

Special Issue Reprint

Violence, Victimization and Prevention

Edited by Sónia Maria Martins Caridade and Maria Alzira Pimenta Dinis

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Editors

Sónia Maria Martins Caridade Maria Alzira Pimenta Dinis



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Editorial

Editor's Introduction: Violence, Victimization and Prevention

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Violence is a complex, multifaceted, and multi-determined phenomenon (Dahlberg and Krug 2006) that victimizes the lives of many children, adolescents, adults, and the elderly on a daily basis. Violence and victimization permeate various cultures and systems—including in individual, family, school, and social contexts—as well as subsystems such as conjugal, parental, peer, and dating relationships (WHO 2014), and these are present both offline and online (Caridade and Dinis 2020a). These phenomena impact numerous areas, including physical and mental health, criminal justice, and social welfare, potentially hindering social development (WHO 2014; Seth and Peshevska 2014). Experiencing violence is a significant risk factor for developing social and health-related problems throughout one's life (Rossi and Talevi 2017). Therefore, there are continuous efforts made to achieve an understanding of how various forms of violence manifest, with the aim of identifying their causes and risk factors in order to inform prevention and intervention policies (Caridade and Dinis 2020b; Hamby 2017).

This Special Issue aims to address violence as a serious public health issue that entails various new forms of victimization, spurred by contemporary societies. This Special Issue brings together fourteen studies, based on different methodological approaches, that explore the multifaceted dimensions of violence, its impact across various contexts, and innovative approaches to its prevention. In this editorial, we aim to summarize the essence and main conclusions of the research included in this Special Issue, offering a glimpse into cutting-edge research that significantly contributes to our understanding and mitigation of violence in society.

This Special Issue includes four literature reviews that expand knowledge on violence across several domains: a bibliometric review on dating violence (Martínez-Heredia et al. 2021), two scoping reviews on cyber interpersonal violence (Machado et al. 2022; Villalonga-Aragón et al. 2023), and a systematic review on cybersecurity within organizations (Sulaiman et al. 2022). These reviews underline the escalating research focus and the critical need for targeted preventive measures against both traditional and emerging forms of violence.

Additionally, this Special Issue addresses specific vulnerable groups, such as adolescents and university students, through studies such as Martínez-González et al.'s (2021) analysis of peer coercion and Recal-Esnoz et al.'s (2021) development of a scale measuring the acceptance of rape myths. Another qualitative study (Mapayi et al. 2023) focuses on the experiences of sexual harassment survivors in Nigerian universities, highlighting the urgent need for enhanced institutional support.

Research exploring the broader societal implications of violence includes Caridade et al.'s (2022) examination of crime fears in Porto, Portugal, and Ferrás et al.'s (2023) study on the territorial distribution of gender-based violence against elderly women in Galicia, Spain. These studies contribute to our understanding of how environmental and social factors influence perceptions of safety and the distribution of violence.

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Emphasizing the importance of social inclusion, Ahmad (2023) explore how ethnic minority women navigate autonomy within honor-related contexts. Additional articles focus on the Colombian context, with Banquez-Mendoza et al. (2022) reconstructing the historical memory of armed conflict in the Montes de María and with Bustos and Manrique-Hernandez (2024) analyzing economic causes of conflict recidivism post-FARC peace accord.

This Special Issue concludes with studies on community violence responses (Gebo and Franklin 2023) and the intersection of poverty and violence against women in Palmira, Colombia (Quiñones et al. 2020), advocating for comprehensive strategies to address and prevent violence.

Together, these contributions not only advance our theoretical and empirical knowledge but also underline the urgent need for a comprehensive approach to combat violence across different contexts and populations. Through the described array of articles addressing violence, this Special Issue endeavors to pave the way for future research and policy-making efforts, aiming to foster safer, more inclusive societies.

Conflicts of Interest: The authors declare no conflicts of interest.

List of Contributions:

Ahmad, Menal. 2023. "You Don't Want to Be Perceived as Wild and Unruly": How Ethnic Minority Women Experience and Negotiate Their Autonomy within Honor-Related Contexts. *Social Sciences* 12: 575. https://doi.org/10.3390/socsci12100575.

Bustos, William Orlando Prieto, and Johanna Manrique-Hernandez. 2024. Paramilitary Conflict in Colombia: A Case Study of Economic Causes of Conflict Recidivism. *Social Sciences* 13: 112. https://doi.org/10.3390/socsci13020112.

Caridade, Sónia, Mariana Magalhães, Vanessa Azevedo, Maria Alzira Pimenta Dinis, Rui Leandro Maia, Rui Estrada, Ana Isabel Sani, and Laura M. Nunes. 2022. Predicting Frequent and Feared Crime Typologies: Individual and Social/Environmental Variables, and Incivilities. *Social Sciences* 11: 126. https://doi.org/10.3390/socsci11030126.

Ferrás, Carlos, María José Ginzo Villamayor, and Yolanda García. 2023. Analysis of Location and Spatial Distribution of Elderly Women Victims of Gender Violence. *Social Sciences* 12: 72. https://doi.org/10.3390/socsci12020072.

Gebo, Erika, and Brianna Franklin. 2023. Exploring Responses to Community Violence Trauma Using a Neighborhood Network of Programs. *Social Sciences* 12: 518. https://doi.org/10.3390/socsci12090 518.

Machado, Bárbara, Sónia Caridade, Isabel Araújo, and Paula Lobato Faria. 2022. Mapping the Cyber Interpersonal Violence among Young Populations: A Scoping Review. *Social Sciences* 11: 207. https://doi.org/10.3390/socsci11050207.

Mapayi, Boladale M., Ibidunni O. Oloniniyi, Olakunle A. Oginni, Onyedikachi J. Opara, Kehinde J. Olukokun, Abigail Harrison, and Morenike O. Folayan. 2023. Stifled Screams: Experiences of Survivors of Sexual Harassment in First-Generation Universities in Southwestern Nigeria. *Social Sciences* 12: 401. https://doi.org/10.3390/socsci12070401.

Martínez-González, Marina Begoña, Claudia Patricia Arenas-Rivera, Aura Alicia Cardozo-Rusinque, Aldair Ricardo Morales-Cuadro, Mónica Acuña-Rodríguez, Yamile Turizo-Palencia, and Vicente Javier Clemente-Suárez. 2021. Psychological and Gender Differences in a Simulated Cheating Coercion Situation at School. *Social Sciences* 10: 265. https://doi.org/10.3390/socsci10070265.

Martínez-Heredia, Nazaret, Gracia González-Gijón, Andrés Soriano Díaz, and Ana Amaro Agudo. 2021. Dating Violence: A Bibliometric Review of the Literature in Web of Science and Scopus. *Social Sciences* 10: 445. https://doi.org/10.3390/socsci10110445.

Quiñones, Karen, Paris A. Cabello-Tijerina, Máximo Vicuña de la Rosa, and Wilfrido Newton Quiñones Londoño. 2020. Strategies for Territorial Peace: The Overcoming of the Structural Violence in Women Living in Palmira, Colombia. *Social Sciences* 9: 211. https://doi.org/10.3390/socsci9110211. Recalde-Esnoz, Irantzu, Héctor Del Castillo, and Gemma Montalvo. 2021. Sexual AssaultMyths Acceptance in University Campus: Construction and Validation of a Scale. *Social Sciences* 10: 462. https://doi.org/10.3390/socsci10120462.

Sulaiman, Noor Suhani, Muhammad Ashraf Fauzi, Walton Wider, Jegatheesan Rajadurai, Suhaidah Hussain, and Siti Aminah Harun. 2022. Cyber–Information Security Compliance and Violation

Behaviour in Organisations: A Systematic Review. Social Sciences 11: 386. https://doi.org/10.3390/socsci11090386.

Villalonga-Aragón, Maria, César Merino-Soto Manuel Martí-Vilar, and Lizley Tantalean-Terrones. 2023. A Scoping Review of Educational Interventions to Increase Prosociality against Gender-Based Violence in University Bystanders. *Social Sciences* 12: 406. https://doi.org/10.3390/socsci12070406.

References

Banquez-Mendoza, Jesús G., Marina B. Martínez-González, José Amar-Amar, and Laura V. López-Muñoz. 2022. Reconstruction of Historical Memory: A Methodological Approach to Uncover the Reasons of the Armed Uprising in the Montes de María, Colombia. Social Sciences 11: 103. [CrossRef]

Caridade, Sónia Maria Martins, and Maria Alzira Pimenta Dinis. 2020a. *Adolescent Dating Violence: Outcomes, Challenges and Digital Tools*. New York: Nova Science Publishers. ISBN 9781536174793.

Caridade, Sónia Maria Martins, and Maria Alzira Pimenta Dinis, eds. 2020b. Adolescent Dating Violence: Outcomes, Preventive Practices and Further Challenges. In *Adolescent Dating Violence: Outcomes, Challenges and Digital Tools*. New York: Nova Science Publishers, pp. 1–18.

Dahlberg, Linda L., and Etienne G. Krug. 2006. Violence a global public health problem. *Ciência & Saúde Coletiva* 11: 277–92. [CrossRef] Hamby, Sherry. 2017. On defining violence, and why it matters. *Psychology of Violence* 7: 167–80. [CrossRef]

Rossi, Alessandro, and Dalila Talevi. 2017. Interpersonal violence and mental illness. Journal of Psychopathology 23: 49-51.

Seth, Dinesh, and Dimitrinka Jordanova Peshevska. 2014. Preventing interpersonal violence in Europe. *Macedonian Journal of Medical Sciences* 2: 350–52. [CrossRef]

WHO (World Health Organization). 2014. Global Status Report on Violence Prevention. Geneva: World Health Organization.

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Revieu

Dating Violence: A Bibliometric Review of the Literature in Web of Science and Scopus

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Abstract: This study has the general purpose of improving the understanding and description of the field of violence in young couple relationships by means of a bibliometric analysis. A descriptive and transversal-retrospective methodology is used, the objective of which is to describe in a quantitative way the information obtained from the production of 842 references registered in the Scopus and Web of Science databases. The results show that during 2017 and 2018, the majority of publications were concentrated, highlighting that the United States is the country with the highest amount of scientific production on violence in intimate relationships. It is important to highlight that more and more countries are investigating this subject, highlighting an increase in production from 2015 onwards. The violence that occurs in the relationships of young couples is a global social and health problem that requires research to be able to deepen its knowledge and in the prevention of this social scourge.

Keywords: dating violence; young; bibliometric review; indicators; scientific production

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1. Introduction

Dating violence is understood as the threat or use of sexual, verbal or physical abuse by one partner against the other (Leen et al. 2013; Rodríguez-Castro and Alonso-Ruido 2015; Rubio-Garay et al. 2017), which means that to properly identify situations of violence, physical and/or sexual aggression must be assessed alongside other forms of violence such as verbal aggression and/or threats, affecting couples who have either been together for a long time or are starting a relationship (Ontiveros et al. 2020).

Violence in young couples' relationships is a very important and fairly widespread public health and social problem. Numerous studies (Ruel et al. 2017; Navarro-Pérez et al. 2020; Dodaj et al. 2020; Taquette et al. 2020; Rodríguez-Domínguez et al. 2020) reveal a high prevalence of this type of violence among young people in different countries. The levels transcend social class, ethnicity, educational level or sexual orientation (Ortiz and Morales 2011). Similarly, in recent years, several systematic reviews have been conducted on the prevalence of violence experienced by young couples (Jennings et al. 2017; Rubio-Garay et al. 2017; Garthe et al. 2017; Yanez-Peñúñuri et al. 2019; Taquette and Monteiro 2019; Bundock et al. 2020), highlighting the existence of health problems such as depression or anxiety, as well as immediate negative effects on well-being and physical, mental and reproductive health, affecting the quality of life and the development of the individual (Sugg 2015; Meza 2018; Duval et al. 2020). Therefore, and according to the WHO (2017), this type of violence is a health problem in different parts of the world, which is why action programmes and policies have been implemented, mainly in the school context, a scenario of socialisation and construction of identity in adolescents (Bundock et al. 2020). But the problem still needs to be addressed in programming for the prevention of violence that often occurs in mixed-sex formats in a critical understanding of the differences and similarities of sex in the perpetration of violence and, finally, the effectiveness of programming efforts aimed at reducing it could be refined and improved (Dardis et al. 2015).

Several studies (De Puy et al. 2015; Parker et al. 2017; Cho and Huang 2017; Marganski and Melander 2018; Park and Kim 2019; Storer et al. 2019; Tussey and Tyler 2019) argue that more multivariate and longitudinal research is needed, with a lack of gender-specific analytical approaches and focus on contextual factors. In addition, more longitudinal research is needed to cover multiple experiences of violent victimization in various social contexts. There is also a need for a greater critical understanding of gender differences and similarities in the perpetration of domestic violence by young couples, which would help refine and improve knowledge about domestic violence (Dardis et al. 2015; Wincentak et al. 2017; Sianko et al. 2019).

Given this scenario, it is important to determine the research trend, and review the literature related to the concept of "dating violence", taking into account the publications on the Web of Science and Scopus platforms. It is also pertinent to know the management of the programs and consider responding to this social problem that arises and is characterized by the great negative effect that it can have on the health of the person. A bibliometric review of the literature was performed to explore the dating violence with special emphasis on methodological factors and gaps in the literature. Consequently, this bibliometric review aims to analyse existing research on violence in young couples' relationships, helping to understand the needs for its prevention. Bibliometric analysis has been an effective tool to quantitatively analysing academic publications and to assess research trends in different research fields (Wu et al. 2020).

2. Materials and Methods

The general objective of this article is to analyse the current existing research in the Web of Science and Scopus databases on violence in young couples' relationships. The following are proposed as specific objectives:

- (a) To know the diachronic productivity and the compliance with Price's Law¹.
- (b) To analyse authors and specialized sources by checking the Lotka Law and the Bradford Law.
- (c) To analyse the most relevant impact indicators: type of document, country of publication, language, the affiliation of the authors, most-cited journals and references, and authors with the greatest impact. The analysis indicators were established from the review of bibliometric studies (Rodríguez-García et al. 2019; Martínez-Heredia 2020; Rodríguez-García et al. 2020; Pham et al. 2021).
- (d) Carry out a bibliometric map of the keywords that deal with the information under study.

This research followed a methodological strategy of bibliometric study, of a descriptive type and of a transversal-retrospective nature, whose objective is to describe in a quantitative way the information obtained (Fuentes and Ortega 2019; Suleiman-Martos et al. 2020). The development of these studies allows us to know the main contributions to the state of the art, as well as to emphasize the need to visualize the results from other research as a starting point to make new scientific contributions (Cabrera-Ramos 2020; Abad Robles et al. 2020). To meet the research objective, firstly a descriptor was defined for the search in the corresponding databases, "dating violence", the most commonly used concept to define violence in young couple relationships, from the Thesaurus ERIC. The choice of this descriptor is mainly focuses on the possibility of bringing together the subject matter of the study, bearing in mind that violence in young couples is the central focus of our research.

Representative and reliable sources are used in the various bibliometric studies carried out in the different areas of research (Fuentes Cabrera et al. 2019; Eckhardt and Massa 2019; Cebrino and Cruz 2020; Badenes-Sastre and Expósito 2021). For this reason, the Web of Science and Scopus databases were taken into consideration. Both databases group together the scientific production with the greatest impact, facilitating access to cited documents, basing their data on the calculation of the h factor to measure an author's journey (Granda-Orive et al. 2011; Granda-Orive et al. 2013).

To carry out the descriptive analysis of the quantitative data, the SPSS version 25 programme was used and the analysis and interpretation of co-occurrences of keywords through the VOSviewer programme. The analysis variables (Table 1) were established from the review of previous bibliometric studies in the area of social sciences (Hallinger and Chatpinyakoop 2019; Rodríguez-García et al. 2019; Blanco-Ariza et al. 2019; Amaro Agudo and Martínez-Heredia 2020; Cretu and Morandau 2020): The indicators are:

- Output indicators: diachronic (Price Law) and personal productivity (Lotka's Law).
- Dispersion indicators: correlation between authors and articles.
- Impact indicators: type of document, country of publication, language, the affiliation
 of authors, journals, references with greater impact, authors with greater production
 and bibliometric map.

Table 1. Variables and inclusion/exclusion criteria.

Variable	Inclusion Criteria
Year of publication	From the year 2015 to the year 2019 (the year 2020 has been eliminated for not being finalized)
Type of document	All is considered
Affiliation	All is considered
Language	All is considered
Publications with greater impact	More than 50 citations
Research internationalization	More than 10 publications
Authorship of publication	More than 10 publications
Reference journals	More than 10 publications
Co-occurrence of content	Title, abstract and keywords

In the following table, we can see the variables analysed and the criteria are taken into account for their analysis.

From the year 2015 to the year 2019 (the year 2020 has been eliminated for not being finalized)

The statistical variable studied was scientific production following a longitudinal statistical sample between 2015 and March 2020. The data collection took place in July 2020. The data collection took place in July 2020. The final sample of references was 842 (n = 842), of which 495 belong to Web of Science and 347 to Scopus. The initial search resulted in 2234 articles, with 35 removed due to duplication. Two reviewers independently screened the articles by abstract and title to determine eligibility for further examination. One thousand one hundred and twenty were retained for further analysis. The reviewers then conducted an in-depth review of the articles resulting in 842 articles meeting inclusion criteria. Refer to Figure 1 for a flowchart of the study selection process. In the following flow diagram, we can see the process followed until obtaining the final sample.

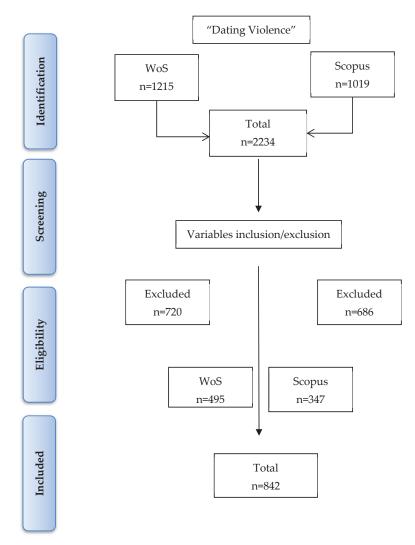


Figure 1. Flowchart of the review process.

3. Results

- 3.1. Production Indicators
- Diachronic productivity

Taking into account the diachronic productivity and using the variable of the year of publication, in both databases, it can be observed that there has been a linear growth in the research topic under study, however, in the In the Web of Science database, it is noted that the highest scientific production occurred during the year 2017 (n = 103; 20.1%) and in Scopus in 2018 (87; n = 25.07%). The WoS database collects the greatest scientific production during the number of years studied. Figures 2 and 3 show the results analyzed by year and database.

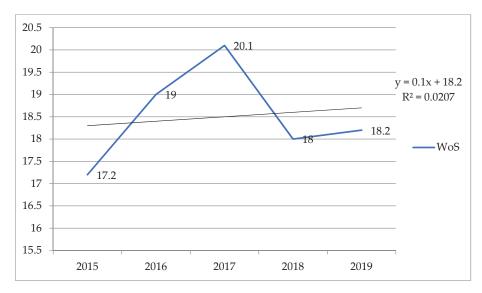


Figure 2. Diachronic production of the scientific production indexed in the Web of Science database.

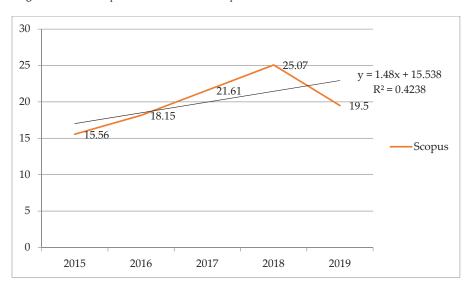


Figure 3. Diachronic production of the scientific production indexed in the Scopus database.

When verifying Price's law of the exponential growth of scientific information, it is fulfilled since there is a phase of linear growth, in which the growth rate remains constant or independent of the size of the system, highlighting that the research is in phase 3-linear growth (Price 1986). The amount of production and its percentage percentages remain very stable, around 85–103 publications and 17%–20% in WoS and 54–87 publications and 15%–25% in Scopus.

- Personal productivity

Lotka's law or the law of the productivity of scientific authors indicates that only a small proportion of authors is responsible for the majority of scientific works, so that as the amount of work on a given increases subject, the number of authors decreases (Urbizagastegui 2011). In the following graph (Figure 4) it can be seen that the correlation between the number of authors and the number of scientific production in both databases is positive.

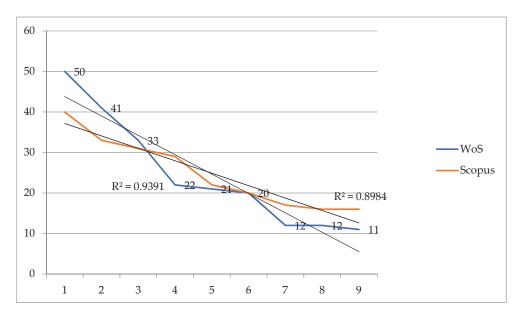


Figure 4. Personal production of the scientific production indexed in the Web of Science and Scopus databases.

The Pearson correlation coefficient in the Web of Science database is r=-0.948 and in Scopus r=-0.969, so both variables are correlated in the opposite direction, with a linear correlation with a perfect negative slope, assuming an absolute determination between both variables.

3.2. Indicators of Dispersion

Bradford's law or dispersion law describes that most articles about a specialized subject could be published by a few specialized journals, together with certain general or dispersal journals, therefore there is a relationship between the published articles and the journals of a given area, stating that a reduced number of journals belong to the nucleus, and this concentrates a similar number of articles than a large number of journals grouped in different areas of greater dispersion (Alvarado 2016). There are a reduced number of journals, which make up the core, which concentrates a similar number of articles as a large number of journals, grouped in areas of greater dispersion (zone 1, 2 and 3). In total we have 17 journals and 342 references distributed in four areas with an average of 86 in each area, so we observe that the nucleus with only 2 journals has 83 references, a number very similar to the other nuclei, which have a greater number of journals (Figure 5).

Both variables are correlated in the opposite direction, with a linear correlation of perfect negative slope between both variables (number of articles and number of journals). The Pearson correlation coefficient in the Web of Science database is r=-0.747 and in Scopus r=-0.991 (Figure 6).

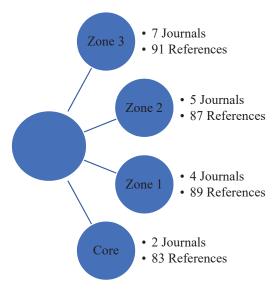


Figure 5. Dispersion of the scientific production indexed in the WoS and Scopus databases.

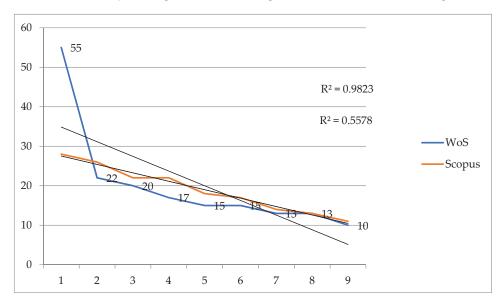


Figure 6. Dispersion of the scientific production indexed in the Web of Science and Scopus databases.

3.3. Impact Indicators

- Type of document

Considering this variable corresponding to the type of document found (Figure 7), it is verified that in both databases the highest percentage of references are scientific articles (n = 276/79.5% in Scopus and n = 92.34/92.34% in WoS). On the other hand, in Scopus we found book chapters with only 7.4% (n = 26), in addition to reviews (n = 16; 4.6%) and books (n = 2; 0.57%). However, in the Web of Science database, we highlight the review (n = 25; 5.04%), the books (n = 7; 1.41%) and conference proceedings (n = 6; 1.21%).

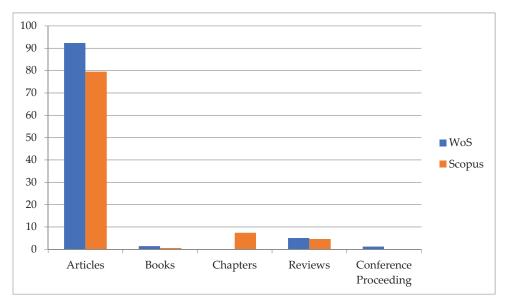


Figure 7. Type of document.

Affiliation

The following variable seeks to analyze the institution to which the authors of the documents found are affiliated. Table 2 shows the affiliations of the authors that contain more than 10 publications. The number of references distributed among the 8 institutions with the highest number of affiliations are 5.76%, 5.47% and 4.89% from the Ohio University, The University of Texas at Arlington and the Centers for Disease Control and Prevention respectively in the Scopus database, the number being higher in the WoS database and coinciding in the Centers for Disease Control and Prevention with a similar percentage (6.25%) (Table 3).

Table 2. Number of documents according to affiliation found in the Scopus database.

Affiliation	Number	Percentage
Ohio University	20	5.76
The University of Texas at Arlington	19	5.47
Centers for Disease Control and Prevention	17	4.89
The University of North Carolina at Chapel Hill	14	4.03
The University of Tennessee, Knoxville	13	3.74
Virginia Commonwealth University	12	3.45
National Center for Injury Prevention and Control	12	3.45
UT Medical Branch at Galveston	12	3.45

Language

The language variable (Figure 8) in the scientific production on violence in intimate relationships, the highest percentages are in English in both databases (n = 330; 95.1% Scopus and n = 413; 83.26% Wos), followed by Spanish (n = 16; 4.61% in Scopus) and Korean in WoS (n = 44; 8.87%).

Table 3. Number of documents by affiliation found in the WoS database.

Authors with the Highest Production	Number	Percentage
United States Department of Health Human Services	110	22.18
National Institutes of Health Nih USA	87	17.54
Nih Eunice Kennedy Shriver National Institute of Child Health Human Development Nichd	42	8.47
Centers for Disease Control Prevention USA	31	6.25
Intramural CDC HHS	25	5.04
Nih National Institute on Alcohol Abuse Alcoholism Niaaa	24	4.84
NCIPC CDC HHS	19	3.83
NIH National Institute on Drug Abuse Nida	16	3.23
NIH National Institute of Mental Health Nimh	12	2.42
National Institute of Justice	11	

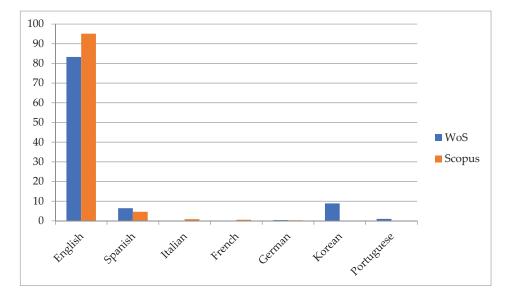


Figure 8. Language of publication.

- Publications with the greatest impact

Regarding the variable publications (Table 4) with the greatest impact, we found that the article "Teen dating violence: A meta-analytic review of prevalence rates", from the journal Psychology of Violence is the most cited with a total of 102 citations. Followed by "Physical dating violence, sexual violence, and unwanted pursuit victimization: A comparison of incidence rates among sexual-minority and heterosexual college students" from the Journal of Interpersonal Violence with 83 citations in the Scopus database. In contrast, we check in the WoS database, the first most cited article "Teen Dating Violence (Physical and Sexual) Among US High School Students Findings From the 2013 National Youth Risk Behavior Survey" has 132 citations and the second coincides with the Scopus database, but in this case with 78 citations.

Table 4. Most cited references in Scopus.

Title	Authors	Magazine	Year	Citations
Teen dating violence: A meta-analytic review of prevalence rates	Wincentak, K., Connolly, J., Card, N.	Psychology of Violence	2017	102
Physical dating violence, sexual violence, and unwanted pursuit victimization: A comparison of incidence rates among sexual-minority and heterosexual college students	Edwards, KM, Sylaska, KM, Barry, JE, (), Walsh, WA, Ward, SK	Journal of Interpersonal Violence	2015	83
An Examination of the Factors Related to Dating Violence Perpetration Among Young Men and Women and Associated Theoretical Explanations: A Review of the Literature	Dardis, CM, Dixon, KJ, Edwards, KM, Turchik, JA	Trauma, Violence, and Abuse	2015	78
Gender Role Attitudes and Male Adolescent Dating Violence Perpetration: Normative Beliefs as Moderators	Reyes, HLMN, Foshee, VA, Niolon, PH, Reidy, DE, Hall, JE	Journal of Youth and Adolescence	2016	59
Sexting, psychological distress and dating violence among adolescents cents and young adults [Sexting, psychological disorder and violent dating in adolescents and young adults	Morelli, M., Bianchi, D., Baiocco, R., Pezzuti, L., Chirumbolo, A.	Psicothema	2016	56
The Co-Occurrence of Physical and Cyber Dating Violence and Bullying Among Teens	Yahner, J., Dank, M., Zweig, JM, Lachman, P.	Journal of Interpersonal Violence	2015	52

- Internationalization of research

Regarding the countries with the greatest scientific production of violence in young couples, the United States stands out, with 70.31% (n = 244) in Scopus and 61.09% (n = 303) in WoS with a large number regarding to the rest of the countries, as can be seen in Table 5 which represents the countries that have from 10 published documents on the subject. Four were extracted containing a total of 321 of the 347 analyzed for the Scopus database where Spain is in the second position (n = 42; 12.10%) followed by Canada (n = 24; 6.91%) and England with only 3.17% (n = 11), as in the Web of Science database where Spain is the second country (n = 61; 12.30%) followed by Canada (n = 25; 5.04%) and Mexico (n = 17; 3.43%).

Table 5. Number of documents according to the country of publication in the Scopus database.

Scopus			WoS		
Country of Publication	Number	Percentage	Country of Publication	Number	Percentage
USA	244	70.31	USA	303	61.09
Spain	42	12.10	Spain	61	12.30
Canada	24	6.91	Canada	25	5.04
England	11	3.17	Mexico	17	3.43

- Authorship of publication

Of the total number of authors with the greatest scientific production (Tables 6 and 7), those with more than 10 publications on the subject were selected, Shorey, RC (5.76%) being the one with the most publications, followed by Stuart, GL with 15 publications (4.32%) and Temple, JR with 3.45% of the total, in the Scopus database. In contrast, we found a greater number of authors in WoS, although it is highlighted that the aforementioned authors coincide with the Scopus database, highlighting that Temple, JR has a greater number (0.1%).

Table 6. Authors with the highest scientific production in the Scopus database.

Author Affiliation	Number	Percentage
Shorey, RC	20	5.76
Shorey, RC Stuart, GL	15	4.32
Temple, JR	12	3.45

Table 7. Authors with the highest scientific production in the WoS database.

Affiliation Authors	Number	Percentage
Shorey. RC	41	8.27
Temple, JR	50	10.1
Stuart, GL	33	6.65
Foshee, VA	12	2.42
Reye, s HLM	12	2.42
Ennett, ST	22	4.44
Foshee Vangie, A.	11	2.22
Tharp, AT	21	4.23
Vivolo-Kantor Alana, M.	20	4.03

Reference journals

Table 8 shows the matching reference journals in both databases; it can be seen that the journal with the most publications is Journal of interpersonal violence (9.7% respectively), however, in the Scopus database, the journal Violence and Victims is the journal with the lowest reference (2.6%) and in the Web of Science database the journal Adolescent Dating Violence Theory Research and Prevention (2.2%).

Table 8. Journals with the highest production in Scopus and WoS.

	Scopus		V	VoS
Publications	Number	Percentage	Number	Percentage
Journal of Interpersonal Violence	28	9.7	48	9.7
Journal of Youth and Adolescence	26	4.4	20	4
Adolescent Dating Violence Theory Research and Prevention	22	4	10	2.2
Violence Against Women	22	3.2	15	2.3
Journal of Adolescent Health	18	3	22	4.4
Journal of Aggression Maltreatment and Trauma	17	3	13	2.6
Psychology of Violence	14	2.7	16	3.2
Violence and Victims	13	2.6	13	2.6

Content co-occurrence

The content co-occurrence analysis applied to the title, abstract and keywords of the analyzed scientific production shows that there are relationships between them. As can be seen in the figure, there are five thematic clusters (green, blue, red, purple and yellow) as we can see in Figure 9. The size of the concepts is proportional to the frequency of appearance and the number of existing connections with other concepts. In the green cluster, the largest concept is "teen", this group is related to descriptors that refer to factors surrounding adolescents. The red group is led by the term "woman" and "dating violence", which allows describing that violence in intimate relationships is directed mainly towards women. On the other hand, the purple cluster is headed by the descriptor "program" and includes descriptors related to its effectiveness and evaluation. The blue cluster encompasses research terms in the field, highlighting the words "literature" and "review". Finally, the yellow cluster highlights "intimate partner violence". This analysis allowed

us to know that the research on violence in the relationships of young couples focuses on identifying the factors that influence this type of violence.

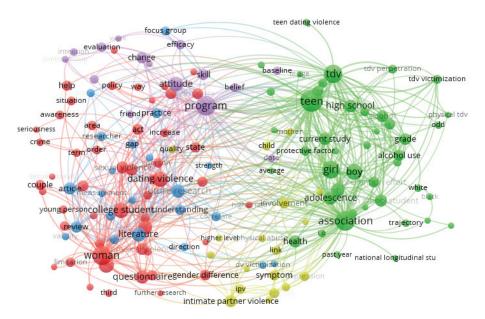


Figure 9. General analysis of co-occurrences.

4. Discussion

Traditionally, violence in young couples' relationships has been studied and identified in formal contexts such as marriage and committed or monogamous relationships, but it was only recently that researchers suggested that this type of violence is a significant problem in young, single adults (Duval et al. 2020). The scientific review undertaken consolidates the idea that further work is needed on issues such as violence prevention programming, a critical understanding of gender differences and similarities in violence perpetration that could refine and improve the effectiveness of programming efforts to reduce violence (Dardis et al. 2015). This coincides with the purple cluster, which is headed by the descriptor "program" including descriptors related to its effectiveness and evaluation. Several studies (Dardis et al. 2015; Marganski and Melander 2018; Wincentak et al. 2017; Spencer et al. 2020) conclude that further research is needed on the subject matter for a more critical understanding of gender differences and similarities, and the results show exponential growth in output, which is evidence of an increase since 2015. These studies show that violence in relationships among young people is conceived within the framework of psychological and physical aggression to resolve conflicts that are essential to the relationship itself, increasing the risk of committing subsequent aggressions (Rubio-Garay et al. 2015). Numerous authors such as Rubio-Garay et al. (2017), Garthe et al. (2017), Meza (2018), Zych et al. (2019), Duval et al. (2020) show a greater psychological and sexual victimization in women, as well as the perpetration of psychological aggressions of women towards men and sexual aggressions of men towards women. These results coincide with the red cluster, which is headed by the term "woman", highlighting that violence in intimate relationships is directed mainly towards women.

It is necessary to offer a process of preventive intervention, which allows for a more effective and context-adjusted orientation according to the duration of the relationship, degree of commitment, parental influence, among others (Ravi et al. 2020), as well as prevention programmes focused on the development of optimal emotional regulation and impulse control skills with emphasis on relationships (Ontiveros et al. 2020).

5. Conclusions

This article aims to present a description of the area of research on violence in young couples' relationships, taking into account indicators of production (diachronic and personal productivity), dispersion (correlation between authors and articles) and impact (type of document, country of publication, language, author affiliation, publications, references with greater impact, authors with greater production and bibliometric map) in the Web of Science and Scopus database. Mainly, it is highlighted that the years 2017 (Web of Science) and 2018 (Scopus) led the research of violence in couple relationships, with the United States being the country with the highest amount of scientific production. The correlation between the number of authors and the number of scientific productions in both databases is negative; the authors with the highest number of publications coincide in both databases. The most frequent type of document is scientific articles published in journals with specific themes of violence. There is no doubt that more and more countries are researching this subject, reflecting an increase in production since 2015. Since the violence in young relationships is a global health problem, more research is being done to understand and prevent this type of violence.

This research focused on analyzing the scientific production published during the specified period of time, but several limitations stand out; bibliometric review studies, for which information may be lost due to not using the correct descriptors or due to the lack of feasibility of covering all the databases that currently exist. However, due to the novelty and specificity of the term, it was decided to introduce only the concept "dating violence" as an element of the search engine, the study method does not allow to judge the quality of the analyzed research, and the option of using only the Scopus and WoS database may have limited sample size and diversity.

As a future line of research, it is proposed to systematically analyze the sample in this article, including new descriptors taking into account the main objectives, methodological design, variables under study, analyzed sample and information collection instruments, to give a greater scope to the objectives proposed.

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Notes

They are conceptually detailed in the results section.

References

Abad Robles, Manuel Tomas, Daniel Collado-Mateo, Carlos Fernández-Espínola, Estefania Castillo Viera, and Francisco Javier Gimenez Fuentes-Guerra. 2020. Effects of Teaching Games on Decision Making and Skill Execution: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health 17: 505. [CrossRef] [PubMed]

Alvarado, Rubén Urbizagástegui. 2016. El crecimiento de la literatura sobre la ley de Bradford. *Investigación Bibliotecológica:* Archivonomía, Bibliotecología e Información 30: 51–72. [CrossRef]

- Amaro Agudo, Ana, and Nazaret Martínez-Heredia. 2020. Patrimonio como recurso educativo en la ciudad: Revisión teórica y experiencias educativas para el aprendizaje a lo largo de la vida. *Cadmo: Giornale italiano di pedagogia sperimentale* 1: 9–27. [CrossRef]
- Badenes-Sastre, Marta, and Francisca Expósito. 2021. Perception and Detection of Gender Violence, and Identification as Victims: A Bibliometric Study. *Annals of Psychology* 37: 341–51.
- Blanco-Ariza, Ana Beatriz, Alexis Messino-Soza, Ángel Vázquez-García, and Enrique Melamed-Varela. 2019. Social innovation in the non-profit organization framework: A review. Social Sciences 8: 236. [CrossRef]
- Bundock, Kerrie, Chan Carmen, and Hewitt Olivia. 2020. Adolescents' help-seeking behavior and intentions following adolescent dating violence: A systematic review. *Trauma, Violence, & Abuse* 21: 350–66.
- Cabrera-Ramos, Juan Francisco. 2020. Producción científica sobre integración de TIC a la Educación Física: Estudio bibliométrico en el periodo 1995–2017. Retos: Nuevas Tendencias en Educación Física, Deporte y Recreación 37: 748–54.
- Cebrino, Jesús, and Silvia Portero de la Cruz. 2020. A worldwide bibliometric analysis of published literature on workplace violence in healthcare personnel. *PLoS ONE* 15: e0242781. [CrossRef]
- Cho, Hyunkag, and Luhua Huang. 2017. Aspects of help seeking among collegiate victims of dating violence. *Journal of Family Violence* 32: 409–17. [CrossRef]
- Cretu, Daniela Maria, and Felicia Morandau. 2020. Initial teacher education for inclusive education: A bibliometric analysis of educational research. *Sustainability* 12: 4923. [CrossRef]
- Dardis, Cristina María, Dixon Kristiana, Edwards Katie, and Turchik Jessica. 2015. An examination of the factors related to dating violence perpetration among young men and women and associated theoretical explanations: A review of the literature. *Traume, Violence, and Abuse* 19: 136–52. [CrossRef] [PubMed]
- De Puy, Jacqueline, Sherry Hamby, and Caroline Lindemuth. 2015. Teen dating violence in French-speaking Switzerland: Attitudes and experiences. *International Journal of Conflict and Violence (IJCV)* 8: 305–15.
- Dodaj, Arta, Sesar Kristina, and Šimić Nataša. 2020. Impulsivity and empathy in dating violence among a sample of college females. Behavioral Sciences 10: 117. [CrossRef] [PubMed]
- Duval, Alicia, Lanning Beth, and Patterson Megan. 2020. A systematic review of dating violence risk factors among undergraduate college students. *Trauma, Violence, & Abuse* 21: 567–85.
- Eckhardt, Christopher, and Andrea Massa. 2019. Psychological theories of intimate partner violence. *Handbook of Interpersonal Violence across the Lifespan*, 1–22. [CrossRef]
- Fuentes Cabrera, Arturo, Antonio José Moreno Guerrero, José Santiago Pozo Sánchez, and Antonio-Manuel Rodríguez-García. 2019.

 Bullying among teens: Are ethnicity and race risk factors for victimization? A bibliometric research. *Education Sciences* 9: 220.

 [CrossRef]
- Fuentes, Antonio, and José Luis Gallego Ortega. 2019. Análisis bibliométrico sobre educación especial. *Profesorado, Revista de Currículum y Formación del Profesorado* 23: 307–27.
- Garthe, Rachel, Sullivan Terri, and McDaniel Michael. 2017. A meta-analytic review of peer risk factors and adolescent dating violence. Psychology of Violence 7: 45. [CrossRef]
- Granda-Orive, José Ignacio de, Adolfo Alonso-Arroyo, and Francisco Roig-Vázquez. 2011. ¿Qué base de datos debemos emplear para nuestros análisis bibliográficos?: Web of Science versus Scopus. Archivos de Bronconeumología 47: 213. [CrossRef] [PubMed]
- Granda-Orive, José Ignacio, Adolfo Alonso-Arroyo, Francisco García-Río, Segismundo Solano-Reina, Carlos Andrés Jiménez-Ruiz, and Rafael Aleixandre-Benavent. 2013. Ciertas ventajas de Scopus sobre Web of Science en un análisis bibliométrico sobre tabaquismo. Revista Española de Documentación Científica 36: 011. [CrossRef]
- Hallinger, Philip, and Chatchai Chatpinyakoop. 2019. A bibliometric review of research on higher education for sustainable development, 1998–2018. Sustainability 11: 2401. [CrossRef]
- Jennings, Wesley G., Chidike Okeem, Alex R. Piquero, Christine S. Sellers, Delphine Theobald, and David P. Farrington. 2017. Dating and intimate partner violence among young person's ages 15–30: Evidence from a systematic review. *Aggression and Violent Behavior* 3: 107–25. [CrossRef]
- Leen, Eline, Emma Sorbring, Matt Mawer, Emma Holdsworth, Bo Helsing, and Erica Bowen. 2013. Prevalence, dynamic risk factors and the efficacy of primary interventions for adolescent dating violence: An international review. *Aggression and Violent Behavior* 18: 159–74. [CrossRef]
- Marganski, Alison, and Lisa Melander. 2018. Intimate partner violence victimization in the cyber and real woeld: Examining the extet of Cyber aggression experiences and its association with in-person dating violence. *Journal of Interpersonal Violence* 33: 1071–95. [CrossRef] [PubMed]
- Martínez-Heredia, Nazaret. 2020. Análisis cienciométrico de mayor impacto acerca del duelo y la pérdida en personas con discapacidad intelectual. Siglo Cero 51: 47–60. [CrossRef]
- Meza, Jesús Armando. 2018. Violencia en las relaciones de noviazgo: Una revisión de estudios cualitativos. *Apuntes de Psicología* 35: 179–86.
- Navarro-Pérez, José J., Amparo Oliver, Ángela Carbonell, and Barry H. Schneider. 2020. Effectiveness of a mobile App intervention to prevent dating violence in residential child care. La eficacia de una intervención con aplicación móvil sobre actitudes asociadas a la violencia de pareja en los adolescentes de centros de acogida. *Psychosocial Intervention* 29: 35–52. [CrossRef]

- Ontiveros, Gabriela, Arthur Cantos, Po-Yi Chen, Ruby Charak, and K. Daniel O'Leary. 2020. Is all dating violence equal? Gender and severity differences in predictors of perpetration. *Behavioral Sciences* 10: 118. [CrossRef]
- Ortiz, Mabel T. López, and Denisse Ayala Morales. 2011. Intimidad y las múltiples manifestaciones de la violencia doméstica entre mujeres lesbianas. Salud y Sociedad 2: 151–74. [CrossRef]
- Park, Sihyun, and Sin-Hyang Kim. 2019. Who are the victims and who are the perpetrators in dating violence? Sharing the role of victim and perpetrator. *Trauma, Violence, & Abuse* 20: 732–41.
- Parker, Elizabeth M., Sarah Lindstrom Johnson, Katrina J. Debnam, Adam J. Milam, and Catherine P. Bradshaw. 2017. Teen Dating Violence Victimization Among High School Students: A Multilevel Analysis of School-Level Risk Factors. *Journal of School Health* 87: 696–704. [CrossRef] [PubMed]
- Pham, Hiep-Hung, Thi-Kieu Dong, Quan-Hoang Vuong, Dinh-Hai Luong, Tien-Trung Nguyen, Viet-Hung Dinh, and Manh-Tung Ho. 2021. A bibliometric review of research on international student mobilities in Asia with Scopus dataset between 1984 and 2019. Scientometrics 126: 5201–24. [CrossRef]
- Price, Derek. 1986. Little Science, Big Science ... and Beyond. New York: Columbia University Press, pp. 336–36.
- Ravi, Kristen E., Beverly M. Black, Diane B. Mitschke, and Katelyn Pearson. 2020. Karen refugee youths' satisfaction with a teen dating violence prevention program. *Journal of Ethnic & Cultural Diversity in Social Work* 29: 221–37.
- Rodríguez-Castro, Yolanda, and Patricia Alonso-Ruido. 2015. Análisis de los discursos de los y las jóvenes sobre la violencia en las relaciones de pareja. Revista de Estudios e Investigación en Psicología y Educación 1: 15–18. [CrossRef]
- Rodríguez-Domínguez, Carmen, Pedro J. Pérez-Moreno, and Mercedes Durán. 2020. Cyber dating violence: A Review of Its Research Methodology. *Anales De Psicología/Annals of Psychology* 36: 200–9.
- Rodríguez-García, Antonio Manuel, Juan Manuel Trujillo, and José Sánchez. 2019. Impact of scientific productivity on digital competence of future teachers: Bibliometric approach on Scopus and Web of Science. Revista Complutense de Educación 30: 623–46. [CrossRef]
- Rodríguez-García, Antonio-Manuel, Antonio-José Moreno-Guerrero, and Jesús Lopez Belmonte. 2020. Nomophobia: An individual's growing fear of being without a smartphone—A systematic literature review. *International Journal of Environmental Research and Public Health* 17: 580. [CrossRef] [PubMed]
- Rubio-Garay, Fernando, M. Ángeles López-González, Miguel Ángel Carrasco, and Pedro Javier Amor. 2017. Prevalencia de la violencia en el noviazgo: Una revisión sistemática. *Papeles del Psicólogo* 38: 135–47. [CrossRef]
- Rubio-Garay, Fernando, Miguel Ángel Carrasco, Pedro Javier Amor, and María Ángeles López-González. 2015. Factores asociados a la violencia en el noviazgo entre adolescentes: Una revisión crítica. *Anuario de Psicología Jurídica* 25: 47–56. [CrossRef]
- Ruel, Catherine, Francine Lavoie, Martine Hébert, and Martin Blais. 2017. Gender's role in exposure to interparental violence, acceptance of violence, self-efficacy, and physical teen dating violence among Quebec adolescents. *Journal of Interpersonal Violence* 35: 3079–101. [CrossRef]
- Sianko, Natallia, Merita H. Meçe, and Linda Abazi-Morina. 2019. Family functioning among rural teens and caregivers: Interactive influence on teen dating violence. Family Process 59: 1175–90. [CrossRef] [PubMed]
- Spencer, Chelsea M., Kristin M. Anders, Michelle L. Toews, and Sarah K. Emanuels. 2020. Risk markers for physical teen dating violence victimization in the United States: A meta-analysis. *Journal of Youth and Adolescence* 49: 575–89. [CrossRef]
- Storer, Heather L., Allison Talan, Alison Swiatlo, Kendra LeSar, Marsha Broussard, Carl Kendall, David W. Seal, and Aubrey Spriggs Madkour. 2019. Context matters: Factors that influence African American teens' perceptions and definitions of dating violence. *Psychology of Violence* 10: 79. [CrossRef]
- Sugg, Nancy. 2015. Intimate Partner Violence: Prevalence, health consequences and intervention. *Medical Clinics for North America* 99: 629–49. [CrossRef] [PubMed]
- Suleiman-Martos, Nora, Luis Albendín-García, José L. Gómez-Urquiza, Keyla Vargas-Román, Lucia Ramirez-Baena, Elena Ortega-Campos, De La Fuente-Solana, and I. Emilia. 2020. Prevalence and Predictors of Burnout in Midwives: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health 17: 641. [CrossRef]
- Taquette, Stella R., Claudia Leite Moraes, Luciana Borges, and Simoni Furtado. 2020. Teen-dating violence: Conception of adolescents in a Brazilian metropolis. *Journal of Injury and Violence Research* 12: 153–69.
- Taquette, Stella, and Denise Monteiro. 2019. Causes and consequences of adolescent dating violence: A systematic review. *Journal of Injury and Violence Research* 11: 137. [PubMed]
- Tussey, Brian Ermon, and Kimberly Tyler. 2019. Toward a comprehensive model of physical dating violence perpetration and victimization. *Violence and Victims* 34: 661–77. [CrossRef]
- Urbizagastegui, Rubén. 2011. La colaboración de los autores en la literatura producida sobre la Ley de Lotka. *Ciência da Informação* 40: 266–79.
- WHO. 2017. La violencia infligida por la pareja y la salud de la mujer. Available online: https://www.who.int/gender/violence/who_multicountry_study/summary_report/chapter4/es/ (accessed on 1 November 2021).
- Wincentak, Katherine, Jennifer Connolly, and Noel Card. 2017. Teen dating violence: A meta-analytic review of prevalence rates. Psychology of Violence 7: 224–41. [CrossRef]
- Wu, Yanqi, Jie Chen, Hui Fang, and Yuehua Wan. 2020. Intimate partner violence: A bibliometric review of literature. *International Journal of Environmental Research and Public Health* 17: 5607. [CrossRef] [PubMed]

Yanez-Peñúñuri, Libia Yanelli, Jorge Arturo Martínez-Gómez, and Cesar Armando Rey-Anacona. 2019. Therapeutic intervention for victims and perpetrators of dating violence: A systematic review. *Revista Iberoamericana de Psicologia y Salud.* 10: 107–21. Zych, Izabela, Carmen Viejo, Elena Vila, and David P. Farrington. 2019. School bullying and dating violence in adolescents: A

systematic review and meta-analysis. Trauma, Violence, & Abuse 2: 397-412.





Review

Mapping the Cyber Interpersonal Violence among Young Populations: A Scoping Review

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Abstract: The increase in digital practices and networking has introduced important changes to social interactions. The extensive use of technology among young people has allowed for cyber communication, which has numerous benefits but can also trigger violence in relationships. Interpersonal violence affecting young people is becoming more widely recognized as a public health issue. The aim of this scoping review is to map and systematize the published academic literature on Cyber Interpersonal Violence (CIV) amongst young people, following the methodological approach proposed by Arksey and O'Malley. Five databases were searched: PubMed, Scopus, CINAHL (EBSCOhost), Science Direct and Social Sciences Citation Index. Eighteen studies in English, Portuguese, Spanish and French, published from 2004 onwards, were included. Three main areas arose in the CIV: cyber dating abuse, cyberbullying and cyber-harassment. Investing in prevention is the key to preventing cyber violence.

Keywords: young populations; cyber violence; interpersonal violence; scoping review

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1. Introduction

Adolescents and young people are vanguards of the consumption of new technologies. Young people's accessibility to technological tools has exploded, causing the youth to lose many communication and social interaction skills (Reed et al. 2016). Digital practices increase the risk of being exposed to cyber interpersonal violence (CIV) once everyone has access to the digital conversation, everywhere, with everyone. The use of digital tools confers numerous benefits to the social processes of adolescents; nevertheless, digital practices increase young people's exposure to interpersonal invasiveness, making them more susceptible to experiencing cyber dating abuse (CDA), cyberstalking, cyberbullying and sexting (Caridade et al. 2019; Jun 2020). According to recent studies, these forms of violence have received several labels, such as electronic abuse, online abuse, sexual abuse, online sexual abuse, cyber harassment (Flach and Deslandes 2017). The current literature uses aggression, abuse and violence as commutable, although they are not the same (Geffner 2016). Hence, the term abuse indicates not a single behaviour but the victim's context, motive and outcomes. Nevertheless, the existing measures do not contemplate these characteristics and are more dedicated to evaluating a specific behaviour. Defining these forms of violence represents an ongoing challenge for investigators in understanding the phenomenon in future research.

According to the objectives of the present scoping review, we will use all the possible terms, such as abuse, aggression and violence, to bring together the most significant number of manuscripts possible. We will be analysing violent interpersonal behaviours which occur via technological devices, such as game consoles, cell phones, computers and the internet

(European Institute for Gender Equality 2020; Smith et al. 2019), amongst our target group, i.e., young students. When it occurs in younger communities, interpersonal violence victimisation always constitutes an adverse childhood experience with potentially harmful lifetime effects (Kowalski et al. 2019).

Online interactions have unique features that promote and encourage intimidating tactics, such as control and monitoring (Stephenson et al. 2018). Hence, aggression can occur at any moment, and physical proximity with the victim loses importance in the online context. Additionally, the aggressor does not see the victim's reaction, so it is tempting to diminish the consequences of their acts (Muñoz-Fernández and Sánchez-Jiménez 2020). Lastly, the aggressor may feel immune due to the anonymity that the online context provides, while the victim experiences more humiliation due to a growing potential audience (Stonard 2020).

In this work, we explore all the various aspects understood to be part of CIV. The World Health Organization (WHO) has stated that "interpersonal violence is the fourth leading cause of death in adolescents and young people globally", and one in eight young people report sexual abuse (World Health Organization 2021).

In most parts of the world, cyber violence is becoming a significant concern, affecting an increasing number of people, particularly women and young people (Council of Europe 2020). Furthermore, it has been stated that cyber violence is not an isolated phenomenon, often following the same patterns as offline violence (European Institute for Gender Equality 2020). The Council of Europe (CE) defines cyber violence as "(...) the use of computer systems to cause, facilitate, or threaten violence against individuals that results in, or is likely to result in, physical, sexual, psychological, or economic harm or suffering and may include the exploitation of the individual's circumstances, characteristics, or vulnerabilities" (Council of Europe 2020).

The current literature (Buelga et al. 2020; Caridade and Braga 2019; Galende et al. 2020; Gkiomisi et al. 2017) focuses on CDA or cyberbullying features. These are particularly concerning issues among teenagers, either because they are at a vulnerable age or because empirical evidence reveals that 56% of teens in dating relationships have experienced CDA (Cava et al. 2020). On the other hand, prevalence rates vary in terms of patterns of victimization or perpetration. Regarding cyber control behaviours, 10.6% of teenagers admitted to committing direct cyber abuse against their partners. This rate increased to 82% when it came to direct cyber aggression against their partner (Borrajo et al. 2015). Prevalence of victimization rates follow the same patterns, depending on whether direct cyber aggression (14%) or cyber control (75%) was measured.

In the cyberbullying field, a study carried out by Jun {Formatting Citation} states that 34% of the adolescents were involved in cyberbullying as cyberbullies (6.3%), victims (14.6%), or both cyberbullies and victims (13.1%). Even if data on cyber violence varies, these are significant issues that require attention, particularly in adolescence.

This article outlines a scoping review on the emerging theme of CIV with considerable impact on the interpersonal functioning of young people. Hence, the primary aim of the scoping review is to map and systematize the published academic literature on the mentioned subject. The secondary objectives are three, as follows: (i) to develop a descriptive overview of the existing academic literature to reveal the most relevant research trends on CIV amongst young people; (ii) to systematically map and categorise the wide variety of instruments designed to identify and assess CIV, in general and amongst our target group; (iii) to identify research gaps, and, consequently, to develop recommendations.

2. Methods

2.1. Search Strategy for Identifying Relevant Studies

This review follows the search strategy recommended by the Joanna Briggs Institute Manual {Formatting Citation}, which includes the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist (Tricco et al. 2018). The search strategy was conducted in the following databases: PubMed, Scopus,

CINAHL (EBSCOhost), Science Direct and Social Sciences Citation Index. The search was conducted between September and December 2020. No geographical restraint was applied.

A search strategy was designed to retrieve as many potentially eligible studies as possible: [(Youth) OR (Adolescen*) OR (Adolescent) OR (Students) OR (Universities)] AND [(Abuse) OR (Violence) OR (aggression) OR (aggress*)] AND [(Cyber) OR (Digital) OR (Digit*)].

2.2. Inclusion and Exclusion Criteria

The inclusion criteria referred to (1) studies on cyber interpersonal violence using a quantitative or qualitative approach; (2) studies on the adolescent population, which mainly comprised of university students; (3) studies published as of 2004; and (4) studies published in English, Portuguese, Spanish, and French.

The exclusion criteria referred to (1) studies not including cyber interpersonal violence (such as cyberbullying, cyber dating abuse, cyber harassment); (2) studies on a primarily adult population (where the sample is not comprised of students); (3) articles that focused on face-to-face violence; (4) studies published before 2004; and (5) clinical trials with no results.

2.3. Data Collection

Titles and abstracts were read by two reviewers, including the Principal Investigator (PI) and a co-investigator, to decide if they met the eligibility criteria. After the database search, the selected studies were carried out on Mendeley software, used for database organisation and removal of the duplicated articles. All studies that met the defined criteria were analysed in full text. Any issues regarding a study's eligibility have been handled after a debate with a third reviewer. The studies considered for inclusion were categorized according to the primary features: authors, year publication, geographic location, sample characteristics (N, age, sex), CIV domain, objectives, and main findings.

3. Results

Figure 1 summarizes the PRISMA (Moher et al. 2009) literature procedure. The scoping review covered a total of 18 studies. Out of 457 identified studies, we retrieved 85 references after applying the duplication process.

3.1. Overview of Included Studies

The eighteen articles included presented an overview of the existing research carried out about CIV, including the instruments produced and applied up until the present (Table 1).

3.2. Year of Publication and Location

The studies included in this study were published between the years of 2010 (Mishna et al. 2010) and 2020 (Buelga et al. 2020; Caridade et al. 2020; Galende et al. 2020; Jun 2020; Rebollo-Catalan and Mayor-Buzon 2020; Reed et al. 2016). The year with the most publications was 2020 (n = 6), followed by 2018 (n = 3) and 2019, and 2017 and 2015 (n = 2). Most of the studies were conducted in Spain (n = 4) (Buelga et al. 2020; Galende et al. 2020; Rebollo-Catalan and Mayor-Buzon 2020; Sánchez et al. 2015). Three studies were conducted in Portugal (Caridade et al. 2019, 2020; Pereira et al. 2016), and three included several countries (Athanasiou et al. 2018; Caridade et al. 2019; Del Rey et al. 2015). Two studies each were conducted in the United States of America (Peskin et al. 2017; Reed et al. 2020) and Canada (Mishna et al. 2010; Smith et al. 2018). Two studies were conducted in Asia: one in Korea (Jun 2020) and one in China (Lee et al. 2013). Approximately 67% of the studies were conducted in Europe (n = 12), mostly in Spain. One study was conducted in Italy (Morelli et al. 2018) and Greece (Gkiomisi et al. 2017).

3.3. Sample Characteristics

The sample size of the studies ranged from 61 (Lee et al. 2013) to 13,798 (Athanasiou et al. 2018). There were some disparities in the sample frame, including: students in general (n = 14) (Buelga et al. 2020; Caridade et al. 2019, 2020; Del Rey et al. 2015; Galende et al. 2020; Gkiomisi et al. 2017; Jun 2020; Pereira et al. 2016; Morelli et al. 2018; Peskin et al. 2017; Rebollo-Catalan and Mayor-Buzon 2020; Reed et al. 2016; Sánchez et al. 2015), university/college students (n = 1) (Caridade et al. 2019), and middle and high school students (n = 3) (Lee et al. 2013; Mishna et al. 2010; Smith et al. 2019). The age of the participants ranged from a minimum of 11 (Del Rey et al. 2015; Galende et al. 2020; Peskin et al. 2017) to a maximum of 30 (Caridade et al. 2019).

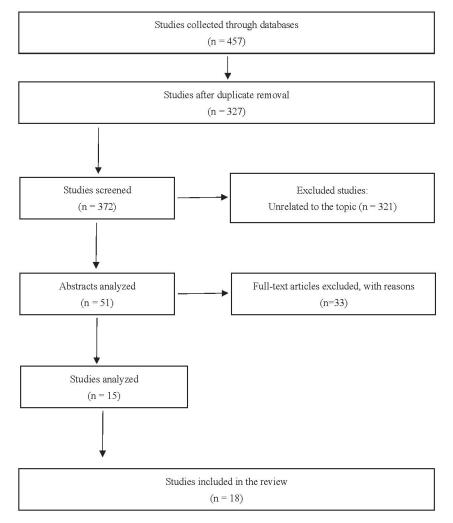


Figure 1. Flowchart of selection of studies. Note: PRISMA figure adapted from Moher, Liberati, Tetzlaff, Altman, The PRISMA Group (Moher et al. 2009); Creative Commons.

 Table 1. Description of studies (n = 18) included in the scoping review protocol.

Type of Study			ting Systematic	ting Systematic	ting Survey	ting Survey .e	Cyber Dating Abuse Questionnaire	- Cyber- ent harassment tion scale
Field			Cyber Dating Violence	Cyber Dating Violence	Cyber Dating Abuse	Cyber Dating Violence	Cyber Dating Abuse	Cyber- harassment victimization
		Outcomes	Paucity of cyber dating violence prevention programs programs Interventions to the cognitive and/or attitudinal component behaviour Skill-building component (emotion regulation, communication skills, coping and conflict-resolution strategies)	Developed a conceptual and methodological standardization The effectiveness of actions to prevent and respond to CDA was essential.	Forms of CDA: using dating partner's social networking account, intimidate partner for not responding to calls or messages	Dating violence prevention programs should include issues related to CDV in schools	With high reliability, CFA found four factors: direct aggression victimization (0.86), control victimization (0.91), direct aggression perpetrator (0.89), and control perpetrator (0.84)	Most adolescent victims are also aggressors Need of qualitative research in the field Integrated psychoeducational and
Main Results	Prevalence	Vict.	NA	5.8% to 92% (large variety in terms of gender differences)	■ NA	35.6%	58.8%% online control 59.2% any CDA	NA
	Preva	Perp.	NA	8.1% to 93.7% (large variety in terms of gender differences)	15%	33%	63.2% online control 66.9% any CDA	66.1%
Objectives			Prevention programs	Prevalence rates Identify related variables Development and/or validation of measures	Prevalence rates Identify related variables	Prevalence rates Explore self-esteem and physiological distress	Prevalence rates Development and/or validation of measures	Prevalence rates
			•	•••	••	••	••	•
Sample Characteristics (N, Age)			Adolescents (aged 11 to 19 years)	Students (aged 12 to 30 years)	Adolescents (aged 11 to 15 years) $N = 424$	High school students (aged 14 to 18 years) $N = 190$	University students (average age of 28.41) N = 272	Adolescents (aged 12 to $16 \ years) \\ N = 627$
Location			Spain	Portugal, France and Spain	USA	Canada	Portugal	Portugal
Author/s and Publication Year		Year	Galende et al. (2020)	Caridade et al. (2020)	Peskin et al. (2017)	Smith et al. (2018)	Caridade and Braga (2019)	Pereira et al. (2016)

Table 1. Cont.

Table 1. Cont.

						Main Results	lts			
Author/s and Publication	Location	Sample Characteristics (N, Age)		Objectives	Pre	Prevalence			Field	Type of Study
Year					Perp.	Vict.	Outcomes	ımes		
Athanasiou et al. (2018)	Germany, Greece, Island, Netherland, Poland, Romania and Spain	Adolescents (aged 14 to 17 years) N = 13.708		Prevalence rates Related variables	N A	Higher rate 37.3% (Romaria) and lowest in 13.3% (Spain)	Cyberbullying victin was associated with network sites integrating internet communication tech teaching in educatio contexts should be emphasized as a pre approach. Internalizing and externalizing and externalizing issues linked to cyber victimization.	Cyberbullying victimization was associated with social network sites linegrating internet communication technology teaching in educational contexts should be approach. Internalizing and approach. Internalizing and internalizing and internalizing sisues are linked to cyber victimization.	Cyberbullying	Survey
Caridade et al. (2020)	Portugal	Adolescents and young adults (mean age of 25.36 years) $N = 173$	••	Prevalence rates Abuse context	43.4%	38.2%	■ CDA is genera with jealousy.	CDA is generally associated with jealousy.	Cyber Dating Abuse	Survey
Mishna et al. (2010)	Canada	Middle and high school students (5th to 12th grade) N = 2186	••	Prevalence rates Use of technology	33.7%	49.5%	Most bullying was perpetrated by and a friends Teens practice cyberl because it makes the funny, popular, and powerful	Most bullying was prepertated by and against friends Teens practice cyberbullying Teens practice in makes them feel funny, popular, and powerful	Cyberbullying	Survey
Lee et al. (2013)	China	High school students $N = 61$		Prevention program	NA	NA	The WebQuest course improved understand about cyberbullying rand effectively, lowere intentions, and mainte the benefits after learn It didn't change attitut toward cyberbullying	The WebQuest course improved understanding about cyberbullying rapidly and effectively, lowered intentions, and maintained intentions, and maintained lift be breiffs after learning. It didn't change attitudes toward cyberbullying	Cyberbullying	Survey
Reed et al. (2020)	USA	Young populations		Prevalence rates	NA	Giris /female 2.5% to 25% Boys/male 0.8% to 34.4% Total 1% to 58.7%	Types of CSH: sexual harassment experience online, unwanted sexual unwanted sexual messages / photos, have sexual messages / photos, have sexual messages / mag shared without permis	Types of CSH: sexual harassement experienced online, unwanted sexual solicitation, receiving unwanted sexual messages/ photos, having sexual messages/ simages shared without permission.	Cyber sexual harassment	Review
Buelga et al. (2020)	Spain	Adolescents (aged 12 to 16 years) N = 1318	••	Prevalence rates Development and/or validation of measures	NA	V V	Item Factor Analyses identified two-factor structure: direct cyber-aggression and indirect cyber-aggres	Item Factor Analyses identified two-factor structure: direct cyber-aggression and indirect cyber-aggression	Cyberbullying	Adolescent Cyber- Aggressor scale

Table 1. Cont.

NA—Not applied; Vict—Victimization; Perp—Perpetration; EFA—Exploratory factor analysis; CFA—Confirmatory Factor Analysis.

3.4. Field of the Studies

All 18 analysed studies self-report as regarding CIV. However, it was possible to understand some emerging fields: cyber dating violence/cyber dating abuse (n = 8) (Caridade and Braga 2019; Caridade et al. 2019, 2020; Galende et al. 2020; Morelli et al. 2018; Peskin et al. 2017; Sánchez et al. 2015; Smith et al. 2018), cyberbullying (n = 7) (Athanasiou et al. 2018; Buelga et al. 2020; Del Rey et al. 2015; Gkiomisi et al. 2017; Jun 2020; Lee et al. 2013; Mishna et al. 2010), cyber harassment (n = 2) (Pereira et al. 2016; Reed et al. 2020) and cyber bystanders (n = 1) (Rebollo-Catalan and Mayor-Buzon 2020).

3.5. Assessment Tools

CIV was assessed using various methods given their importance for the operationalization of CIV. As one of the critical objectives of the current investigation, we discuss them in Table 2.

Table 2. Tools used to assess CIV.

Field	Measures/Author(s)	Author(s)/Year Publication	Scale/Factors (Items)
CDA/CDV	Cyber Dating Abuse Questionnaire, developed from the cyberbullying scales of Litwiller and Brausch (2013)	Smith et al. (2018)	Victimization (8) Perpetration (8)
	13 items adapted from previous studies (Zweig et al. 2013).	Peskin et al. (2017) Van Ouytsel et al. (2017)	Perpetration (13)
	Cyber Dating Abuse Questionnaire (CDAQ) (Borrajo et al. 2015)	Borrajo et al. (2015) Borrajo and Gámez-Guadix (2016) Caridade and Braga (2019) Van Ouytsel et al. (2016, 2017) García-Sánchez et al. (2017)	Perpetration (20) Victimization (20) Direct aggression (10) Control/monitoring (10)
	Cyber Dating Q_A Scale	Sánchez et al. (2015) Sánchez Jiménez et al. (2017)	Perpetration emotional communication strategies (ECS) (7) Online control (OC) (6) Online jealousy (OJ) (4) Online intrusive behavior (OIB) (4) Online intimacy (OJ) (3) Cyber datin practices (CP) (4)
	Cyber Dating Violence Inventory (CDVI) developed from the Conflict in Adolescent Dating Relationship Inventory (CADRI) (Morelli et al. 2018)	Morelli et al. (2018)	Victimization and perpetration psychological violence (12) Relational violence (10)
	Cyber Dating Abuse Victimization (CDAV) (Zweig et al. 2014)	Lu et al. (2018) Zweig et al. (2013, 2014)	Victimization (12)
Cyberbullying	Cyberbullying and Online Aggression (Hinduja and Patchin 2011) and 8 items about dating behaviors	Zerach (2016)	Victimization (9) Perpetration (9)
	Cyberbullying survey	Jun (2020)	Victimization
	Achenbach's Youth Self Report (YSR)	Athanasiou et al. (2018)	Victimization
	Several Questions about Experience of cyber bullying	Mishna et al. (2010)	Victimization Perpetration
	Self-Compiled Questionnaire	Lee et al. (2013).	Prevention
	CYB-AGS Cyber-Aggressor Scale	Buelga et al. (2020)	Victimisation
	European Cyberbullying Intervention Project Questionnaire	Del Rey et al. (2015)	Victimization (11) Aggression (11)

Table 2. Cont.

Field	Measures/Author(s)	Author(s)/Year Publication	Scale/Factors (Items)
Cyber-harassment	Cyber-Harassment Assessment Scale	Pereira et al. (2016) Spitzberg and Hoobler (2002)	Victimization Perpetration (18)
	General items about sexual harassment experienced online	Korchmaros et al. (2013) Pew Research Center (2014)	
	Unwanted sexual solicitation	Marret and Choo (2017) Chang et al. (2016) Jones et al. (2013)	
	Unwanted sexual messages/photos	Sánchez Jiménez et al. (2017) Pew Research Center (2014) Choi et al. (2016) Montiel et al. (2016)	
	Sexual messages/images shared without permission	(Kearl 2018) Pew Research Center (2014) Powell and Henry (2018)	

In the field of CDA/CDV, the measurement tools that emerged were the Cyber Dating Abuse Questionnaire (CDAQ) developed by Borrajo et al. (2015) (n = 8), the Cyber Dating Violence Inventory (CDVI) (n = 1) (Morelli et al. 2018), the Cyber Dating Q_A Scale (n = 2) and Cyber Dating Abuse Victimization (CDAV) (n = 3). Many of the tools assess both victimization and perpetration, while a smaller number of instruments focus only on victimization (n = 1) or perpetration (n = 1).

In the field of cyberbullying, the measurement tools that emerged were Cyberbullying and Online Aggression (n=1), a cyberbullying survey (n=1), Achenbach's Youth Self Report (n=1), self-complied questionnaire (n=1), one study including several questions about the experience of cyber bullying (Gkiomisi et al. 2017), the CYB-AGS cyber-aggressor scale (n=1) and one study including the European Cyberbullying Intervention Project Questionnaire, which included European countries such as Spain, Germany, Italy, Poland, United Kingdom and Greece (Del Rey et al. 2015).

Cyber-harassment measures included the Cyber-harassment Assessment Scale (n=2) while one study analysed general items about sexual harassment experienced online (n=1) (Reed et al. 2020).

3.6. Objectives and Main Findings

Many studies (n = 13) estimated prevalence rates. The number of participants who considered conducting CIV ranged from 8.1% (Caridade et al. 2019) to 93.7% (Sánchez et al. 2015). CDV was the field with the highest rates of perpetration (93.7%), followed by cyberbullying (54.1%).

The prevalence of victimization also differed significantly between research, ranging from 1% (Sánchez et al. 2015) in a study where the authors analysed cyber sexual harassment in young populations in the USA, to 92% (Caridade et al. 2019), also found in the USA study. In terms of different fields, CDV was the field with the highest victimisation rates (92%), followed by cyberbullying.

A European study also found that Romania has registered the highest rate, with 37.3%, in terms of cyberbullying victimisation, and Spain the lowest with 13.3%. In Italy, a study on CDV also found similar rates of perpetration and victimisation in digital psychological violence (67% vs. 64%) and digital relational violence (13% vs. 14.3%).

In the CDV field, the primary outcomes are: the necessity of a conceptual and methodological standardization (Caridade et al. 2019); that dating prevention programs should be included in schools (Smith et al. 2019); the necessity of a qualitative approach; and integration of psycho-educational and intervention programs (Pereira et al. 2016). In the cyberbullying field, the primary outcomes are: cyberbullying can assume several forms; the higher the interaction with parents, the lower the cyberbullying experience rate; it is necessary to develop teaching materials in order to prevent cyberbullying in the academic

field (Jun 2020); cyberbullying victimization is associated with social network sites; integrating internet communication technology instruction in educational contexts should be emphasized as a preventive approach (Athanasiou et al. 2018); most cyberbullying is perpetrated by and against friends; and teens practice cyberbullying because it makes them feel funny, famous and influential (Mishna et al. 2010).

3.7. Measures to Assess CIV

One of the main goals of several of the studies examined (n = 6) was developing and validating measures.

A study conducted in Portugal validated the Cyber Dating Abuse Questionnaire (CDAQ) with good reliability (Caridade and Braga 2019). Morelli et al. (2018) validated the cyber dating violence inventory with good reliability in Italy. Overall, all the studies obtained adequate measures through Cronbach's alpha, ranging from 0.71 (Sánchez et al. 2015) to 0.91 (Caridade et al. 2019). In the cyberbullying field in Spain, Buelga et al. (2020) analysed the psychometric properties of the CYB-AGS cyber-aggressor scale.

4. Discussion

We successfully found 18 studies in the present scoping review. Our results reveal that the interest of the scientific community in the study of cyber violence has increased considerably in the last five years. Other structured literature reviews also found recent interest (Caridade et al. 2019; Flach and Deslandes 2017). This result is something to be expected considering the technological revolution that we have witnessed in recent decades, with teenagers being the primary users of digital tools in their daily lives (Guadix et al. 2018). The current interest in CIV emphasizes the need to find an international construct regarding a problem that affects boys and girls in their interpersonal relationships. Our results corroborated this perspective once we obtained a high variability in the existing instruments regarding dimensions, definitions, methodology, and approach to the cyber violence problem. Contemporary research on CIV has produced highly variable and complex results to interpret, with a considerable amount of content (Caridade et al. 2019; Flach and Deslandes 2017; Guadix et al. 2018; Brown and Hegarty 2018). On the other side, prevalence rates are also variable, with victimization rates ranging from 1% to 92% and perpetration rates between 8.1% (Caridade et al. 2019) to 93.7% (Sánchez et al. 2015).

This variability can be understood by considering the inherent features of the online space where cyber violence occurs, which finds itself undergoing continuous development. The digital world represents an endless opportunity, with vanguardist solutions, both in terms of internet access, progress, and technological advances, including more sophisticated computers, smartphones and other devices. These advances offer the youth new tools but also represent new opportunities for aggression and victimization (Lucero et al. 2014). This progress and development can justify the variability in results, such as the methodology, instruments concept, and the difficulties in developing a solid construct in the cyber violence field.

Different constructs have been used to describe cyber violence, such as cyber sexual harassment, cyber-harassment victimization, cyber dating abuse, cyber dating violence, cyberbullying, cyber violence, electronic aggression and online teen dating violence. Our scoping review found that three fields emerged: CDA/CDV, cyberbullying and cyberharassment.

Cyber violence areas revealed similar levels of victimization to those detected in inperson violence (Caridade et al. 2019). For that reason, it has been questioned whether cyber violence constitutes a new form of violence or an extension of face-to-face violence (Muñoz-Fernández and Sánchez-Jiménez 2020; Stephenson et al. 2018). In the CDA field, some authors assume the first option and revise their measures to the online context (Morelli et al. 2018); others believe in the second option since cyber violence has unique characteristics that are distinct from face-to-face violence (Peskin et al. 2017). In terms of the cyberbullying context, most authors consider that regardless of the similarities with

bullying, cyberbullying has its specific attributes and manners of aggression in the online world (Buelga et al. 2020; Jun 2020). For example, in cyberbullying, cyberspace allows anonymity to the aggressor and, although there is no physical aggression, the audience is much vaster so that the suffering may be more prominent for victims. Lastly, some authors (e.g., Sánchez et al. 2015) consider cyber harassment an extension of face-to-face violence, while others (e.g., Pereira et al. 2016) agree that it has specificities that can only be observed online. For example, young people today face a troubling reality when they come across sexual content shared without permission, which causes harm to young people. In the virtual world, everything is public, so anyone can see and share it, making it practically impossible to completely remove this content. Therefore, CIV can be understood as several abusive typologies (e.g., psychological, physical, sexual, control and direct aggression), such as those found in face-to-face dating violence (Caridade et al. 2019; European Commission 2021; European Institute for Gender Equality 2020).

Different tools were used to measure CDA/CDV, cyberbullying and cyber-harassment. In the CDA/CDV field, six different tools were used. In the cyberbullying field, seven tools were used, and in cyber-harassment, five tools emerged. All the tools were developed and validated for the different proposals, and all used different criteria (e.g., victimization, perpetration or both; specific versus broad behaviours).

Furthermore, five of the studies tried to design and verify measures using exploratory and confirmatory factor analyses to confirm various conceptually different factors. We also found significant differences in other methodological aspects of the studies, namely, the sample size and sampling context and the time assessed (e.g., from the last week to life), which explains the varying prevalence rates. This lack of consensus in terms of conceptions, methods, and methodological aspects can result in a wide range of prevalence estimates, meaning CIV knowledge is currently limited. As a result, there is a higher need for scientific investigation and explanation of CIV (Borrajo et al. 2015; Buelga et al. 2020; Del Rey et al. 2015; Reed et al. 2016; Sánchez et al. 2015).

The evidence demonstrates the importance of focusing on the development of prevention and intervention policies for these different forms of CIV.

CIV is a real problem for our society, with high rates of perpetration and victimization, 63.2% and 58.8%, respectively, in this instance in Portugal (Caridade and Braga 2019). Cyber-harassment perpetration is also very common among adolescents, with perpetration rates of 66.1% (Pereira et al. 2016). Digital psychological violence is also a problem, with levels of perpetration of 67% and victimization of 64%. This could be explained by the fact that some of the authors that have discussed these adolescents often do not recognize the numerous forms of digital emotional abuse and cyber control as violence (Lucero et al. 2014), something that should be further understood and studied, as it will condition responses to the violence process. Some authors are also alert that this fact could lead adolescents, who may be unaware of this, to admit online control behaviours more readily than direct aggression (Caridade et al. 2019).

This scoping review also broadened our understanding of CIV perpetration and victimization-related characteristics. The perpetuation of CIV has been linked to a wide range of factors. Individual factors (demographic, psychosocial, behavioural and psychological) accounted for most of the variables, while others included relationships (peer and family) and community influences (Buelga et al. 2020; Guadix et al. 2018; Peskin et al. 2017). The studies evaluating gender as a specific demographic factor produced mixed results. Some studies (Jun 2020; Pereira et al. 2016; Smith et al. 2018) supported gender differences in CIV perpetration and others (Borrajo et al. 2015; Jun 2020; Smith et al. 2018) showed similar rates of CIV-perpetrating behaviours among males and females. These mixed-gender findings corroborate what has been verified in dating violence in person (Cava et al. 2020) and reveal the need to deepen research in this domain, given the growing gender equity in access to the digital world. More individual factors were assessed, including psychosocial factors such as jealousy and sexist beliefs. In addition, behavioural factors, including bullying perpetration, conduct disorders and drug use, were analysed.

Psychological factors were also included, such as narcissism, with findings revealing that they were linked to CIV perpetration (Caridade and Braga 2019; Jun 2020; Peskin et al. 2017). In CIV, these characteristics can become more harmful because, with digital dissemination, it is easier to have followers that share the same beliefs, potentially causing the aggression to be magnified (Lucero et al. 2014).

Many characteristics associated with CIV victimization have been identified, such as depressive symptoms, anxiety, emotional/psychological distress, delinquency, prior cyber victimization, bad grades in school and parental closeness, among others (Buelga et al. 2020; Forbes et al. 2019; Peskin et al. 2017).

Protective factors are explored in this context. Given the importance of correlations in designing intervention and preventative measures, further study in this area is needed (Kowalski et al. 2019; Peskin et al. 2017).

To summarise, it is a vital requirement for additional research to characterise the dimensions that comprise cyber dating violence and other types of CIV, such as cyberbullying and cyber harassment. The studies in the field should pursue a path of standardisation to develop and produce robust and valid instruments that allow us to recognise and compare the prevalence data. This will make it possible to obtain a more inclusive understanding of the phenomenon and encourage possible prevention and intervention programs in schools and universities (Backe et al. 2018). This study is particularly crucial for the adolescent population, which appears to be a highly susceptible group to the impacts of being involved in cyber violence.

Our study has some weaknesses. First, violence through new technologies is an emergent phenomenon that lacks conceptual standardization. Furthermore, due to the variability of terminology available, some manuscripts may not have been selected. The following limitation is closely connected to the analysis of this phenomenon. Due to new violent behaviours, sometimes and in some cases and realities, it is challenging to discover their nature and underlying intentions. For example, impersonation of peers on social media can be recognised as controlling behaviour when it is performed to acquire information about a friend or relation if the intention is to disrupt the partner's peer relationships. To enable awareness, upcoming measures should accurately describe the measured behaviours. Finally, for a deeper understanding of cyber violence, studies with a longitudinal methodology are necessary. This methodology will allow more precise temporal inferences and more explicit identification of distinct variables such as lifestyle factors or the effects of various types of cyber violence. Longitudinal approaches should prove to be useful in deepening the variables related to CIV. Future studies should also focus on the influence of CIV on adolescents' lives and whether the impact of CIV varies depending upon the nature of the communications tools used. Such practices are essential to better education and focusing future policy and intervention actions.

5. Conclusions

This scoping review has attempted to gather knowledge of the existing academic literature to reveal the most relevant research trends in cyber violence among youth. In addition, it summarises the available instruments used to measure adolescent cyber violence, such as CDA/CDV, cyberbullying and cyber-harassment. According to our results, CIV can be thought of as a multidimensional construct with sexual and nonsexual behaviours, grouped into different dimensions and among several fields, as stated above. This analysis provides an awareness of cyber violence as an extension of the many forms of face-to-face violence, granting the expression and refinement of new behaviours such as control/monitoring, cyber sexual violence, or public aggression.

Lastly, the current literature uses aggression, abuse and violence as commutable. Authors must define these terms in their theoretical framework; a conceptual and methodological uniformity is required to achieve higher generalizability of the findings in this research field and to prevent and intervene successfully. It is also essential to define how we measure aggression, abuse, or violence among young people. For example, insulting a peer

once via technology can be understood as aggression but not considered as abuse. Hence, it would require numerous instances in order to be considered abuse, as with face-to-face abuse. However, nowadays, young people use public broadcasts or videos with sexual content as a form of revenge. In this case, aggression might be considered abuse because there is a clear intention to hurt the victim and the consequences are severe. Future research should analyse if public exposure modulates the perception of aggression or abuse and evaluate the efficiency of prevention and intervention educational programmes, which we believe is the next step for research in this area.

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References

- Athanasiou, Kalliope, Eirini Melegkovits, Elisabeth K. Andrie, Charalampos Magoulas, Chara K. Tzavara, Clive Richardson, Donald Greydanus, Maria Tsolia, and Artemis K. Tsitsika. 2018. Cross-national aspects of cyberbullying victimization among 14–17-year-old adolescents across seven European countries. *BMC Public Health* 18: 800. [CrossRef] [PubMed]
- Backe, Emma Louise, Pamela Lilleston, and Jennifer McCleary-Sills. 2018. Networked individuals, gendered violence: A literature review of cyberviolence. Violence and Gender 5: 135–46. [CrossRef]
- Borrajo, Erika, and Manuel Gámez-Guadix. 2016. Abuso "online" en el noviazgo: Relación con depression, ansiedad y ajuste diádico. Behavioral Psychology/Psicología Conductual 24: 221–35.
- Borrajo, Erika, Manuel Gámez-Guadix, Noemí Pereda, and Esther Calvete. 2015. The development and validation of the cyber dating abuse questionnaire among young couples. *Computers in Human Behavior* 48: 358–65. [CrossRef]
- Brown, Cynthia, and Kelsey Hegarty. 2018. Digital dating abuse measures: A critical review. *Aggress Violent Behavior* 40: 44–59. [CrossRef]
- Buelga, Sofia, Javier Postigo, Belén Martínez-Ferrer, María-Jesús Cava, and Jessica Ortega-Barón. 2020. Cyberbullying among adolescents: Psychometric properties of the CYB-AGS cyber-aggressor Scale. *International Journal of Environmental Research and Public Health* 17: 3090. [CrossRef]
- Caridade, Sónia, and Teresa Braga. 2019. Versão portuguesa do Cyber Dating Abuse Questionaire (CDAQ)–Questionário sobre Ciberabuso no Namoro (CibAN): Adaptação e propriedades psicométricas. *Análise Psicológica* 1: 93–105. [CrossRef]
- Caridade, Sónia, Teresa Braga, and Erika Borrajo. 2019. Cyber dating abuse (CDA): Evidence from a systematic review. *Aggression and Violent Behavior* 48: 152–68. [CrossRef]
- Caridade, Sónia, Hélder Fernando Pedrosa e Sousa, and Maria Alzira Pimenta Dinis. 2020. Cyber and offline dating abuse in a Portuguese sample: Prevalence and context of abuse. Behavioral Sciences 10: 152. [CrossRef]
- Cava, María-Jesús, Sofía Buelga, Laura Carrascosa, and Jessica Ortega-Barón. 2020. Relations among romantic myths, offline dating violence victimization and cyber dating violence victimization in adolescents. *International Journal of Environmental Research and Public Health* 17: 1551. [CrossRef]
- Chang, Fong-Ching, Chiung-Hui Chiu, Nae-Fang Miao, Ping-Hung Chen, Ching-Mei Lee, and Jeng-Tung Chiang. 2016. Predictors of Unwanted Exposure to Online Pornography and Online Sexual Solicitation of Youth. *Journal of Health Psychology* 21: 1107–18. [CrossRef] [PubMed]
- Choi, HyeJeong, Joris Van Ouytsel, and Jeff R. Temple. 2016. Association between Sexting and Sexual Coercion among Female Adolescents. *Journal of Adolescence* 53: 164–68. [CrossRef] [PubMed]
- Council of Europe. 2020. Cyberviolence. Available online: https://www.coe.int/en/web/cybercrime/cyberviolence (accessed on 22 December 2020).
- Del Rey, Rosario, José A. Casas, Rosario Ortega-Ruiz, Anja Schultze-Krumbholz, Herbert Scheithauer, Peter Smith, Fran Thompson, Vassilis Barkoukis, Haralambos Tsorbatzoudis, Antonella Brighi, and et al. 2015. Structural validation and cross-cultural robustness of the European Cyberbullying Intervention Project Questionnaire. *Computers in Human Behavior* 50: 141–47. [CrossRef]

- European Commission. 2021. A Cybersecure Digital Transformation in a Complex Threat Environment—Brochure. Available online: https://ec.europa.eu/digital-single-market/en/news/cybersecure-digital-transformation-complex-threat-environment-brochure (accessed on 21 November 2020).
- European Institute for Gender Equality. 2020. Violence at a Glance. Available online: https://eige.europa.eu/gender-equality-index/2020/domain/violence (accessed on 22 January 2021).
- Flach, Roberta Matassoli Duran, and Suely Ferreira Deslandes. 2017. Cyber dating abuse in affective and sexual relationships: A literature review. Cadernos de Saude Publica 33: 1–19. [CrossRef]
- Forbes, Miriam K., Sally Fitzpatrick, Natasha R. Magson, and Ronald M. Rapee. 2019. Depression, anxiety, and peer victimization: Bidirectional relationships and associated outcomes transitioning from childhood to adolescence. *Journal of Youth and Adolescence* 48: 692–702. [CrossRef] [PubMed]
- Galende, Nuria, Naiara Ozamiz-Etxebarria, Joana Jaureguizar, and Iratxe Redondo. 2020. Cyber dating violence prevention programs in universal populations: A systematic review. *Psychology Research and Behavior Management* 13: 1089. [CrossRef] [PubMed]
- García-Sánchez, Paola Valeria, Cecilia Guevara-Martínez, José Luis Rojas-Solís, Fabiola Peña-Cárdenas, and Víctor Gerardo González Cruz. 2017. Apego y Ciber-Violencia En La Pareja de Adolescentes. Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology 2: 541–50. [CrossRef]
- Geffner, Robert. 2016. Partner aggression versus partner abuse terminology: Moving the field forward and resolving controversies. Journal of Family Violence 31: 923–25. [CrossRef]
- Gkiomisi, Athanasia, Maria Gkrizioti, Athina Gkiomisi, Dimitrios A. Anastasilakis, and Panagiotis Kardaras. 2017. Cyberbullying among Greek high school adolescents. *The Indian Journal of Pediatrics* 84: 364–68. [CrossRef]
- Guadix, Manuel Gámez, Erika Borrajo, and Esther Calvete Zumalde. 2018. Abuso, control y violencia en la pareja a través de internet y los smartphones: Características, evaluación y prevención. *Papeles del Psicólogo* 39: 218–27.
- Hinduja, Sameer, and Justin W. Patchin. 2011. Electronic Dating Violence. Thousand Oaks: Cyberbullying Research Center.
- Jones, Lisa, Kimberly Mitchell, and David Finkelhor. 2013. Online Harassment in Context: Trends from Three Youth Internet Safety Surveys (2000, 2005, 2010). *Psychology of Violence* 3: 53. [CrossRef]
- Jun, Woochun. 2020. A study on the cause analysis of cyberbullying in Korean adolescents. *International Journal of Environmental Research and Public Health* 17: 4648. [CrossRef] [PubMed]
- Kearl, Holly. 2018. The Facts behind The# MeToo Movement: A National Study on Sexual Harassment and Assault. Washington, DC: Stop Street Harassment.
- Korchmaros, Josephine D., Michele L. Ybarra, Jennifer Langhinrichsen-Rohling, Danah Boyd, and Amanda Lenhart. 2013. Perpetration of Teen Dating Violence in a Networked Society. Cyberpsychology, Behavior, and Social Networking 16: 561–67. [CrossRef] [PubMed]
- Kowalski, Robin M., Susan P. Limber, and Annie McCord. 2019. A developmental approach to cyberbullying: Prevalence and protective factors. *Aggression and Violent Behavior* 45: 20–32. [CrossRef]
- Lee, Ming-Shinn, Wu Zi-Pei, Leif Svanström, Koustuv Dalal, and Susan Tortolero Emery. 2013. Cyber bullying prevention: Intervention in Taiwan. *PLoS ONE* 8: e64031. [CrossRef]
- Litwiller, Brett J., and Amy M. Brausch. 2013. Cyber Bullying and Physical Bullying in Adolescent Suicide: The Role of Violent Behavior and Substance Use. *Journal of Youth and Adolescence* 42: 675–84. [CrossRef]
- Lu, Yua Joris Van Ouytselb, Michel Walraveb, Koen Ponnetc, and Jeff R. Templea. 2018. Cross-Sectional and Temporal Associations between Cyber Dating Abuse Victimization and Mental Health and Substance Use Outcomes. *Journal of Adolescence* 65: 1–5. [CrossRef]
- Lucero, Jessica L., Arlene N. Weisz, Joanne Smith-Darden, and Steven M. Lucero. 2014. Exploring gender differences: Socially interactive technology use/abuse among dating teens. *Affilia* 29: 478–91. [CrossRef]
- Marret, Mary J., and Wan Yuen Choo. 2017. Factors Associated with Online Victimisation among Malaysian Adolescents Who Use Social Networking Sites: A Cross-Sectional Study. *BMJ Open* 7: e014959. [CrossRef]
- Mishna, Faye, Charlene Cook, Tahany Gadalla, Joanne Daciuk, and Steven Solomon. 2010. Cyber bullying behaviors among middle and high school students. *American Journal of Orthopsychiatry* 80: 362–74. [CrossRef]
- Moher, David, Alessandro Liberati, Jennifer Tetzlaff, Douglas G. Altman, and for the PRISMA Group. 2009. Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *BMJ* 339: b2535. [CrossRef] [PubMed]
- Montiel, Irene, Enrique Carbonell, and Noemí Pereda. 2016. Multiple Online Victimization of Spanish Adolescents: Results from a Community Sample. Child Abuse & Neglect 52: 123–34.
- Morelli, Mara, Dora Bianchi, Antonio Chirumbolo, and Roberto Baiocco. 2018. The cyber dating violence inventory. Validation of a new scale for online perpetration and victimization among dating partners. European Journal of Developmental Psychology 15: 464–71. [CrossRef]
- Muñoz-Fernández, Noelia, and Virginia Sánchez-Jiménez. 2020. Cyber-aggression and psychological aggression in adolescent couples: A short-term longitudinal study on prevalence and common and differential predictors. *Computers in Human Behavior* 104: 106191. [CrossRef]
- Pereira, Filipa, Brian H. Spitzberg, and Marlene Matos. 2016. Cyber-harassment victimization in Portugal: Prevalence, fear and help-seeking among adolescents. *Computers in Human Behavior* 62: 136–46. [CrossRef]

- Peskin, Melissa F., Christine M. Markham, Ross Shegog, Jeff R. Temple, Elizabeth R. Baumler, Robert C. Addy, Belinda Hernandez, Paula Cuccaro, Efrat K. Gabay, Melanie Thiel, and et al. 2017. Prevalence and correlates of the perpetration of cyber dating abuse among early adolescents. *Journal of Youth and Adolescence* 46: 358–75. [CrossRef]
- Pew Research Center. 2014. Internet User Demographics. Washington, DC: Pew Research.
- Powell, Anastasia, and Nicola Henry. 2018. Policing Technology-Facilitated Sexual Violence against Adult Victims: Police and Service Sector Perspectives. *Policing and Society* 28: 291–307. [CrossRef]
- Rebollo-Catalan, Angeles, and Virginia Mayor-Buzon. 2020. Adolescent bystanders witnessing cyber violence against women and girls: What they observe and how they respond. *Violence against Women* 26: 2024–40. [CrossRef]
- Reed, Elizabeth, Alice Wong, and Anita Raj. 2020. Cyber sexual harassment: A summary of current measures and implications for future research. *Violence against Women* 26: 1727–40. [CrossRef]
- Reed, Lauren A., Richard M. Tolman, and Monique Ward. 2016. Snooping and sexting: Digital media as a context for dating aggression and abuse among college students. *Violence against Women* 22: 1556–76. [CrossRef]
- Sánchez, Virginia, Noelia Muñoz-Fernández, and Rosario Ortega-Ruíz. 2015. "Cyberdating Q_A": An instrument to assess the quality of adolescent dating relationships in social networks. Computers in Human Behavior 48: 78–86. [CrossRef]
- Sánchez Jiménez, Virginia, Noelia Muñoz Fernández, Luis Antonio Lucio López, and Rosario Ortega Ruiz. 2017. Ciberagresión En Parejas Adolescentes: Un Estudio Transcultural España-México. *Revista Mexicana de Psicología* 34: 46–54.
- Smith, Kevin, Jude Mary Cénat, Andréanne Lapierre, Jacinthe Dion, Martine Hébert, and Karine Côté. 2018. Cyber dating violence: Prevalence and correlates among high school students from small urban areas in Quebec. *Journal of Affective Disorders* 234: 220–23. [CrossRef] [PubMed]
- Smith, Peter K., Leticia López-Castro, Susanne Robinson, and Anke Görzig. 2019. Consistency of gender differences in bullying in cross-cultural surveys. *Aggression and Violent Behavior* 45: 33–40. [CrossRef]
- Spitzberg, Brian H., and Gregory Hoobler. 2002. Cyberstalking and the Technologies of Interpersonal Terrorism. *New Media & Society* 4: 71–92.
- Stephenson, Victoria L., Brittany M. Wickham, and Nicole M. Capezza. 2018. Psychological abuse in the context of social media. Violence and Gender 5: 129–34. [CrossRef]
- Stonard, Karlie E. 2020. "Technology was designed for this": Adolescents' perceptions of the role and impact of the use of technology in cyber dating violence. *Computers in Human Behavior* 105: 106211. [CrossRef]
- Tricco, Andrea C., Erin Lillie, Wasifa Zarin, Kelly K. O'Brien, Heather Colquhoun, Danielle Levac, David Moher, Micah D. J. Peters, Tanya Horsley, Laura Weeks, and et al. 2018. PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. Annals of Internal Medicine 169: 467–73. [CrossRef]
- World Health Organization. 2021. Adolescent and Young ADULT Health. Available online: https://www.who.int/news-room/fact-sheets/detail/adolescents-health-risks-and-solutions (accessed on 19 January 2022).
- Van Ouytsel, Joris, Elizabeth Torres, Hye Jeong Choi, Koen Ponnet, Michel Walrave, and Jeff R. Temple. 2017. The Associations between Substance Use, Sexual Behaviors, Bullying, Deviant Behaviors, Health, and Cyber Dating Abuse Perpetration. *The Journal of School Nursing* 33: 116–22. [CrossRef]
- Van Ouytsel, Joris, Koen Ponnet, Michel Walrave, and J. R. Temple. 2016. Adolescent Cyber Dating Abuse Victimization and Its Associations with Substance Use, and Sexual Behaviors. *Public Health* 135: 147–51. [CrossRef]
- Zerach, Gadi. 2016. Pathological Narcissism, Cyberbullying Victimization and Offending among Homosexual and Heterosexual Participants in Online Dating Websites. *Computers in Human Behavior* 57: 292–99. [CrossRef]
- Zweig, Janine M., Meredith Dank, Jennifer Yahner, and Pamela Lachman. 2013. The Rate of Cyber Dating Abuse among Teens and How It Relates to Other Forms of Teen Dating Violence. *Journal of Youth and Adolescence* 42: 1063–77. [CrossRef] [PubMed]
- Zweig, Janine M., Pamela Lachman, Jennifer Yahner, and Meredith Dank. 2014. Correlates of Cyber Dating Abuse among Teens. *Journal of Youth and Adolescence* 43: 1306–21. [CrossRef] [PubMed]





Review

A Scoping Review of Educational Interventions to Increase Prosociality against Gender-Based Violence in University Bystanders

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Abstract: Gender-based violence represents a problem of public interest with a high prevalence on university campuses, which has intensified the preventive strategy for potential victims. However, the prosocial action of the viewer provides a promising alternative to mitigate its incidence. This study analyzes preventive interventions based on gender-based violence towards university viewers as a basis for future proven and sensitive implementation processes of intercultural adaptation. The Scoping review process was implemented based on the Arksey and O'Malley methodology (aligned with the Cochrane manual), with subsequent reporting of results according to the PRISMA guide. In total, 15 articles finally met the selection criteria in the databases: WOS, Scopus, ERIC, PsycINFO, Embase, and PubMed, with specific descriptors. Despite the heterogeneity in the types of intervention and the study variables, the intervention and the results are described, and it is highlighted that they were effective for most of the proposed objectives, such as the decrease in the perpetration of sexual violence, the increase in prosocial behavior, and the recognition of forms of violence. The great value of these preventive interventions is concluded, and the diversity of these strategies implemented in parallel and continuously would have a lasting impact in higher education contexts.

Keywords: prevention; intervention; gender-based violence; intimate partner violence; programs; university students; bystanders; Scoping review

1. Introduction

Individuals' and communities' well-being loss is even more multifactorial in diverse conditions, where minorities are vulnerable to having their health and security requirements disregarded (Costa 2023). In addition, community spaces with high rates of diversity are exposed to a lack of interpersonal identification and communication shortages. That enhances the presence of frustration and negative feelings as the origin of violent behavior (Baron and Neuman 1996). In this sense, University campuses, as a global tendency, are likely to be vulnerable to different expressions of violence, so their minorities require prosocial support that enhances their well-being.

1.1. Bystander Behavior in Social Psychology

During the 20th century, research in social psychology has been mainly motivated by the predictability of behavior based on mediating processes. Therefore, much of the scientific production of the last century have tried to identify, isolate, describe, and explain concepts related to thought and action (Montero 1994).

Social psychology showed curiosity and concern for the inaction of human groups in the face of emergent events, such as what happened in 1964 with CSG, a 28-year-old girl who was the victim of an assault with fatal consequences after not receiving help in time.

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Thirty-eight neighbors witnessed the event, but only one person called the police when the aggressor left the place (Gangsberg 1964). Although the eventuality does not show the number of witnesses or their degree of exposure to the event, various authors focus on a new conceptualization of group behavior (Manning et al. 2007). Under this premise, a bystander is a person present in each scenario who possesses the power to assume or avoid responsibility for its action.

As a prelude to the 1970s, the social psychologists Bibb Latané and John Darley promoted the first experimental study on the bystander, regarding his inhibition of action or transfer of responsibility (Levine 2012), based on behavioral predictability associated with the subject's attitude, as an effect of the adjustment in his subjective perception of the norms of "pass" and "subjective control" and even his "value-expectation" belief scheme (Ajzen 1991). The experiments of Darley and Latané (Darley and Latane 1968) describe and explain the behavior of the spectator, who, regardless of his personality type, can imitate or influence the behaviors of others, assuming a proactive, apathetic, alienated, or anomic attitude. For this purpose, they posed emergent cases in experimental conditions, proving that the greater the presence of bystanders, the less supportive or helpful intervention was in the experimental subjects (Myers 1983). From this experience, the five moments in the bystander's prosocial intervention are: (a) identifying the situation; (b) perceiving the risk in potential victims; (c) assuming the responsibility to intervene; (d) deciding to act; and (e) acting (Latané and Darley 1968, 1970). Burn (2008) applied this model to sexual and gender-based violence from the bystander perspective, identifying the five inhibitory barriers to prosocial action. These barriers involve the diffusion of responsibility (Levine 2012) and the determination of the victim (as potential or actual) in terms of their observable characteristics of appearance and behavior (Burn 2008). In this sense, the importance of understanding the behavior of the university spectator in relation to the approach of dating violence in their peer group is highlighted (Cusano et al. 2020).

1.2. Gender-Based Violence on University Campuses and Bystander Intervention

According to the World Health Organization (WHO), gender-based violence constitutes a human rights abuse and a public health problem of epidemic proportions (WHO 2013), with a need for urgent action, as indicated in the World Report on Violence and Health of the Pan American Health Organization (PAHO) (Pan American Health Organization 2002). Data from 21 US universities surveyed in 2015 indicate that 1 in 5 female students and 1 in 20 male students experienced sexual assault during their formative years (Association of American Universities 2015). In the following four years, despite efforts to implement preventive programs and increased resources to identify this problem among students, the prevalence of sexual assault cases remained stable, and the rate of sexual assault persisted (Association of American Universities 2019; Jozkowski 2015). Therefore, the university population requires psychoeducation on sexual consent based on sociocultural factors (Ortiz and Shafer 2018).

Sexual violence prevention programs on college campuses generally address the establishment of limits on sexual consent for women (Berkowitz 2002; Davis 2000; Fabiano et al. 2003). They also include psychoeducational proposals for developing positive and proactive attitudes in the male population (Flood 2006; Gibson 2014). However, recent publications (Chabot et al. 2016; Deitch-Stackhouse et al. 2015) reflect that bystander intervention overcomes the dualistic view of sexual assault prevention focused on the victim and the aggressor (Mennicke et al. 2018; Brown et al. 2014; Lemay et al. 2019; Palmer 2016) and focuses on eradicating environments tolerant of violence and sexual assault. This model involves the inclusion of community intervention strategies for the promotion of socio-normative changes (Banyard et al. 2003). The prosocial model of the bystander is included (Darley and Latane 1968; Banyard et al. 2014, 2007; Crooks et al. 2018), for their empowerment in the face of situations at risk of sexual violence. These interventions aim to teach the college student to recognize the warning signs of possible sexual assault and encourage them to intervene if they see a peer in distress (McMahon and Banyard

2011). Some of these experiences increased bystander prosocial behavior (Banyard et al. 2007; Coker et al. 2011), but others did not (Gidycz et al. 2011). Regardless of their results, short-duration, group-focused program formats are identified as having limited overall reach and impact (Salazar et al. 2019).

Prosocial behavior, a differential construct of altruism, is associated with normative judgments, social skills, and self-regulatory capacity (Caprara et al. 2005). It acquires vital importance due to its association with the sense of community, attention, and care of the group to which it belongs, especially when emergencies arise (Martí-Vilar et al. 2019). This sense of community promotes action to interrupt aggression or a situation of potential aggression, going against social norms that support sexual violence, and being an effective and supportive ally for survivors (Cares et al. 2014).

Nevertheless, most of the primary prevention research in this field comes from the North American context. A cross-national review of violence intervention and prevention programs (Ellsberg et al. 2015) revealed that more than 80% of the rigorous evaluations were conducted in six high-income countries, which account for 6% of the world's total population.

In this topic, systematic reviews and meta-analyses of programs that address sexual violence among university students were identified. In this regard, Park and Kim (2022) analyzed the effect of programs to reduce the risk of intimate partner violence in 13 randomized controlled trials. In turn, Finnie et al. (2021) included 28 studies in their review, considering interventions in intimate partner violence based on the promotion of alternative behaviors to aggression and the creation of protective environments. Additionally, Evans et al. (2019) analyzed 11 intervention studies on university bystanders, diverse in duration, instrumentation, and educational strategy. Likewise, Mahoney et al. (2019) applied the Haddon Matrix to evaluate intervention programs against sexual aggression on university campuses, selecting 31 articles published between 2001 and 2017, including experimental and quasi-experimental design programs. Finally, Jouriles et al. (2018) analyzed 24 articles on bystander attitudes, beliefs, and behaviors, their effects, and sustainability.

It should be noted that, although the mentioned studies are systematic reviews on educational programs against gender violence, they present certain limitations and parameters: three articles include publications on primary preventive intervention in intimate partners and tertiary preventive intervention (towards the perpetrator victim dyad), not being exclusive on bystanders (Park and Kim 2022; Finnie et al. 2021); also the presentation of the assessment and analysis of their effects (Finnie et al. 2021; Evans et al. 2019); the selection of experimental design programs in randomized controlled groups (Park and Kim 2022; Mahoney et al. 2019); and finally, the analysis of descriptive studies and processes of promotional and preventive intervention in bystanders (Jouriles et al. 2018). The main contribution of the present review study is that each selected article is based on educational interventions in prosocial behavior applied to spectators (as the main target population), regardless of their scope, methodology, intervention strategy, or evaluation of their sustainability over time.

Review articles contribute to scientific dissemination by synthesizing the state of research in various disciplines and themes and constituting a starting point for research thanks to the integration and updating of results (Fernández-Ríos and Buela-Casal 2009). The relevance of a Scoping review based on violence prevention programs allows a realistic analysis of the most used strategies and the revalidation of effective methodologies, which is very useful for formulating public policies and implementing social programs (Provost et al. 2021).

Therefore, the main objective of the research was to systematize the studies based on university bystander education programs for the prevention and intervention of gender-based violence and to carry out a descriptive study. For this purpose, we aimed to contrast the studies based on the interventions implemented and executed, their research design, the type and size of the sample, the sociodemographic characteristics of the participants, the measurement instruments, and the results of the effect or effectiveness of the interventions.

2. Materials and Method

2.1. Protocol

The present study evidences a Scoping review of the scientific literature published in preventive-prosocial intervention programs directed to mitigate gender-based violence in university contexts (Appendix A). Its elaboration includes the question, the inclusion-exclusion criteria, the review and selection of studies, the extraction of data with their respective analyses and the report of results. In confluence, the Cochrane review regarding the effects of health or social interventions (including randomized and non-randomized studies) (Higgins et al. 2022). Finally, these findings are reported in terms of the PRISMA statement (Yepes-Nuñez et al. 2021) for the publication of Scoping reviews (Figure 1).

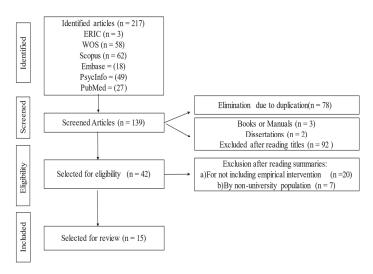


Figure 1. PRISMA diagram, study selection process. Preferred Reporting Items for Systematic Reviews and Flowchart of Meta-Analyses (PRISMA).

2.2. Search

This bibliographic search took place between August and September 2021. It was carried out in different social and cultural contexts, referring to educational interventions implemented in the USA, UK, Vietnam, Italy, and South Korea; the registration of the country was important to increase the generalization of the results. The search was confirmed in three phases. First of all, a search to obtain an overview of the subject in question was carried out; secondly, the application of the inclusion and exclusion criteria to delimit and centralize the topic was performed; and, finally, a manual search to include those articles that had not been found after the first itinerancy was carried out.

The search strategies allowed us to identify the maximum number of studies on bystander education programs for university students in the face of gender-based violence. The review was conducted in English and Spanish, under the combination of two terms joined with the connector [AND], with no limit on the year of publication. Likewise, the manual search was performed by checking the list of references of the articles that were significantly relevant to the study, in order to access potentially additional studies.

The initial question (PICO) that guided this review was built as follows: Do educational interventions increase prosociality in the face of gender violence among university bystanders? University bystanders are considered the participants (P), the interventions (I) are educational, comparisons (C) are either made with pre- and post-test measurements, between-group comparison, or a control group, and outcomes (O) try to measure the effects that the programs have on gender violence.

2.3. Eligibility

A protocol was registered in PROSPERO and the search was performed according to the following criteria. The identification code is CRD42022337692.

2.3.1. Inclusion Criteria

The included studies conform to the following formats: (a) Articles referring to bystander intervention processes in gender-based violence; (b) Studies of an experimental nature (whether pre-experimental, quasi-experimental, or controlled experimental); (c) Studies involving modeling effects in viewer behavior; (d) Research that includes a university population, regardless of gender, ethnicity, geographic location, educational level, or age range; and (d) Studies published in the English language.

2.3.2. Exclusion Criteria

Studies were discriminated in the following formats: (a) Articles associated with social experiments (studies of a psychological and sociological nature, with exposure of the participants to specific stimuli and consequent immediate measurement), since they do not correspond to structured processes of preventive intervention; (b) non-experimental descriptive-comparative, cross-sectional studies that collect information on the subject but do not record the manipulation of stimuli for learning alternative behaviors to cope with gender violence; (c) Articles on content validation of gender-based violence prevention programs; (d) Books, manuals or dissertations, (e) Thesis of all kinds (degree or professional qualification), as they are not exposed to the scrutiny of a scientific journal; (f) Editorials; (g) Clinical case studies and (h) Exclusion of gray literature with the use of secondary databases such as Google Scholar.

In the process of identifying the studies, the following terms were considered: Gender-based violence AND prosocial* AND intervention, and Intimate partner violence AND prosocial* AND intervention, as combinations indicated for the databases: Web of Science (WOS), Scopus, of proven quality in their records (Cavacini 2014), Education Resource Information Center (ERIC), and PsycInfo. The combination used in PubMed was Intimate adheres partner violence AND prevention AND undergraduate students. Finally, in the case of Embase, the following was considered: Gender-based violence AND prosocial* AND intervention, gender-based violence AND bystander AND intervention; and partner violence AND prosocial* AND intervention. It should be noted that the last four databases are included according to the objectives of the review associated with the fields of higher education, mental health, and the addition of topics of psychosocial interest.

2.4. Data Collection

Once the articles were obtained, they were exported to Covidence, a screening and data extraction tool for conducting reviews of standard interventions. This resource allows duplicate detection and allows each reviewer to examine the titles and abstracts of the articles and decide whether to include or exclude them by applying the previously established criteria. In case of a discrepancy, the arguments were discussed together. Next, the selected documents were recorded in the Mendeley bibliographic manager and an Excel spreadsheet. To systematically analyze the information contained in the articles, the following categories were completed: (a) authors, year of publication, and country; (b) type of intervention; (c) methodology used and the presence or absence of a control group; (d) sociodemographic characteristics of the sample; (e) the study variables; (f) the evaluation instruments used; and (g) the results obtained.

2.5. Selection

The resulting search targeted 217 articles: 3 in ERIC, 58 in WoS, 62 in Scopus, 18 in Embase, 49 in PsycInfo, and 27 in PubMed. The papers were downloaded in a text file and subsequently analyzed based on the title, abstract, keywords, type of intervention, and results. As a result of this first evaluation, 78 duplicate articles were removed and 92 studies

were discarded in the first screening after reading the title. Then, 42 articles were preselected and their full text read. Of these, 39 articles were selected, and after applying the inclusion and exclusion criteria, 27 articles were eliminated from the review. At the end, a final selection of 15 articles was included in this Scoping review, whose paramount requirement was to consider the modification of viewer behavior through stimuli or psychoeducational processes, which imply results of effect or effectiveness (Figure 1).

Two researchers carried out the final selection of the studies included (M.V-A. and M.M.-V.). Their decisions were based on the methodological quality they presented, following the SQUIRE Guidelines 2.0. After that, three researchers (M.V.-A., L.T.-T. and C.M.-S.) were responsible for assessing them according to three categories related to their quality (low, medium, high). Only those articles considered of high quality were included. Once the process was finished, none of them were excluded.

2.6. Synthesis of Results

The synthesis of the results was formulated based on six pre-established criteria, that integrate common aspects of the studies reviewed: (a) Type of intervention; (b) Design of the educational intervention; (c) Type of sample and its distribution; (d) Sample size; (e) Demographic characteristics of the sample; (f) Measuring instruments; and (g) The main results of the studies. These criteria are observed in the results section (See Table 1) and are the subject of analysis in the discussion.

Table 1. Articles that reflect the intervention in the prevention of gender-based violence in bystanders.

Year, Authors, Country, and Citations	Kind of Intervention	Objectives	Design/ Sample	Sample Distribution	Instruments		Results
Kuffel & Katz 2002 10.5A Psychijo 54 Citations (Kuffel and Katz 2002)	Educational video followed by a discussion ted by a male/female presenter or co-presenters. The Control group viewed an episode of the series "Friends."	To assess the effectiveness of a brief program to prevent physical, psychological, and sexual aggression in infinite relationships.	Design: Intervention Group with Control Group. Sampling: Random	N = 123 EU (Initial), n = 76 EU (Final) IC3 56 8%, (n = 28) – CG; 65.2%, (n = 48) Women 63.4%, Men 36.6%	Relationship Expectations Scale (RES; Washington & Finer, 1997). Scenarios to discriminate physical, Severation to discriminate physical, psychological, and secural ahuse; aggressive and abusive dainty behavior. Conflict Thacties Scale-Revised (CTS-2), attitude towards the program.	S; gressive 2); attitude	The program is effective for the IG with: Improved identification of types of abuse. Decreased aggressive attitudes. The results were not sustainable
Coker et al. (2014) The United Kingdom Scopus 150 Clautions (Coker et al. 2014)	Green Dot—Bystander training program that engages the US in actions to reline SV	To compare the rates of the types of videores in the US before and after the intervention in the IG and GG.	Design: Experimental Comparative Observational Sampling: Stratified Random	N = 7026 EU (From three compuess) IC 59.4%; IC 526 CC 6076 (n= 4258) IC Men (49.6%) women (50.4%), CC Men (47.5%), women (52.5%), A freedescendant and others (20.6%), CC Cucassian (77.5%), Afreedescendant and others (20.6%), CC Cucassian (77.5%), Afreedescendant and others (20.5%)	Wetimization and violent (Perpet nation—Adaptation of (a) Forced or prepet nation—Adaptation of (a) Forced or unwanted sex (NSSEW), (b) Sexual Harssment (QEb. b) P Payne et al.), (c) Salking (NSYW), and (d) Physical and Psy dotological Violence in countainly (RCTS). Sociodemographic attributes	ced or (c) Stalking chological	The program: • Decreased rate of victimization and perpetration of SV.
Potter et al., 2008. D.SA PubMed 29 Clistons (Potter et al. 2008)	Media campaign around four posters with a modeling effect on alternative behaviors in a VAW risk situation	Analyze the role of campaigns in addressing a public health problem. Describe the implementation and evaluation of the strategy in the reduction of incidences of VAW	Design: Quasi-Experimental with CG (exploratory). Sampling: Intertional	N = 145 EU I.C. 55.9% (n = 81)—CC: 44.1% (n = 64) Women 51%, Men 49%	Knowledge of means of intervention in case of VAW. Perception of learning and assessment of the program post-intervention. Development of focus groups to improve the content of visual stimuli.	n in case of ent of the prove the	The campaign: Validated its content with the intervention of the participants. Participants Increased prosocial behaviors.
Potter et al., 2011 2011 DisA PubMed 54 Clabors (Potter et al. 2011)	"Know your Power": Peater campaign the prevention of sexual violence, under the conveyo of social self-identification	Evaluate the effectiveness of the posters and their internalization for the intervention as a prosocial bystander.	Design: Quasi-experimental 01 measure Sampling: Voluntary (External motivation [EM]	They viewed the posters (n = 291) EU; They did not View the gesters; (n = 272) USA Completed survey; (n = 372) USA Women 67%, Men 39%, Caucasian (87%), other (13%)	Willingness to participate in preventing sexual assault deferition as witnesses in VAW cases.	tring sexual	The program: Was effective in the phases of contemplation and action contemplation and action Name of actions women's actions
Salazar et al., 2014 USA WOS 112 Citations Salazar et al. 2014)	RealConsent: Web-based general health promotion program. (control) program.	Check the effectiveness of the Program to prevent the prepriation of St, increase proceed behavior, and learn about the relationships of theoretical mediators in the US.	Design: Experimental with CG Sampling: Random	n = 743 EU (Baseline) n = 451 EU (Post Intervention) n = 215 (Follow-up) IG. 518, (n = 375) GG, 49% (n = 367). Heterosecual or bisevaul men = 367). Caucasian (44%), African American (22%), Asian (20%), and otheres (3%)	Primary Measures (a) Reactions to Offersive Language and Behavior (ROLB) (b) Confinct Theta-off (CIES),07 tems. 2. Questionnaire on theoretical mediators of implied consent.	anguage , 07 items. tors of	The program • Decreased DV perpetration and foreseed. It, but did not ingget bystander intervention. • Promoted significant differences in the Londalors evaluated (p < 0.001).
Cares et al., 2015 USA WOS R Clates et al. 2014)	Bringing in the Bystander: 2-session regregation (only with the KC) Know, your Power? Social marketing prompting with modelling and reinforcement effect for Gland GC (Pesters with scenarios that address VS incidents).	Evaluate the effectiveness of the opengam and the monitagin in two university fedds (a) Pre and post there entire, (b) Followuph (5 months late), (c) Followuph (2 months late), parallel to the sociodemographic contrast.	Design: Experimental with CC Sampling: Voluntary	n = 948 EU (Baseline) n = 607 EU (Post Intervention) n = 346 EU (Glow-up) IC, 49% n = (460 CG; 51% in = 482) Pre-Intervention Men [51,53%, women (47,2%), and fit barasgender participants, Caucasian (73,2%), Afro-descendant (26,8)	Social desirability (Stöber 2001) Adapted Illinois Rape Myth Acceptance (Payne et al. 1999) Malamuths Attraction to Secual Violence Bestander Efficacy (Banyard 2008; Banyard et al. 2014) Intention to Help a Friend and Stranger Scale (Banyard et al. 2014) Knowledge Herns (2nd edition) (Banyard et al. 2014) Knowledge Herns (2nd edition) (Banyard et al. 2017)	unce (Payne olence Sanyard nger Scale nyard et al.	The Program is effective: • Fernale students on campuses • with a larger male population. • For prosocial action in the face of an SV situation.
Senn & Forest, 2011 USA Pografio 31 Chatrons (Senn and Forest 2016)	Bringing in the Bysander Workshops on bysander intervention against the social norms have what as 6 and recognic from the validate AS and recognic from the strategies of potential SA events.	To evaluate the efficacy of education for preventing Seoual assault in bysamders (see efteped by undergraduate students trained for this purpose).	Design: Quasi-Experimental Single group. Sampling: Voluntary	n = 827 EU (Initial) n = 444 (Final) (1) Initial Sampling—ICs (82.6% (n = 518)—CC; 57.4% (n = 309) (2) Final Sampling—ICs (86% (n = 248)—CG; 44%, (n = 190) (Normen 7.2%, Mor an 27%, other genders 1%, Cauxesian 96, 1%, Other Arican American—Caribbean, Asian or Middle Eastern 3.9%.	1. Bysander efficacy (Banyard et al. 2014) 2. Preparation change / Helia (Banyard et al. 2014), 4. Berries to intervention for sexual assault (Ban 2016). 2. Www. Hearther (Banyard et al. 2014), 2. Www. Hearther (Edge) ped from Banyard et al. 2017, in Banyard et al. 2017, in Banyard et al. 2016, in Banyard et al. 2016.	014) (014), (014), (014), sisult (Burn iyard et al.	The program: Increased willingness toward proactive intervention, independent of hird-party criticism. Decreased pre-contemplative beliefs. The effects lasted four months.

Table 1. Cont.

Year, Authors, Country, and Citations	Kind of Intervention	Objectives	Design/ Sample	Sample Distribution	Instruments	ents	Results
Mennicke et al., 2018 2018 Postchifo 15 Citations (Mennicke et al. 2018)	Social norms marketing campaign to engage men in Aspravention (Implemented for five years)	Evaluate the campaign's impact on positive and prosocial attitudes, beliefs, and behaviors towards SA and bystander intervention with the change of norms on campus.	Design: Quasi-Experimental of a single group. Sampling:	3000 EU for each annual period N = 15,000 EU based on initial sampling and n = 4158 participants over 5 years Hetresexual men 90,9%, because 25%, Gays 5.4%, recessual net 90,9%, and 6.6%, Other 4.%, African American 28%, and 6.4%, Other 4.%,	ë	Multidimensional survey based on attitudes: (a) Beliefs in rape myttle (Illinois Sade—H-ilem Adaptratine (Payne et al. 1999). (b) Secually aggressive behaviors, and (c) Bysander infervention behavior (six items), with self-assessment and co-assessment processes.	The social norms marketing campaign: • Positively affected the perceptions, attitudes, beliefs, and self-reported prosocial behaviors related to acts of secual assault.
Ortiz & Shaffer, 2018 USA Scoppus 9 Grations (Ortiz and Shafer 2018)	"Define Your Line"; Campaign to "Define Your Line"; Campaign to through peer to peer and mediated messiging.	To test the effectiveness of the education compagn on sexual conent promoted by university students.	Design: Single group quasi-experimental (exploratory). Sampling: Voluntary EM	N = 992 US. Pretest (in = 324), Poetrest 1 (in = 328), Poetrest 2 (in = 340) = 340 =	ાં ડાંસ્ટ ને	Adaptation of the Humphreys and Rousseau. Revieds Sexual Consus 15 Sexual Consus 16 Beabards and Adaptation of the Sexual Consus 18 sequent Adaptation of the Sexual Consus Request Beabards Scale to determine whether or not it is a sexual sexual conference of the Sexual Consus Sexual Conference of the Sexual Conference o	The campaign: Improves understanding of sexual corteent, as a function of exposure time. Has greater effectivenes in males who belong to fratemities.
Salazar et al., 2019 USA WOS 7 Citations (Salazar et al. 2019)	RoalConsent: Web-based sexual violence prevention program or Control Condition	Check the effectiveness of the Program to prevent the perpetation of SV, and increase the prosocial behavior of the viewer and the validity of theoretical models	Design: Quasi-Experimental with GC Sampling: Random	N = 743 EU IG 51% (n = 276) CG: 49% (n = 367) Hetenseward or bleaval havers Caucasian (14%), Arican American (20%), Latino (11%), and Other (3%)	. 2	Reactions to Offersive Language and Behavior (ROLB). Conflict Tactics-II (CTS2), 07 items-	The program is effective with: Decreases perpetration in SV to 28% reases proscrial behavior to 12% but is not associated with 12% but is not associated with the rettin Mildales theoretical models.
Cusano et al., 2020 USA WOS 2 Citations (Cusano et al. 2020)	Focus groups (GF), (d 10.75 min on dating violence (DV) perspectives.	To analyze the understanding and knowledge of DV and its impact on the decision to intervene as a prosocial bystander.	Design: Qualitative Grounded theory Sampling: Voluntary knowledge and interest	N = 45 EU 03 G of Man, 04 G of vormen, and 02 G, mixed Mert (ir = 40%), women (in = 51%), and OG (in = 9%) Caucasian (£2%), Asian (22%), African American (28%), and Latino (£6%)	1.	DV structured protocol (thoughts, definition, preception of victim super, favorable dag of policies, campus resources, experiences with those involved in abusive relationships, and prosocial intervention predisposition.	Correlational. The Focus Groups reflect prevention: Recognition of unhealthy and abuse to behaviors Ability to determine risks. Discrimination in emergencies
Yount et al., 2020 Wetnam WOS 6 Cltations (Yount et al. 2020)	Global Consent—Program adapted from Real Consent for use in Vietnam or Web-based Control Educational Program.	To test the impact of the adapted program (GlobalCoreart) in preventing sexual violence and prosocial behavior of university viewers.	Design: Experimental with CG. Sampling: Random	N = 793 EU (n = 345 UPV and n = 448 PU) IC. SOW, (n = 359) CC. SOW, (n = 396). Het researcal of theorem in ren does not indicate ethnicity.	1, 2,	Questionnaire on family history, exposure to violence in childhood, and other forms of secual content. RealConsent evaluation forms and scales (adapted) to GlobalConsent modules.	The program is effective in the Vernamese population and for adapting to other Low and Middle-Income countries.
Santacrose, L.B.; Laura, A.C.; 2020 U.SA. Psychip o 5 Citations (Santacrose et al. 2019)	Intervene a 23-min video, with the effect of modeling the viewer's proescial behavior, with strategies to intervene in 7 situations.	To assess the effectiveness of the video in increasing the self-ergoorde probability of intervention (pre and post-video viewing) with a 4-week follow-up.	Design: Experimental with CG. Sampling: Random	n = 1245 EU (Initial), n = 853 (Final) 1) Inital Simpling—ICG 367% (n = 444)—CG: 64.3% (n = 749) 20 Final Simpling—ICG 40.2% (n = 344)—CG 957% (n = 549) Women 55.9%, Men 44.1%	÷	Survey around the bystander model (5 steps), three questions around the prosecial model, and two about scool norms in twelve different situations, seven of which focused on intervention.	The video increased the probability of prosocial intervention, in favor of women, in case of (i) infinite partner violence, (b) sevual aggression, and c) secual harassment.

Table 1. Cont.

Year, Authors, Country, and Citations	Kind of Intervention	Objectives	Design/ Sample	Sample Distribution	Instruments	Results
Martini, M.; De Piccoli, N. 2020 Italy EMBASE OCTIATION (Octiations)	USVreact: a 4-month training program for university staff to counter sexual violence	Evaluate the program's effectiveness regarding the greater system, the redentification and evaluation of SV fields, and the predisposition to vinitervention to predisposition to intervention to the predisposition to intervention.	Design: Quasi-experimental single group	N = 66 (0.2 university communities) 8.75% sits (2.45 teachers, 1.6% university leaders and 1.6%, directors) Men (7.5%), somen (9.25%) Does not relation and privides.	Justification of the gender system (Jost and Kay 2005) ESV, an adaptation of the Fit genel 5 Casle Stable rape myth from MeMahou and Farmer (2011) in its Italian adaptation (SRMAT) by Martine et al. (2021).	The program: Increases recognition of subtle forms of violence. Reduces exceptance of the rape myth. Develops active and reactive attentions of SVV
			Sampling: Voluntary EM	Does not mate entitle by	 Bystander intention to intervene (Banyard et al. 2003, 2005) 	Depend culture.
Park, S.; Kim, S.H. 2021 South Korea	With You Education: Bystander	Evaluate the acceptance and impact of the mooram designed to immoore the	Design: Quasi-Experimental Single Group	N = 46 EU	Competence of supporters to help victim friends, with eight scales from the Physician Readiness to Manage intimate partners	The program is effective in: The willingness to help. The willingness to help.
EMBASE 0 Citations (Park and Kim 2021)	Program	skills of friends who support DV Victims	Sampling: Voluntary EM	Men (24%), women (76%) Does not indicate ethnicity	Volence (PREMIS). 2. Satisfaction questionnaire used in (E. Park et al. 2017, p. 200). 3. Focus group to identify participants perceptions.	•

Sexual Experience Questionnaire (QES), National Survey of Sexual and Intimate Partner Violence (NSSIPV), University Students (EU), Intervention Group (IG), Control Group (IC), Prosocial Intervention (PI), Domestic Violence (DV), Experience of Sexual Violence (ESV), National Survey on Violence against Women (NSVAW), Violence against Women (VAW), "Revised" Conflict Tactics Scale (RCTS).

3. Results

A total of 15 documents met the criteria to be part of the review. Table 1 shows a synthesis of all of them. A brief description follows.

All the analyzed articles were published in the last 19 years, 86.7% (n = 13) in the previous 10 years, and 69.2% (n = 9) in the last 5 years (review, the year 2021 has not yet ended and the number may have increased). Additionally, 73.3% (n = 11) of the research has been carried out in the USA (Cusano et al. 2020; Ortiz and Shafer 2018; Mennicke et al. 2018; Salazar et al. 2014, 2019; Cares et al. 2014; Cavacini 2014; Coker et al. 2014; Potter et al. 2011; Senn and Forrest 2016; Santacrose et al. 2019). The remaining percentage has been performed in the United Kingdom (Coker et al. 2014), Vietnam (Yount et al. 2020), Italy (Martini and Piccoli 2020), and South Korea (Park and Kim 2021) (n = 1 for each country). The first published study (Kuffel and Katz 2002) has 39 citations on ResearchGate and 17 on Springer Link. The number of publications has been increasing, as can be seen. Likewise, Coker et al. (2014) and Salazar et al. (2014) studies stand out for their number of citations (with 150 and 112 mentions, respectively), in contrast to Martini et al. (2021) and Park and Kim (2021) studies. They did not report citations, probably due to the time of publication, the novelty of the type of preventive intervention, and the accessibility of the means of publication.

3.1. Types of Intervention

In this regard, a study based on focus groups of 60 to 75 min assessed students' experiences, behaviors, and attitudes toward gender-based dating violence (Cusano et al. 2020). Three articles on web-based intervention programs (Salazar et al. 2014, 2019; Yount et al. 2020); two of them (Salazar et al. 2014, 2019) implemented RealConsent (the only sexual violence prevention program for college students), which is considered effective according to the Centers for Disease Control and Prevention (Salazar et al. 2014; Dills et al. 2016). The third article implements and executes the adaptation of the RealConsent program in the Vietnamese population, determining said version as Global Consent, based on the preventive approach to sexual violence and promoting prosocial behavior (Yount et al. 2020).

Likewise, some intervention programs were implemented on campus (Cares et al. 2014; Coker et al. 2014; Senn and Forrest 2016; Park and Kim 2021) and through social marketing campaigns (Ortiz and Shafer 2018; Mennicke et al. 2018; Cares et al. 2014; Potter et al. 2008, 2011). As well as the combination of both strategies: the implementation of an intervention program (Bringing in the Bystander), followed by a social marketing campaign called "Know You Power" (Cares et al. 2014). This campaign was also executed under the concept of social self-identification (Potter et al. 2011) through discussion groups and surveys, with focus groups and surveys associated with the context of the target audience. From another angle, the "USVReact" (Martini and Piccoli 2020) program involved administrative personnel who work on university campuses because their permanence transcends the passing of different generations of students and their contribution to the construction of an organizational and educational environment can be stable and sustainable over time. In addition, the "Bringing in the Bystander" program (Senn and Forrest 2016) is considered highly effective for assessing the pronouncement against social norms that support sexual aggression or coercion and for identifying and safely interrupting those situations that can lead to sexual violence. These facts become an effective and supportive ally with rape survivors (Banyard et al. 2007). The media campaign from the multidisciplinary approach requires mention in which professors, university staff, and selected students participated (Potter et al. 2008). Along the same lines, the "Define You Line" (Ortiz and Shafer 2018) campaign was carried out with a community approach, thanks to the encouragement of university students and other faculty members.

These experiences include the exposure of the participants to 20-min educational videos, as is the case with the shorts "Intervene" (Santacrose et al. 2019) and "Choices"

(Kuffel and Katz 2002). The latter four segments represented physical, psychological, and sexual aggressions, followed by a guided discussion.

These processes are supported by different theories, among which stand out: Bandura's social cognitive theory (Bandura 2004; Salazar et al. 2019, Santacrose et al. 2019); Latané and Darley's situational model of viewer behavior (Latané and Darley 1969, 1970; Cusano et al. 2020; Park and Kim 2021); the social norms theory of Fabiano et al. (2003) and Perkins and Berkowitz (1986) (Mennicke et al. 2018; Salazar et al. 2019; Santacrose et al. 2019) and the transtheoretical model of Prochaska and Diclemente (1984) (Cares et al. 2014; Potter et al. 2011; Senn and Forrest 2016).

3.2. Design

The selected studies favor the implementation of experimental designs, with one exception (Cusano et al. 2020), which focused on developing focus groups on the understanding of dating violence and its impact on viewer behavior. The study provides the participants with a space for expression and reflection, from the subjective conception towards the achievement of joint conclusions; therefore, it is considered an "intervention" (before the learning that it implies). It also includes the delivery of preventive material at the end of each conversation.

Experimental studies (Kuffel and Katz 2002; Salazar et al. 2014; Yount et al. 2020; Santacrose et al. 2019) are the ones that denote greater control in the selection process of the matched sample and favor the creation of supervised conditions in the treatment of intervention groups and control groups. In these four studies, two particular conditions emerged: (a) The implementation of educational sessions (Salazar et al. 2014; Yount et al. 2020), in the American and Vietnamese contexts, respectively, based on the decrease in the perpetration of SV and the increase in prosocial behaviors; and (b) The presentation of educational videos with a modeling effect (Kuffel and Katz 2002; Santacrose et al. 2019). In the first case towards an increase in the probability of intervention and in the second case towards a preventive attitude of physical, psychological, and sexual violence.

Quasi-experimental studies are identified as those that follow the experimental model but do not achieve total surveillance of the intervening variables, including the sample selection process. Three studies included a control group (Salazar et al. 2019; Cares et al. 2014; Potter et al. 2008). This condition allows a comparative contrast that validates the effectiveness of the intervention process (as a similar effect). Five studies considered only the intervention group (Ortiz and Shafer 2018; Mennicke et al. 2018; Coker et al. 2014; Senn and Forrest 2016; Martini and Piccoli 2020; Park and Kim 2021), given the number of participants and the conditions of massive and indistinct intervention, which is understandable when it comes to long-term campaigns or programs.

In this context, the study by Coker et al. (2014) stands out for its comparative analysis of the effects of the program on different university campuses. Additionally, it included a single measurement study (Potter et al. 2011), based on the incorporation of prosocial attitude as mediating stimuli in SV cases.

3.3. Type of Sample

The consideration of the sample reflects the researcher's access to the population and its selection methods, the previous dissemination of the study, and its objectives (as part of informed knowledge). A non-probabilistic-voluntary sample (Cusano et al. 2020) was justified by the exposition of the research purposes and the agreement of undergraduate students interested in being part of the study.

Studies with voluntary samples (Ortiz and Shafer 2018; Cares et al. 2014; Potter et al. 2011; Martini and Piccoli 2020; Park and Kim 2021) considered a specific selection of the sample, using incentives to mobilize the interest of the participants. In some cases, by offering a symbolic financial payment or the opportunity to participate in a lottery (during the follow-up and evaluation stages).

Random probability samples equate intervention and control groups (Mennicke et al. 2018; Salazar et al. 2014, 2019; Kuffel and Katz 2002; Yount et al. 2020; Santacrose et al. 2019). All members of the population were equally likely to be selected.

In the case of a stratified random sample (Kuffel and Katz 2002), the section by strata allows its representativeness based on the population (through quotas, according to its sociodemographic conditions).

Finally, a study with purposeful sampling (Kuffel and Katz 2002) is identified based on a specific population sector, considering students residing in departments and university housing.

3.4. Sample Size

Regarding the size of the samples, some studies used small samples (less than 200 participants) (Cusano et al. 2020; Kuffel and Katz 2002; Martini and Piccoli 2020; Park and Kim 2021), medium samples (200–1000) (Ortiz and Shafer 2018; Salazar et al. 2014, 2019; Cares et al. 2014; Potter et al. 2008, 2011; Senn and Forrest 2016; Yount et al. 2020), and large samples (1000–15,000) (Mennicke et al. 2018; Coker et al. 2014; Santacrose et al. 2019). The demographic characteristics of the sample are as follows:

Four articles included only heterosexual or bisexual (Salazar et al. 2014, 2019; Yount et al. 2020) and homosexual (Mennicke et al. 2018) male samples; the rest included female samples, too. Some included other genders (Cusano et al. 2020; Senn and Forrest 2016) and transgender participants (Ortiz and Shafer 2018; Cares et al. 2014). Regarding age and considering that all the studies include university students, the age range reported in the majority fluctuates between 18 and 25 years, except for two studies; (Martini and Piccoli 2020) that include contracted university staff, so the range is wider (T1. M = 44.46 years (SD = 9.81), T2. M = 45.67 years (SD = 7.87), and Salazar et al. (2019), which includes a sample from 16 to 57 years old, with a mean age of 21 (M = 21.24; SD = 4.68).

Many studies collected information regarding ethnicity, which is remarkable in a country as diverse as the US (Cusano et al. 2020; Ortiz and Shafer 2018; Mennicke et al. 2018; Salazar et al. 2014, 2019; Cares et al. 2014; Potter et al. 2011; Senn and Forrest 2016; Santacrose et al. 2019). Of the studies from other countries, only one from the United Kingdom (Coker et al. 2014) collects information on this characteristic.

3.5. Measuring Instruments

The focus group strategy was an outcome assessment tool in the study of Cusano et al. (2020), as well as in the validation of the visual content of one of the media campaigns (Potter et al. 2008) and the qualitative identification of the outcomes perceived by participants in the "With Your Education" program (Park and Kim 2021). In these cases, qualitative analysis software is often used because it offers an exploratory and flexible research approach that provides a rich and detailed description of the study phenomena (Braun and Clarke 2006).

As expected, the three studies that implement the web-based program "RealConsent" (Gidycz et al. 2011; Salazar et al. 2014; Yount et al. 2020) share the use of specific instruments and, in turn, others depending on the purposes of the study. For example, one of them (Salazar et al. 2014) employs various measures of theoretical mediators of implied consent to assess the mechanisms through which RealConsent produces significant effects for its targets. Likewise, the Vietnamese adaptation included measures of self-efficacy and prosocial behavior of the bystander, sociodemographic data, and other control variables, as well as cognitive, attitudinal, and affective mediators and control variables aligned with the GobalConsent modules.

Social desirability is measured by two studies (Cares et al. 2014; Senn and Forrest 2016) through the Social Desirability Scale (SDS-17) (Stöber 2001). As for scales that measure variables directly related to the prosocial bystander model, we found various scales, such as the willingness to help scale (Banyard et al. 2014), bystander efficacy (Cares et al. 2014; Senn and Forrest 2016), the intention of helping a friend (Banyard et al. 2014), the choice to help a stranger (Banyard et al. 2014; Cares et al. 2014), the bystander's intention to intervene

(Banyard et al. 2005; Martini and Piccoli 2020), change/help preparation (Banyard et al. 2014), intention bystander brief (Banyard et al. 2014), barriers to intervention for sexual assault (Burn 2008), and bystander behavior adapted (Banyard et al. 2007) revised score in (Banyard et al. 2014; Senn and Forrest 2016). Another study (Santacrose et al. 2019) chose to develop a survey that grouped the measures of interest in the prosocial bystander model and the perception of the social norm of intervening in a particular situation.

Regarding myths or justifications, the Illinois rape myth acceptance scale (Payne et al. 1999) is included in the abbreviated form (Cares et al. 2014) and the original (Mennicke et al. 2018); a gender system justification scale (Jost and Kay 2005) and the updated measure to assess the subtle rape myth (McMahon and Farmer 2011) in its Italian adaptation SRMA-IT (Martini et al. 2021; Martini and Piccoli 2020).

3.6. Study Results

Prior to extensively commenting on the results described in Table 1, note that the heterogeneity of the programs found leads to various objectives that make it difficult to discuss the results. However, all the interventions showed positive effects in line with most of the proposed goals.

Participation in various programs was related to decreased perpetration of gender-based violence (e.g., Kuffel and Katz 2002; Coker et al. 2014; Salazar et al. 2014, 2019), as well as increases in the intentions and prosocial behaviors of viewers (e.g., Mennicke et al. 2018; Salazar et al. 2019; Cares et al. 2014; Santacrose et al. 2019; Park and Kim 2021). Although not all studies include men and women, in Santacrose et al. (2019), women were more likely to intervene in potential situations of domestic violence, intimate partner violence, sexual assault, and harassment during the 4-week follow-up.

In turn, fundamental theoretical mediators are obtained for the development and content of the program (Salazar et al. 2014). This latest study also shows that violence and bystander education for college men may benefit from including an explicit focus on decreasing harmful norms related to women.

Also included is a good adaptation of the RealConsent program included in this review (Salazar et al. 2014, 2019), successfully implemented in the United States. The Vietnamese Adaptation (GlobalConsent) (Yount et al. 2020) is the first project to adapt the program following a systematic framework and process for evidence-based program adaptation.

Likewise, the programs register progress in the identification or recognition of types of abuse (Kuffel and Katz 2002), subtle forms of violence (Martini and Piccoli 2020), knowledge of prosocial behaviors (Potter et al. 2008), a reduced adaptation of the rape myth along with less justification of the gender system (Martini and Piccoli 2020), increased awareness and sensitization of gender-based violence as a public health problem (Park and Kim 2021), understanding of the victim's perspective (Park and Kim 2021), and sexual consent (Ortiz and Shafer 2018). The former study has the particularity that college men and members of university-affiliated sororities or social fraternities obtained a more significant improvement than their respective counterparts.

Several studies did not find positive results for efficacy or perceived self-efficacy for the intervention (Salazar et al. 2014, 2019). However, perceived readiness, perceived knowledge, and self-efficacy were significantly different before and after training with another of the programs (Park and Kim 2021), whose improvements were maintained one year later. However, the same was not true for actual knowledge, following the protocol, and access to resources, which only showed significant improvement after education and significantly decreased a year later.

Finally, a qualitative study has been considered based on a data collection protocol regarding dating violence (Cusano et al. 2020). Although it does not involve pre- and post-intervention evaluation (focus group), the mere exposure of the participants to an open conversation implies the contrast of subjective presuppositions that will not maintain their original state again. Although the study does not present evidence in this regard, it opens the possibility of considering subsequent measurements to verify its effect.

4. Discussion

The present review intends to analyze the bystander education programs aimed at university students on their respective campuses as preventive mediation for gender-based violence. This analysis implies an assessment of the interventions, their techniques, and even their successes and limitations.

As noted in the existing literature (Cusano et al. 2020), most studies of violence on college campuses have focused on the experiences of survivors, with little emphasis on students' prior knowledge (as a preventive strategy). This fact widens the gap between the prevalence of gender-based violence and the role of bystanders (Banyard et al. 2009; Paul et al. 2013). The lack of formal university policies and the scarcity of orientation among university students favor barriers in their decision to provide help (Anderson and Danis 2007). Research allows us to analyze the bystander of gender violence as a recipient and as a manager of support for the victim.

On the other hand, in this area of intervention, the community approach stands out, which is a program that values and highlights the role of each member in the fight against gender-based violence. Its exercise is highlighted as recommended by the Centers for Disease Control and Prevention (Centers for Disease Control and Prevention 2004) in terms of public health for the prevention of violence against women since it contributes to raising awareness about the problem, provides behaviors with a modeling effect, and transmits messages and prosocial skills.

Massive interventions, known as campaigns, provided valuable information from recipients at each stage of development and were more effective [e.g., (Potter et al. 2008)], especially when counting on students to design the visual stimuli. These results highlight the need to engage key community informants and the target audience in all facets of campaign design, implementation, and execution. Knowing the bystander role encourages prosocial action in cases of gender-based violence but does not show its long-term sustainability. Simple short-term pretest/post-test design poster campaigns appear to produce an increase in willingness to intervene (Katz and Moore 2013) and are an essential strategy for the wide dissemination of preventive messages in the community (Wandersman and Florin 2003); the controversy in this regard occurs between the message received (discursive model) and the expected or actual reaction of the user, considering their motivation and previous behavior pattern; this is added to the public interest in addressing problems through communication strategies versus a humanistic model focused on the meaning of "well-being" (Werder 2017).

Promoting sensitivity towards the recognition of gender-based violence and the understanding of its categories and patterns is crucial. Society should be directed towards overcoming the perception of a "private matter" to be of public interest and, from a community health approach, providing sustainability and transcendence to the skills or actual knowledge of the participants (Park and Kim 2021), with the reduction of guilt in the victim and a defensive (protective) attitude on the part of the community (Banyard et al. 2003). However, giving help based on high efficacy and supportive intent without basic coping knowledge and skills often leads to unhelpful behaviors and adverse outcomes (Park and Ko 2020), confirming that the knowledge and skills acquired increase the intention and effectiveness when providing help. Therefore, these variables require repeated testing to ensure their potential effectiveness.

The tendency to "prevent conflicts" refers to the need to act before they manifest themselves in the stark way expected. However, it implies limited and negative connotations for coping and resolution, such as not managing or a lack of analysis and understanding of its root causes (Cascón 2001). Considering that conflict is inherent in human relations, Burton (Burton 1998) proposed the term "prevention" as the process of anticipatory intervention in a crisis. It implies an explanation and understanding of the facts, knowledge of the structural changes that allow eliminating its causes, and the promotion of collaborative attitudes that reduce the risk of future outbreaks and acts of violence.

Psychoeducational processes try to favor and provide a series of skills and strategies to better cope with conflicts in their early stages, before the crisis phase; their effectiveness depends on planned and systematic training (Cascón 2001). Therefore, most preventive interventions in gender violence (from the bystander model) include a psychoeducational structure based on awareness and reflection.

The integration of the results reflects multiple techniques of proven efficacy to mitigate gender violence in the university setting. The interventions reviewed present positive effects, but not all of them show significant effectiveness. The responsibility does not rest only on the type of intervention but may correspond to the heterogeneity of the study variables and the diversity of measurement instruments, among other non-focused variables, which agrees with what is expressed by Rubiales et al. (2018). Examples of that are non-unified criteria, instruments that are not very specific and sensitive to the construct (training variable), and the scarce replicability of the programs, among others, as an inaccurate description of the data.

This review suggests that, in the case of gender-based violence, the methodological differences between some works and others regarding the characteristics of the sample are to be trained or sensitized. This is based on the obligation to approach original research, the characterization of the sample based on the differentiated objectives, and the continuity of the participants, even more so when measuring medium- and long-term results. The term "research bias" is based on the delimitation of variables, the specification of their mediation, the conditions of the participants, their association with the study design, and the researcher's management in this regard (Manterola and Otzen 2015).

The fact that 73.3% of articles refer to interventions implemented in the United States is an essential indicator since it ratifies this country as a leader in primary research, which in the academic field allocates more funding to study strategies to curb gender-based violence. Scientific productivity depends on the national objectives and the projection of each country from the development approach and on assessing the main problems of public interest. Given the relevance of gender-based violence and its significant structural consequences, sustainable, research-based solutions must be proposed.

Adapting preventive interventions to different populations or cultural contexts is of great importance, aligning their purposes with current policies, community resources, and lines of action according to the conditions of the target population. For this purpose, each country receiving the strategy requires definition and operation in the official norms and regulations on gender-based violence (regarding the care and protection of potential victims). This condition will allow the modeling of preventive programs in various local and regional contexts. Additionally, there is the possibility that viewers have specific action procedures and institutional support networks. In this line, (Fenton and Mott 2017) makes a series of considerations to implement the bystander approach to violence prevention in Europe.

Finally, the COVID-19 health emergency and the corresponding confinement experienced in 2020 had negative consequences for witnesses of gender violence because they occurred only in the private sphere. Women only went to hospitals when the violence caused severe injuries that could not be treated independently (Nittari et al. 2021). Experiences like this warn of the need to continue fighting this scourge from other sources, such as psychoeducational and awareness-raising interventions on gender-based violence that involve society and reinforce support resources for women victims, as well as access to care and protection against a possible condition of violence.

Limitations and Future Directions

This study is not without limitations; they are shown as follows: (a) consider only six specialized databases; (b) the use of terms that could be insufficient for the identification of a more significant number of articles; (c) the lack of analysis of the characteristics of each program in its methodology and activities; and (d) the role of the intervention in the assimilation of prosocial behaviors in people who perpetrate gender-based violence.

In addition, some of the studies analyzed do not report the sampling strategies used or the type of design they followed. There is no inclusion of gray literature with the use of secondary databases such as Google Scholar. They may be overcome in future research.

Although a risk assessment is not required in a scoping review, it would be interesting to include such an assessment in a future systematic review.

The use of terms symbolized primary difficulty in searching for articles in the databases because, although the objective was to find interventions towards the modification of beliefs, attitudes, intentions, or behaviors of the viewers, there was some controversy with the term "intervention," since most of the articles were based on the theory of the bystander model and their actions in potential situations of gender-based violence. In this way, we identified numerous descriptive and non-exploratory articles on the cross-sectional and diagnostic measurement of the perceptive barriers of the participants, which has reduced the selection of studies. In turn, there are numerous concepts that refer to violence against women in English literature, like "violence against women," "gender-based violence," "intimate partner violence," "dating violence," and "domestic violence". Besides, specific terminology the type of violence is added, such as "sexual violence," which leads or directs the meaning of the interventions, adding to the fact that the databases have not incorporated all the related terms, a situation that contributed to a bias in the inclusion of all existing studies in the field. Despite this, the fact that other articles in high-impact journals have used this combination of terms is essential to note, considering the possibility that some psychological indicators are omitted.

Finally, the vast heterogeneity of variables and instruments used in the different studies should be considered, as it hindered a joint analysis of the interventions and, therefore, the development of generalizations.

5. Conclusions

The 15 articles included in this review are based on informative and awareness programs for university students for the assimilation and execution of prosocial behaviors in response to acts of gender violence. These studies have an experimental design: one of qualitative measurement (Cusano et al. 2020) and 14 of quantitative measurement, among these four experimental studies (Kuffel and Katz 2002; Salazar et al. 2014; Yount et al. 2020; Santacrose et al. 2019), three quasi-experimental studies (Coker et al. 2011; Caprara et al. 2005; Kuffel and Katz 2002), six pre-experimental studies (Ortiz and Shafer 2018; Mennicke et al. 2018; Coker et al. 2014; Senn and Forrest 2016; Martini and Piccoli 2020; Park and Kim 2021), and one single measurement study of reaction to mediating stimuli (Potter et al. 2011).

According to the type of sample, one case of a sample interested in the purpose of the research (Cusano et al. 2020), six cases of a sample promoted by external incentives (Ortiz and Shafer 2018; Cares et al. 2014; Potter et al. 2011; Senn and Forrest 2016; Martini and Piccoli 2020; Park and Kim 2021), six cases of a probability sample (Mennicke et al. 2018; Salazar et al. 2014, 2019; Kuffel and Katz 2002; Yount et al. 2020; Santacrose et al. 2019), one stratified random sample (Kuffel and Katz 2002), and one purposive sample (Potter et al. 2008) were identified. Regarding sample size, four studies with small samples (<200 participants), eight studies with median samples (200–1000 participants), and three studies with large samples (1000–15,000 participants) were identified.

The sociodemographic characteristics of the sample included gender diversity and sexual choice. The most frequent age range was 18 to 25 years for university students and up to 50 years for administrative personnel. Additionally, 60% of the studies presented information on the ethnic origin of the users.

The measurement instruments include semi-structured interviews, scales, and questionnaires based on consent and sexual self-efficacy, prosocial behavior, social desirability, and intention to help. Additionally, there are some cognitive, attitudinal, and affective mediators and, finally, justification of SA, myths about SA, and gender stigmas. All the studies

obtained positive results. However, it is not feasible to standardize their effectiveness given the methodological differences in each study.

Finally, it is suggested that the communication of these results and other research imply a contribution to prosocial and proactive intervention on gender violence by promoting and implementing equitable and intercultural public policies based on educational programs of proven effectiveness in favor of women and vulnerable minority groups.

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Appendix A

Table A1. Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist.

Section	Item	PRISMA-ScR Checklist Item	Reported on Page
		Title	
Title	1	Identify the report as a scoping review.	1
		Abstract	
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	1
		Introduction	
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	1–3
Objectives	4	Provide an explicit statement of the questions and objectives being addressed regarding their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	3
		Methods	
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	4
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	4

Table A1. Cont.

Section	Item	PRISMA-ScR Checklist Item	Reported on Page
Information sources	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	5
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	5
Selection of sources of evidence	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	5–6
Data charting process	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	6
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	5
Critical appraisal of individual sources of evidence	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N.A.
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	3–4
		Results	
Selection of sources of evidence	14	Give number of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	6
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	8–12
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	N.A.
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	2–4
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	4-5
		Discussion	
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	5-6
Limitations	20	Discuss the limitations of the scoping review process.	7
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	8
		Funding	
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	9

Note. N.A.: Not applicable.

References

- Ajzen, Icek. 1991. The theory of planned behavior. Organizational Behavior and Human Decision Processes 50: 179-211. [CrossRef]
- Anderson, Kim M., and Fran S. Danis. 2007. Collegiate sororities and dating violence an exploratory study of informal and formal helping strategies. *Violence Against Women* 13: 87–100. [CrossRef] [PubMed]
- Association of American Universities. 2015. Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct. Available online: https://www.aau.edu/uploadedFiles/AAU_Publications/AAU_Reports/Sexual_Assault_Campus_Survey/AAU_Campus_Climate_Survey_12_14_15.pdf (accessed on 13 April 2023).
- Association of American Universities. 2019. Encuesta Sobre el Clima del Campus de la AAU. Available online: https://www.aau.edu/key-issues/campus-climate-and-safety/aau-campus-climate-survey-2019 (accessed on 13 April 2023).
- Bandura, Albert. 2004. Health Promotion by Social Cognitive Means. Health Education & Behavior 31: 143-64. [CrossRef]
- Banyard, Victoria L. 2008. Measurement and Correlates of Prosocial Bystander Behavior: The Case of Interpersonal Violence. *Violence and Victims* 23: 83–97. [CrossRef] [PubMed]
- Banyard, Victoria L., Elizabethe G. Plante, and Mary M. Moynihan. 2003. Bystander education: Bringing a broader community perspective to sexual violence prevention. *Journal of Community Psychology* 32: 61–79. [CrossRef]
- Banyard, Victoria L., Elizabethe G. Plante, and Mary M. Moynihan. 2005. *Rape Prevention through Bystander Education: Bringing a Broader Community Perspective to Sexual Violence Prevention;* Washington, DC: Department of Justice. Available online: https://www.ncjrs.gov/pdffiles1/nij/grants/208701.pdf (accessed on 13 April 2023).
- Banyard, Victoria L., Mary M. Moynihan, Alison C. Cares, and Rebecca Warner. 2014. How do we know if it works? Measuring outcomes in bystander-focused abuse prevention on campuses. *Psychology of Violence* 4: 101–15. [CrossRef]
- Banyard, Victoria L., Mary M. Moynihan, and Elizabethe G. Plante. 2007. Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology* 35: 463–81. [CrossRef]
- Banyard, Victoria L., Mary M. Moynihan, Wendy A. Walsh, Ellen S. Cohn, and Sally Ward. 2009. Friends of survivors: The community impact of unwanted sexual experiences. *Journal of Interpersonal Violence* 25: 242–56. [CrossRef]
- Baron, Robert A., and Joel H. Neuman. 1996. Workplace violence and workplace aggression: Evidence on their relative frequency and potential causes. *Aggressive Behavior* 22: 161–73. [CrossRef]
- Berkowitz, Alan. 2002. Fostering men's responsibility for preventing sexual assault. In *Preventing Violence in Relationships: Interventions across the Lifespan*. Edited by Paul A. Schewe. Washington, DC: American Psychological Association, pp. 163–96.
- Braun, Virginia, and Victoria Clarke. 2006. Using thematic analysis in psychology. Qualitative Research in Psychology 3: 77–101.
- Brown, Amy L., Victoria L. Banyard, and Mary M. Moynihan. 2014. College Students as Helpful Bystanders Against Sexual Violence. Psychology of Women Quarterly 38: 350–62. [CrossRef]
- Burn, Shawn Meghan. 2008. A Situational Model of Sexual Assault Prevention through Bystander Intervention. Sex Roles 60: 779–92.
- Burton, John. 1998. Conflict: Resolution and Provention. Virginia: The Macmillan Press.
- Caprara, Gian Vittorio, Patrizia Steca, Arnaldo Zelli, and Cristina Capanna. 2005. A New Scale for Measuring Adults' Prosocialness. European Journal of Psychological Assessment 21: 77–89. [CrossRef]
- Cares, Alison C., Victoria L. Banyard, Mary M. Moynihan, Linda M. Williams, Sharyn J. Potter, and Jane G. Stapleton. 2014. Changing Attitudes About Being a Bystander to Violence: Translating an in-person sexual violence prevention program to a new campus. *Violence Against Women* 21: 165–87. [CrossRef] [PubMed]
- Cascón, P. 2001. To Educate in and for the Conflict. Barcelona: UNESCO.
- Cavacini, Antonio. 2014. What is the best database for computer science journal articles? Scientometrics 102: 2059-71. [CrossRef]
- Centers for Disease Control and Prevention. 2004. Sexual Violence Prevention: Beginning the Dialogue. Atlanta: Centers for Disease Control and Prevention.
- Chabot, Heather Frasier, Melissa L. Gray, Tariro B. Makande, and Robert L. Hoyt. 2016. Beyond Sex: Likelihood and Predictors of Effective and Ineffective Intervention in Intimate Partner Violence in Bystanders Perceiving an Emergency. *Journal of Interpersonal Violence* 33: 1909–30. [CrossRef]
- Coker, Ann L., Bonnie S. Fisher, Heather M. Bush, Suzanne C. Swan, Corrine M. Williams, Emily R. Clear, and Sarah DeGue. 2014. Evaluation of the Green Dot Bystander Intervention to Reduce Interpersonal Violence Among College Students Across Three Campuses. Violence Against Women 21: 1507–27. [CrossRef]
- Coker, Ann L., Patricia G. Cook-Craig, Corrine M. Williams, Bonnie S. Fisher, Emily R. Clear, Lisandra S. Garcia, and Lea M. Hegge. 2011. Evaluation of Green Dot: An Active Bystander Intervention to Reduce Sexual Violence on College Campuses. *Violence Against Women* 17: 777–96. [CrossRef]
- Costa, Davide. 2023. Diversity and Health: Two Sides of the Same Coin. Italian Sociological Review 13: 69-90. [CrossRef]
- Crooks, Claire V., Peter Jaffe, Caely Dunlop, Amanda Kerry, and Deinera Exner-Cortens. 2018. Preventing Gender-Based Violence Among Adolescents and Young Adults: Lessons From 25 Years of Program Development and Evaluation. *Violence Against Women* 25: 29–55. [CrossRef]
- Cusano, Julia, Wood Leila, O'connor Julia, and Sarah McMahon. 2020. What Helps and Hinders Students' Intervening in Incidents of Dating Violence On Campus? an Exploratory Study Using Focus Groups. *Journal of Interpersonal Violence* 37: NP6211–NP6235. [CrossRef] [PubMed]

- Darley, John M., and Bibb Latane. 1968. Bystander intervention in emergencies: Diffusion of responsibility. *Journal of Personality and Social Psychology* 8: 377–83. [CrossRef] [PubMed]
- Davis, Tracy. 2000. Programming for Men to Reduce Sexual Violence. New Directions for Student Services 2000: 79-89. [CrossRef]
- Deitch-Stackhouse, Jacqueline, Kristin Kenneavy, Richard Thayer, Alan Berkowitz, and Janine Mascari. 2015. The Influence of Social Norms on Advancement Through Bystander Stages for Preventing Interpersonal Violence. *Violence Against Women* 21: 1284–307. [CrossRef] [PubMed]
- Dills, Jenny, Dawn Fowler, and Gayle Payne. 2016. Sexual Violence on Campus: Prevention Strategies. Atlanta: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Ellsberg, Mary, Diana J. Arango, Matthew Morton, Floriza Gennari, Sveinung Kiplesund, Manuel Contreras, and Charlotte Watts. 2015. Prevention of violence against women and girls: What does the evidence say? *The Lancet* 385: 1555–66. [CrossRef]
- Evans, Jennifer L., Meghan E. Burroughs, and Adam P. Knowlden. 2019. Examining the efficacy of bystander sexual violence interventions for first- year college students: A systematic review. Aggression and Violent Behavior 48: 72–82. [CrossRef]
- Fabiano, Patricia M., H. Wesley Perkins, Alan Berkowitz, Jeff Linkenbach, and Christopher Stark. 2003. Engaging Men as Social Justice Allies in Ending Violence Against Women: Evidence for a Social Norms Approach. *Journal of American College Health* 52: 105–12. [CrossRef]
- Fenton, Rachel A., and Helen L. Mott. 2017. The bystander approach to violence prevention: Considerations for implementation in Europe. *Psychology of Violence* 7: 450–58. [CrossRef]
- Fernández-Ríos, Luis, and Gualberto Buela-Casal. 2009. Standards for the preparation and writing of Psychology review articles. International Journal of Clinical and Health Psychology 9: 329–44.
- Finnie, Ramona K. C., Devon L. Okasako-Schmucker, Leigh Buchanan, Denise Carty, Holly Wethington, Shawna L. Mercer, Kathleen C. Basile, Sarah DeGue, Phyllis Holditch Niolon, Jennifer Bishop, and et al. 2021. Intimate Partner and Sexual Violence Prevention Among Youth: A Community Guide Systematic Review. *American Journal of Preventive Medicine* 62: e45–e55. [CrossRef]
- Flood, Michael. 2006. Changing men: Best practice in sexual violence education. Women Against Violence 18: 26–36.
- Gangsberg, Martin. 1964. 37 Who Saw the Murder Didn't Call the Police. *New York Times*, March 27. Available online: https://www.nytimes.com/1964/03/27/archives/37-who-saw-murder-didnt-call-the-police-apathy-at-stabbing-of.html(accessed on 13 April 2023).
- Gibson, Priscilla Ann. 2014. Extending the Ally Model of Social Justice to Social Work Pedagogy. *Journal of Teaching in Social Work* 34: 199–214. [CrossRef]
- Gidycz, Christine A., Lindsay M. Orchowski, and Alan D. Berkowitz. 2011. Preventing sexual aggression among college men: An evaluation of a social norms and bystander intervention program. *Violence Against Women* 17: 720–42. [CrossRef]
- Higgins, Julian P. T., James Thomas, Jacqueline Chandler, Miranda Cumpston, Tianjing Li, Matthew J. Page, and Vivian A. Welch, eds. 2022. *Cochrane Handbook for Systematic Reviews of Interventions Version 6.3 (Updated February 2022)*. London: Cochrane. Available online: www.training.cochrane.org/handbook (accessed on 13 April 2023).
- Jost, John T., and Aaron C. Kay. 2005. Exposure to Benevolent Sexism and Complementary Gender Stereotypes: Consequences for Specific and Diffuse Forms of System Justification. *Journal of Personality and Social Psychology* 88: 498–509. [CrossRef]
- Jouriles, Ernest N., Alison Krauss, Nicole L. Vu, Victoria L. Banyard, and Renee McDonald. 2018. Bystander programs addressing sexual violence on college campuses: A systematic review and meta-analysis of program outcomes and delivery methods. *Journal of American College Health* 66: 457–66. [CrossRef]
- Jozkowski, Kristen N. 2015. Beyond the dyad: An assessment of sexual assault prevention education focused on social determinants of sexual assault among college students. *Violence Against Women* 21: 848–74. [CrossRef] [PubMed]
- Katz, Jennifer, and Jessica Moore. 2013. Bystander Education Training for Campus Sexual Assault Prevention: An Initial Meta-Analysis. Violence and Victims 28: 1054–67. [CrossRef] [PubMed]
- Kuffel, Stephanie Washington, and Jennifer Katz. 2002. Preventing Physical, Psychological, and Sexual Aggression in College Dating Relationships. *Journal of Prevention* 22: 361–74. [CrossRef]
- Latané, Bibb, and John M. Darley. 1968. Group inhibition of bystander intervention in emergencies. *Journal of Personality and Social Psychology* 10: 215–21. [CrossRef] [PubMed]
- Latané, Bibb, and John M. Darley. 1969. Bystanders "apathy". American Scientist 57: 244-68. [PubMed]
- Latané, Bibb, and John M. Darley. 1970. The Unresponsive Bystander: Why Doesn't He Help? New York: Appleton-Century-Crofts.
- Lemay, Edward P., Karen M. O'Brien, Monica S. Kearney, Elizabeth W. Sauber, and Rachel B. Venaglia. 2019. Using conformity to enhance willingness to intervene in dating violence: A Theory of Planned Behavior analysis. *Psychology of Violence* 9: 400–9. [CrossRef]
- Levine, M. 2012. Helping in Emergencies: Reviewing the Latané and Darley Viewer Studies. In *Social Psychology: Revisiting Classic Studies*. Edited by Joanne R. Smith and Haslam S. Alexander. London: Publications Sage Ltd., pp. 192–208.
- Mahoney, Patricia, Andrea C. Gielen, Maryanne M. Bailey, and Colby Gabel. 2019. Applying the Haddon Matrix to evaluate sexual assault interventions on college campuses. *Journal of American College Health* 68: 579–86. [CrossRef]
- Manning, Rachel, Mark Levine, and Alan Collins. 2007. The Kitty Genovese murder and the social psychology of helping: The parable of the 38 witnesses. *American Psychologist* 62: 555–62. [CrossRef] [PubMed]
- Manterola, Carlos, and Támara Otzen. 2015. Los Sesgos en Investigación Clínica. *International Journal of Morphology* 33: 1156–64. [CrossRef]

- Martini, Mara, and Norma De Piccoli. 2020. Evaluation of USVreact: A Staff Training Program to Prevent Sexual Violence at Universities. Health Education & Behavior 48: 507–15. [CrossRef]
- Martini, Mara, Stefano Tartaglia, and Norma De Piccoli. 2021. Assessing Rape Myth Acceptance: A Contribution to Italian Validation of the Measure for Assessing Subtle Rape Myth (SRMA-IT). *Annals of Sex Research* 34: 375–97. [CrossRef]
- Martí-Vilar, Manuel, Lorena Corell-García, César Merino-Soto, and Manuel Martí-Vilar. 2019. Revisión sistemática de medidas de conducta prosocial. *Revista de Psicología* 37: 349–77. [CrossRef]
- McMahon, Sarah, and G. Lawrence Farmer. 2011. An Updated Measure for Assessing Subtle Rape Myths. *Social Work Research* 35: 71–81. [CrossRef]
- McMahon, Sarah, and Victoria L. Banyard. 2011. When Can I help? A Conceptual Framework for the Prevention of Sexual Violence Through Bystander Intervention. *Trauma, Violence, & Abuse* 13: 3–14. [CrossRef]
- Mennicke, Annelise, Stephanie C. Kennedy, Jill Gromer, and Mara Klem-O'Connor. 2018. Evaluation of a Social Norms Sexual Violence Prevention Marketing Campaign Targeted Toward College Men: Attitudes, Beliefs, and Behaviors Over 5 Years. *Journal of Interpersonal Violence* 36: NP3999–NP4021. [CrossRef]
- Montero, Maritza. 1994. Construction and Critique of Social Psychology. Barcelona: Editorial Anthropos, p. 110.
- Myers, David G. 1983. Social Psychology. New York: McGraw-Hill.
- Nittari, Giulio, Getu Gamo Sagaro, Alessandro Feola, Mattia Scipioni, Giovanna Ricci, and Ascanio Sirignano. 2021. First Surveillance of Violence against Women during COVID-19 Lockdown: Experience from "Niguarda" Hospital in Milan, Italy. International Journal of Environmental Research and Public Health 18: 3801. [CrossRef] [PubMed]
- Ortiz, Rebecca R., and Autumn Shafer. 2018. Unblurring the lines of sexual consent with a college student-driven sexual consent education campaign. *Journal of American College Health* 66: 450–56. [CrossRef] [PubMed]
- Palmer, Jane E. 2016. Recognizing the continuum of opportunities for third parties to prevent and respond to sexual assault and dating violence on a college campus. *Crime Prevention and Community Safety* 18: 1–18. [CrossRef]
- Pan American Health Organization. 2002. World Report on Violence and Health. Washington, DC: PAHO.
- Park, Sihyun, and Sin-Hyang Kim. 2021. A mixed-method pilot study to test a program for friend-supporters of victims of dating violence. *Journal of Community Psychology* 49: 1153–68. [CrossRef]
- Park, Sihyun, and Sin-Hyang Kim. 2022. A Systematic Review and Meta-Analysis of Randomized Controlled Trials for Intimate Partner Violence: The Effects of the Programs Based on Their Purposes. Trauma, Violence, & Abuse 15248380221084748. [CrossRef]
- Park, Sihyun, and Yejung Ko. 2020. Victims of Intimate Partner Violence in South Korea: Experiences in Seeking Help Based on Support Selection. Violence Against Women 27: 320–38. [CrossRef]
- Paul, Lisa A., Kate Walsh, Jenna L. McCauley, Kenneth J. Ruggiero, Heidi S. Resnick, and Dean G. Kilpatrick. 2013. College women's experiences with rape disclosure: A national study. *Violence Against Women* 19: 486–502. [CrossRef]
- Payne, Diana L., Kimberly A. Lonsway, and Louise F. Fitzgerald. 1999. Rape Myth Acceptance: Exploration of Its Structure and Its Measurement Using the Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality* 33: 27–68. [CrossRef]
- Perkins, H. Wesley, and Alan D. Berkowitz. 1986. Perceiving the Community Norms of Alcohol Use among Students: Some Research Implications for Campus Alcohol Education Programming*. *International Journal of the Addictions* 21: 961–76. [CrossRef]
- Potter, Sharyn J., Jane G. Stapleton, and Mary M. Moynihan. 2008. Designing, Implementing, and Evaluating a Media Campaign Illustrating the Bystander Role. *Journal of Prevention & Intervention in the Community* 36: 39–55. [CrossRef]
- Potter, Sharyn J., Mary M. Moynihan, and Jane G. Stapleton. 2011. Using Social Self-Identification in Social Marketing Materials Aimed at Reducing Violence Against Women on Campus. *Journal of Interpersonal Violence* 26: 971–90. [CrossRef] [PubMed]
- Prochaska, James O., and Carlo C. Diclemente. 1984. The Transtheoretical Approach: Crossing Traditional Boundaries of Change. Homewood: Dorsey Press.
- Provost, Sharon, Maura MacPhee, Michael A. Daniels, Michelle Naimi, and Chris McLeod. 2021. A Realist Review of Violence Prevention Education in Healthcare. *Healthcare* 9: 339. [CrossRef] [PubMed]
- Rubiales, Josefina, Daina Russo Pompa, Juan Pablo Paneiva, and Rocío González. 2018. Systematic review on Socioemotional Training programs for children and adolescents from 6 to 18 years old published between 2011 and 2015. Revista Costarricense de Psicología 37: 163. [CrossRef]
- Salazar, Laura F., Alana Vivolo-Kantor, and Anne Marie Schipani-McLaughlin. 2019. Theoretical Mediators of *RealConsent*: A Web-Based Sexual Violence Prevention and Bystander Education Program. *Health Education & Behavior* 46: 79–88. [CrossRef]
- Salazar, Laura F., Alana Vivolo-Kantor, James Hardin, and Alan Berkowitz. 2014. A Web-Based Sexual Violence Bystander Intervention for Male College Students: Randomized Controlled Trial. *Journal of Medical Internet Research* 16: e203. [CrossRef]
- Santacrose, Laura B., Anne C. Laurita, and Timothy C. Marchell. 2019. *Intervene*: Modeling Pro-Social Bystander Behavior in College Students through Online Video. *Health Communication* 35: 397–409. [CrossRef]
- Senn, Charlene Y., and Anne Forrest. 2016. "And then one night when I went to class..": The impact of sexual assault bystander intervention workshops incorporated in academic courses. *Psychology of Violence* 6: 607–18. [CrossRef]
- Stöber, Joachim. 2001. The Social Desirability Scale-17 (SDS-17): Convergent validity, discriminant validity, and relationship with age. European Journal of Psychological Assessment 17: 222–32. [CrossRef]
- Wandersman, Abraham, and Paul Florin. 2003. Community interventions and effective prevention. *American Psychologist* 58: 441–48. [CrossRef]
- Werder, Olaf. 2017. Toward a humanistic model in health communication. Global Health Promotion 26: 33-40. [CrossRef] [PubMed]

World Health Organization (WHO). 2013. Global and Regional Estimates of Violence against Women: Prevalence and Effects of Spousal Violence and Non-Spousal Sexual Violence on Health. Ginebra: World Health Organization (WHO).

Yepes-Nuñez, Juan José, Gerard Urrútia, Marta Romero-García, and Sergio Alonso-Fernández. 2021. Declaración PRISMA 2020: Una guía actualizada para la publicación de revisiones sistemáticas. Revista Española de Cardiología 74: 790–99. [CrossRef]

Yount, Kathryn M., Tran Hung Minh, Quach Thu Trang, Yuk Fai Cheong, Irina Bergenfeld, and Jessica M. Sales. 2020. Preventing sexual violence in college men: A randomized-controlled trial of GlobalConsent. BMC Public Health 20: 1331. [CrossRef] [PubMed]

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Review

Cyber-Information Security Compliance and Violation Behaviour in Organisations: A Systematic Review

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Abstract: Cyber and information security (CIS) is an issue of national and international interest. Despite sophisticated security systems and extensive physical countermeasures to combat cyberattacks, organisations are vulnerable due to the involvement of the human factor. Humans are regarded as the weakest link in cybersecurity systems as development in digital technology advances. The area of cybersecurity is an extension of the previously studied fields of information and internet security. The need to understand the underlying human behavioural factors associated with CIS policy warrants further study, mainly from theoretical perspectives. Based on these underlying theoretical perspectives, this study reviews literature focusing on CIS compliance and violations by personnel within organisations. Sixty studies from the years 2008 to 2020 were reviewed. Findings suggest that several prominent theories were used extensively and integrated with another specific theory. Protection Motivation Theory (PMT), the Theory of Planned Behaviour (TPB), and General Deterrence Theory (GDT) were identified as among the most referred-to theories in this area. The use of current theories is discussed based on their emerging importance and their suitability in future CIS studies. This review lays the foundation for future researchers by determining gaps and areas within the CIS context and encompassing employee compliance and violations within an organisation.

Keywords: cybersecurity/information security; compliance; policy; violation; systematic review

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1. Introduction

From the beginning of the internet era, issues of cyber and information security (CIS) began to surface rapidly (Chen et al. 2018). CIS is regarded as the current avenue in today's digital world. Organisations are under threat and at risk of cyber-attack due to phishing activities. The cybersecurity issue is dynamic and has not been well-studied, despite its enormous importance (Gillam and Foster 2020). Cybersecurity threats include criminals, spammers, and threats from other assorted attackers. Developing countries are more at risk of cyber threats due to limited resources to acquire and implement the mechanisms of cybersecurity in their organisations (Kabanda et al. 2018). Organisations have introduced various security technologies, i.e., database security protection, networking security protocols, and intrusion detection methods (among others), to protect their cyber and information technology from cyber threats.

Considered as the weakest link, humans are vulnerable to various forms of cyber threats (Gratian et al. 2018). Poor and dangerous security practises among individuals in an organisation should be identified, and mitigation efforts such as continual education and awareness are needed to prevent cyber-crimes such as phishing and malware attacks on security systems resulting from human intervention. End users, either for personal usage or within organisations, pose the greatest threat (Menard et al. 2017). In light of this

serious problem within organisations, management and stakeholders have established CIS problems as one of their critical agenda items. In response, organisations have made strict rules and policies to avoid persistent cyber threats such as system and data breaches and malicious software (Cram et al. 2017).

At the personal level, there are various measures available to strengthen one's cybersecurity; these include the adoption of antivirus software, antispyware software, cloud-based backup systems, and identity theft avoidance services (Menard et al. 2017). It is undeniable that external factors pose the biggest threat to CIS in an organisation. However, having the most sophisticated system does not protect the organisation if security surveillance is not imposed at the individual level. Personnel are an insider threat that surfaces as a risk for such a threat to happen (Cram et al. 2017). Hence, studies highlighting compliance and violations of CIS security policies provide the best understanding for practitioners of the antecedents that contribute to the most significant risks to CIS in an organisation.

Compliance and violation are considered two different perspectives in studies of CIS in organisations. The underlying elements of individual compliance and violation of CIS policies combine and are a manifestation of human behaviour. The theories of planned behaviour (TPB) (Ifinedo 2014), protection motivation theory (PMT) (Torten et al. 2018), and general deterrence theory (GDT) (Johnston et al. 2016) are among the theories widely used in CIS studies. Apart from these main theories, other relevant theories could provide a significant understanding of individual behaviours that result in compliance or violation of CIS policies. Studies that were reviewed lack in-depth analysis and conceptualisation of the stated theories. There is no integration of theory or production of hybrid models that encapsulate different aspects of CIS behaviour. As a result, this review offers the latest comprehensive critique and recapitulation of how the adaptation of theories in CIS studies has progressed in organisations from the standpoint of CIS compliance and violation caused by human behaviour.

1.1. The Terminology of Cybersecurity

Information and cybersecurity actually overlap, as the latter precedes the former in terms of including the human assets factor (Von Solms and Van Niekerk 2013). Information security is confined within the orbit of information-resources protection and the role of humans in the security process, whereas cybersecurity includes humans as potential targets, with them sometimes participating in a cyber-attack without consciously knowing it. The terminology of cybersecurity relates to protecting an individual's or organisation's virtual perimeter or environment (Althonayan and Andronache 2018). Van Schaik et al. (2017) define cybersecurity as cyberspace protection that includes personnel and organisations involved in cyberspace as well as any of their assets.

Many organisations tend to use these two terms interchangeably when relating them to their reputation, image, and compliance obligations (Althonayan and Andronache 2018). Among other terms used are "information assurance", "information technology security", or "electronic security". In another definition, Yoon and Kim (2013) define computer security as the "protection of information and computer assets" from computer attacks, theft, and other threats. General terminology such as "online safety behavior" (Boehmer et al. 2015) and "online security behavior" (Van Bavel et al. 2019) has also been adapted by several authors.

Due to these variations, the underlying crux of the term is based on managing software, hardware, assets, and humans in an organisation. Hence, this study uses cybersecurity and information security (CIS) terminology that reflects a holistic representation of protecting the cyber–physical aspects and the surrounding assets. This term also avoids confusion caused by variations in terminology that run the risk of researchers missing essential aspects of this field. This review is based on two facets of CIS: the cybersecurity measurement of personnel; and secondly, risk behaviour within cybersecurity. The former is usually reserved for, but not limited to, PMT applications, as well as those of TPB. The latter usually adopts Deterrence Theory, which features personnel deterrence to achieve compliance with security measures.

1.2. Previous Review

This study is not the first to review the literature on CIS. Previous reviews of CIS compliance and violations in organisations are available in the work of Lebek et al. (2014), Sommestad et al. (2014), Nasir et al. (2019), Soomro et al. (2016), Bongiovanni (2019), Cram et al. (2017), and Karlsson et al. 2016. These studies have their strength in reviewing CIS-related studies and, in particular, on focusing on CIS studies in specific disciplines. A study by Sommestad et al. (2014) presented a review of the determinants of information security policy compliance. The study discovered that several variables are found to be the most-adapted variables within specific theories such as TPB/TRA and TAM. The limitation in Sommestad's study is that the review included studies from various sources (17 journals, 3 magazines, 4 conference proceedings, and 5 from books or theses). Nasir et al. (2019) presented a study based on the cultural concept of information security. Their study is deficient in the broader sense of CIS in terms of the theoretical foundation, despite presenting the critical dimensions of information security studies. Other reviewed studies are limited to only higher education information security (Bongiovanni 2019) and a management approach (Soomro et al. 2016). All these reviews were fundamentally lacking in an understanding of cybersecurity as the 'umbrella' that covers all disciplines in organisational security practices.

The closest review paper that can be considered as the predecessor to this paper is the review by Lebek et al. (2014). The authors comprehensively reviewed a total of 144 articles on information security behaviour and the underlying theories used to conduct the studies. The relevance of our reviews compared to Lebek's study is due to several factors. Firstly, Lebek's study included a total of 51 conference papers. In light of the importance of conferences providing empirical findings, systematic review papers require a rigorous peer-review process that can only be processed by a reputable journal. Secondly, the study does not include the scope of cybersecurity behavioural studies. Cybersecurity, even though having a fundamentally similar notion as information security, covers an advanced scope that embraces organisational security entirely (Von Solms and Van Niekerk 2013).

From a methodological perspective, Lebek's study included eight different research methodologies (empirical research, modelling, deductive analysis, case study, action research, literature review, and grounded theory). Including all the different methodologies would not provide a sufficient understanding of the theory's application. Even more, the empirical studies in Lebek's study cover both quantitative and qualitative approaches. In this study, however, only quantitative studies that can be related to the theories based on the structural model and framework were used.

Next, Lebek's work only focused on the four theories adapted mainly from the reviews, comprising TAM, TPB/TRA, PMT, and GDT. By including conference-proceedings studies, the adapted theories might not have strong empirical justification based on the fundamental theory application. Leaving aside other validated theories such as Technology Threat Avoidance Theory or Social Capital Theory, further compromising insights into users' CIS security behaviour might lead to major flaws in the researchers' in-depth understanding of this phenomenon.

Finally, Lebek's study ranged from 2000 to 2014 and is now considered to be outdated. This current paper provides broader and revitalised findings from the CIS behaviour perspective from a new perspective. This dynamic field changes rapidly within 2 or 3 years as far as advancements in digital evolvement is concerned. This review notably stands out from other systematic-based reviews as its focus is within the scope of underpinning theories in CIS. As Lebek's is the only other study to discuss this, this study differs significantly by carrying out the theory integration of two and three theories from previous studies. This is in stark contrast to Lebek's study, which only focuses on four theories. Table 1 provides a summary of the previous systematic reviews or literature reviews of CIS in organisations.

Table 1. Previous review studies of cybersecurity/information security.

Author	Number of Studies	Year Range	Strength	Limitation
Nasir et al. (2019)	79	2000 to 2017	Information security culture.	Included conference and Ph.D. and Master thesis.
Soomro et al. (2016)	67	2004 to 2014	Role of manager.	Included qualitative studies.
Bongiovanni (2019)	40	2005–2017	Focus on higher education security management.	Limited to only higher education scope. Other organisations would have different contextual and relevant variables needed to understand employee cybersecurity.
Cram et al. (2017)	114	1990–2016	Focuses on security policy. This study creates a structure within the security policy domain that would facilitate theory building for future insights. This is conducted by looking into the inter-relationships among the key constructs.	Included qualitative studies. The time frame is too broad. The inclusion of studies prior to the new millennium may not be exhaustive and does not provide a comprehensive understanding of cybersecurity issues.
Sommestad et al. (2014)	29	2004–2012	60 variables have been studied concerning security policy compliance and incompliance.	Included from various sources (17 journals, 3 magazines, 4 conference proceedings, and 5 in book chapters or theses).
Lebek et al. (2014)	144	2000–2014	Theory-based studies.	Included conference papers. Included were eight methodology approaches rather than an empirical, quantitative study.
Karlsson et al. (2016)	64	1990–2014	interorganisational information security research.	Included conference papers.

2. Methodology

The methodology involves rigorous steps and procedures that examine the required papers within the scope of CIS behaviour. The articles included are from well-known sources, published in a Scopus-indexed journal, and based on reputable databases. Currently, Scopus and the Web of Science (WoS) are the only two reliable sources for citation data (Mongeon and Paul-Hus 2016); particularly, Scopus, whose coverage is interdisciplinary, represents a significant strength related to comparing different scientific fields. These databases included Sciencedirect, Emerald Insight, Taylor & Francis, Springer Link, Wiley-Blackwell, Inderscience, SAGE, and IEEE Explore. Apart from the 8 central databases, other journals included in the Scopus index are also acceptable. These include journals published by institutional publishers. The procedure for retrieving the articles is based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method by including the exclusion and inclusion criteria for articles relevant to this review (Moher et al. 2015).

2.1. Inclusion and Exclusion Criteria

The only articles accepted were those using empirical data, excluding review articles. Conference proceedings and book chapters were excluded. Conference proceedings were omitted to ensure only peer-reviewed articles, thus determining the quality of the reviewed

publications (Mingers et al. 2012). Similar SLR studies have applied a similar approach by limiting sources to only journal publications (Galvão et al. 2018; Birkel and Müller 2021). Excluding conference proceedings has improved the quality of findings (Baashar et al. 2020). Furthermore, only English-language articles were included to minimise the potentially complicated process of understanding due to the need to translate. As for the duration, since the study of information and cybersecurity is relatively new in the social science context, only articles published between 2008 and 2020 (a thirteen-year time span) were accepted. As a result of the search, a total of 60 studies from reputable publishers were collected. Science Direct has the most extensive range of articles, comprising 35 studies. This is supported by multiple journals concerning information security and computer application journals, such as Computer & Security with 13 articles and Computers in Human Behaviour and Information & Management, which each produced 7 articles. Table 2 sets out the inclusion and exclusion criteria of this systematic review.

Table 2. Inclusion and exclusion criteria for the systematic review.

Inclusion	Exclusion
Journal indexed in Scopus	Journal not indexed in Scopus
Written in English	Conference proceedings, book chapters, and theses
Empirical and quantitative study	Conceptual study and literature review
Published between 2008 and 2020	Written in a language other than English

2.2. Search String

As CIS terminology varies in the literature, the authors searched for similar terminologies in dictionaries and thesauruses to ensure that essential terms were not missed. Information and cybersecurity overlap, as the latter precedes the former, including the human assets factor (Von Solms and Van Niekerk 2013). Information security is confined within the orbit of information resource protection and the role of humans in the security process. In contrast, cybersecurity includes humans as potential targets, sometimes participating in a cyber-attack without consciously knowing it. Cybersecurity terminology relates to protecting an individual's or organisation's virtual perimeter or environment (Althonayan and Andronache 2018). Van Schaik et al. (2017) define cybersecurity as cyberspace protection for personnel and organisations involved in cyberspace, as well as any of their assets.

Many organisations use these two terms interchangeably when relating them to their reputation, image, and compliance obligations (Althonayan and Andronache 2018). Among other terms used are "information assurance", "information technology security", or "electronic security". In another definition, Yoon and Kim (2013) define computer security as the "protection of information and computer assets" from computer attacks, theft, and other threats. General terminology such as "online safety behavior" (Boehmer et al. 2015) and "online security behavior" (Van Bavel et al. 2019) has also been adopted by several authors.

Due to these variations, the underlying crux of the term is based on managing software, hardware, assets, and humans in an organisation. Hence, this study uses cybersecurity and information security (CIS) terminology that reflects a holistic representation of protecting the cyber–physical aspects and the surrounding assets. This term also avoids confusion caused by variations in terminology that run the risk of researchers missing essential aspects of this field. The search string for the article search is as follows:

"Cyber Security" or "Information Security" or "Computer Security" or "internet security" or "digital security" and "behavior".

3. Results and Analysis

All the databases were searched one by one based on the specified search string. As a result, 60 studies were finalised. Table 3 presents the list of journals publishing the 60 studies. Computer and Security (Elsevier) produced 13 of the studies. This is followed

by Computers in Human Behavior (Elsevier) and Information and Management, with seven studies each. Other journals had four or fewer studies. (All 60 studies were marked with an "*" in the references).

Table 3. List of journals.

Journal Name	No. of Studies
Computer and security	13
Computers in Human Behavior	7
Information & Management	7
Decision Support system	4
MIS Quarterly	4
Information System Journal	2
European Journal of Information System	2
Information Management & Computer Science	2
Journal of Management Information System	2
Information and Computer Security	2
International Journal of Information Management	2
Others *	13
Total	60

^{*} Others are journals with one publication.

Table 4 shows the list of theories adapted in all the 60 studies. PMT was the most frequently used, with 14 studies, followed by PMT + TPB/TRA and GDT with five studies each. PMT, the Health Belief Model (HBM), and GDT + Neutralisation Theory comprised three studies each. The rest of the theories were applied in at least one or two studies.

Table 4. Theories adapted in the review.

Theory/Theories	No of Studies	Studies
Protection Motivation Theory	14	Boss et al. (2015), Chou and Chou (2016), Dang-Pham and Pittayachawan (2015), Hanus and Wu (2016), Hina et al. (2019), Johnston and Warkentin (2010), Li et al. (2019), Meso et al. (2013), Posey et al. (2015), Torten et al. (2018), Tsai et al. (2016), Van Bavel et al. (2019), Warkentin et al. (2016), and Workman et al. (2008).
GDT	6	Chen et al. (2018), Dinev et al. (2009), Guo and Yuan (2012), Hovav and D'Arcy (2012), Safa et al. (2019), Son (2011), and Siponen and Vance (2010).
PMT + TPB/TRA	4	Cox (2012), Ifinedo (2012), Safa et al. (2015), and Siponen et al. (2014)
GDT+ Neutralisation Theory	3	Alshare et al. (2018), Barlow et al. (2013), and Silic et al. (2017).
PMT + HBM	2	Anwar et al. (2017) and Hwang et al. (2017).
HBM	2	Dodel and Mesch (2019) and Ng et al. (2009).
TPB/TRA	2	Hu et al. (2012) and Zhang et al. (2009).
TTAT	2	Gillam and Foster (2020) and Liang and Xue (2010).
Big Five Personality	2	Gratian et al. (2018) and McCormac et al. (2017).
Others	21	Al-Mukahal and Alshare (2015), Barton et al. (2016), Boehmer et al (2015), Bulgurcu et al. (2010), Burns et al. (2017), Cheng et al. (2013), Choi and Song (2018), D'Arcy and Greene (2014), Donalds and Osei-Bryson (2019), Herath and Rao (2009), Humaidi and Balakrishnan (2015), Ifinedo (2014), Johnston et al. (2016), Lee et al. (2016), Li et al. (2010), Lowry and Moody (2015), Menard et al. (2017), Shropshire et al. (2015), Vance and Siponen (2012), Yazdanmehr and Wang (2016), and Yoon and Kim (2013).
Total	60	

4. Discussion

This systematic review provides an insight into how several theories were adapted in CIS studies. This review is not the first to review theoretical perspectives, as Lebek et al. (2014) have already provided this, but it provides a more in-depth focus on the adapted theories and, especially, theory integration. This review is more converged and exclusive by limiting sources to only journal publications, as compared to Lebek's study, which includes conference proceedings, books, book chapters, and editorials that had not undergone an extensive peer-review process. This review discovered that one of the many theories discussed in their study, the Technology Acceptance Model (TAM), was not applied in any of the 60 studies, except for Dinev et al. (2009), which applied TAM as a supporting and complementary theory in support of PMT. This shows that TAM did not sufficiently explain the user's CIS behaviour, as the constructs did not relate to any cognitive evaluation of security or the psychological domain involving a threat and coping appraisal. The following discussion of this paper is presented in the form of theories adopted/adapted from previous studies.

4.1. Protection Motivation Theory (PMT)

PMT first evolved in the 1980s from the Theory of Fear Appeal (Maddux and Rogers 1983). It has been proposed in the health and medical fields to predict individual engagement in disease prevention (Torten et al. 2018). Within the preventive medicine field, PMT was formulated to predict protective responses among individuals through the health threat of fear appeals (Posey et al. 2015). The theory has developed as a general motivation theory that explains human behaviour based on threats to their actions. Subjectively, the primary purpose of fear appeals is not to frighten people, but to inspire protective behaviours (Herath and Rao 2009; Meso et al. 2013; Boss et al. 2015). Fear is induced when an individual values the cost–benefit analysis in a state of perceived danger or when facing a threat (Workman et al. 2008). It is negatively associated with one affective state that represents a response that arises from a perceived threat, such as worry, negative arousal, discomfort, concern, or a particularly negative mood (Boehmer et al. 2015).

Safa et al. (2015) explain why PMT is one of the best theories to explain individual protective actions. It is central to information technology for users to comply with and perform actions related to cyber protection (Torten et al. 2018). On the other hand, security awareness as a critical role in PMT can also be designed from PMT developed through cognitive responses to security in the form of perceived severity, perceived vulnerability, response cost, response efficacy, and self-efficacy (Hanus and Wu 2016). The danger process controls the primary cognitive function by inducing stress and coping appraisals (Workman et al. 2008). This cognitive coping appraisal is engaged when an individual confronts a situation under pressure, which then leads to appraising the threat vulnerability. This could entail motivational consideration in facing such a threat based on the perception of vulnerability's existence (Herath and Rao 2009). PMT has been adapted in various studies, including in complying with the policy on security, data backup, protection of home and network computers, employing antivirus and antimalware software (Menard et al. 2017), desktop security behaviour (Hanus and Wu 2016), the omission of information security measures (Workman et al. 2008), and general security compliance behaviour (Herath and Rao 2009; Meso et al. 2013; Yoon and Kim 2013; Siponen et al. 2014).

4.1.1. Extension of PMT

PMT has been used as the most fundamental theory in the field of CIS in the past decade. As organisations seek to protect their assets and valuable intangible property, understanding employees' "protection" actions and reactions to threats is the most practical insight for organisations. Given that the majority of the studies adapt PMT, notable studies have adapted and integrated PMT well with other theories and variables. TPB, within the scope of cybersecurity, has been seen to be compatible with PMT (Safa et al. 2015). Five of the studies integrated PMT and TPB/TRA. Four studies integrated PMT and TPB

(Ifinedo 2012; Cox 2012; Safa et al. 2015; Hina et al. 2019) and one study integrated PMT and TRA (Yoon and Kim 2013). Ifinedo (2012) suggest that PMT and TPB, when combined, provide a better understanding of the factors that affect an employee's cybersecurity compliance. As organisations comprise various psychological aspects, a combination of different domains within two or more theories will deepen the fundamental knowledge of employee compliance and violation in CIS.

Dang-Pham and Pittayachawan (2015) proposed an extended PMT model. This model is deemed to be viable in the context of a personal mobile device or the "bring your own device" (BYOD) context that involves corporate and public places. One of the variables included in the extended PMT is the reward. Reward was found to be affected by response efficacy based on the user's intention. The suggested link is different from other studies, as the relationship was proposed as an endogenous relationship, rather than both serving as an exogenous variable to compliance intention. Findings emphasised that the extent of the cyber-threat critically influences the user's intention to perform malware avoidance. Users are not prepared to avoid malware even though they are not working while online. This extended PMT utilises the user's cognitive factors to provoke a considerable change in their intention to avoid threat.

Burns et al. (2017) proposed a relationship between psychological capacities (hope, optimism, self-efficacy, and resilience) and PMT variables. Psychological capacities encompass critical resources for work-related motivation. This integration provides a broad understanding of an employee's compliance with cybersecurity policies through motivational determinants that complement PMT. Furthermore, the model includes maladaptive rewards and fear; these two extra variables within the model help to explain employee-protective security actions.

Another construct integrated with PMT is perceived extraneous circumstances, defined as the user's inability to take control due to unforeseen circumstances that prevent one from engaging in intended actions (Warkentin et al. 2016). Similar to facilitating conditions as a factor that makes an action easier, the perceived extraneous circumstance is a hindrance factor based on events beyond one's control. It may be in the form of family emergencies, work duties, or travel restrictions. Within the scope of cybersecurity, this variable can be viewed as employees failing to comply with cybersecurity policies, perceiving that their workload is high, being busy with assignments, and/or focusing on other necessary job scopes (Siponen et al. 2014). Safa et al. (2015) linked PMT with the TPB variable with a precedent-dependable construct. This includes information security awareness of attitude and organisation policy on the subjective norm and experience and involvement in perceived behavioural control.

The Health Belief Model (HBM) is considered the predecessor of PMT. PMT and HBM have been integrated in two studies (Anwar et al. 2017; Hwang et al. 2017). As an extension of HBM, PMT has been able to predict individual cybersecurity behaviour. One particular focus of the integration of PMT and HBM is the way these two theories are integrated. While many of the PMT and HBM studies acted as two underlying precedent theories to predict cybersecurity behaviour, Li et al. (2019) presented HBM variables as the exogenous variables to PMT. The model refers to peer behaviour that influences cues to action and, subsequently, to prior experience with security practice. It was constructed in such a way that a link was established between the employees' experience of having security breaches and how they would make them less vulnerable to future cyber-attacks.

Tsai et al. (2016) tested the prior experience of safety hazards on the user's online behaviour. The study included perceived security support, personal responsibility, and safety habits. The new coping appraisal examines cognitive capability in connection to taking protective security actions. This coping variable is opted for more frequently than the threat appraisal due to its desirability in identifying user education interventions that can develop the motivation to acquire cybersecurity habits that can fend off online threats.

4.1.2. General Deterrence Theory (GDT)

GDT is the second most adapted theory in CIS studies (Alshare et al. 2018; Johnston et al. 2016; Cheng et al. 2013; Guo and Yuan 2012; Hovav and D'Arcy 2012; Son 2011; and Herath and Rao 2009). Studies applying Single Deterrence Theory include Son (2011), Hovav and D'Arcy (2012), and Guo and Yuan (2012). Studies that apply a single GDT to CIS typically investigate the aspect of negative encouragement in engaging in cybercrime. As studies of CIS are categorised in terms of compliance and violation, all the studies that apply GDT have both compliance (five studies) and violation (seven studies). This shows that GDT is the most suitable theory to be applied to understand employees' violations of behaviour as compared to compliance.

Deterrence Theory suggests that humans will refrain from engaging in undesirable behaviours (violation, crime, and abusive behaviour) if they believe that adverse consequences such as punishment and sanctions might occur (Johnston et al. 2016). Consequently, GDT was found to establish a relationship with humans engaging in deviant behaviours (Cheng et al. 2013). Human behaviour is based on an individual level of rationality that can be influenced by incentives in a particular negative way. Two main domains are laid out in this theory: sanction severity and sanction certainty. Certainty is defined as a belief that their criminal behaviour will be detected. Severity, on the other hand, refers to the degree of punishment once they are caught. It is posited that the higher the degree of certainty and severity of sanctions for a particular act, the more the individual will be deterred from acting in a negative way (Wenzel 2004). Another critical aspect of GDT is the celerity of sanctions, or the swiftness of sanction implementation. People will avoid criminal behaviour if the punishment for such behaviour is carried out with severity, swiftness, and a degree conviction (Alshare et al. 2018). People who are rational in terms of their actions are unlikely to commit a criminal act if their perception of the certainty, celerity, and severity of the sanctions resulting from their actions are more significant than the benefits of the crime (Dinev et al. 2009).

GDT has the highest instances of theory integration. A review shows that it is integrated with PMT + TPB (Herath and Rao 2009), Neutralisation Theory (Siponen and Vance 2010; Barlow et al. 2013; Silic et al. 2017), Social Capital Theory (Cheng et al. 2013), Neutralisation Theory + TPB (Al-Mukahal and Alshare 2015), PMT (Johnston et al. 2016), and Neutralisation Theory + Justice Theory (Alshare et al. 2018). GDT is effective and efficient due to its deterrence in relation to abiding by security policies. Deviant human behaviour can be explained in terms of punishment and sanctions to obtain compliance, as most people weigh up benefits and risks before engaging in any action. Future studies should always include factors within GDT in order to understand the implicit actions related to compliance with CIS.

4.1.3. Theory of Planned Behaviour (TPB)

TPB is a theory that explains how three predictors (attitude, subjective norm, and perceived behavioural control) influence an intention. The intention, in turn, affects individual behaviour. TPB is an extension of the Theory of Reasoned Action (TRA). Both theories are regarded as having the same theoretical underpinning in this review. The former has the added variable of perceived behavioural control. These two theories explain that attitude refers to positive personal feelings toward a behaviour either positively or negatively. The subjective norm is other people's perceptions and views of individuals engaging in a particular behaviour, while perceived behavioural control is one's perception that one can influence such behaviour (Fauzi et al. 2019).

Ten studies applied TPB/TRA (eight of the studies applied TPB) (Dinev et al. 2009; Bulgurcu et al. 2010; Hu et al. 2012; Ifinedo 2012; Cox 2012; Ifinedo 2014; Safa et al. 2015; Humaidi and Balakrishnan 2015), while two studies applied TRA (Yoon and Kim 2013; Siponen et al. 2014). Studies that applied TPB with other theories included PMT (Ifinedo 2014; Cox 2012; Safa et al. 2015) and HBM (Humaidi and Balakrishnan 2015). Humaidi and Balakrishnan (2015) adopted TPB and HBM when assessing employees' security policies

and compliance behaviour. This behaviour was linked with the HBM factors inherent in information security awareness (perceived severity, perceived susceptibility, and perceived benefits). Within the model, management support plays a vital role in information security when managing, for example, a public hospital. The study shows that hospital management is directly connected to decision making by dint of having the authority to solve problems related to human errors before proceeding to develop any information security policies. Another variable perceived to be important is trust. Trust is embedded in the TPB and HBM models. Trust is a critical factor for employees to believe in top management. Instilling confidence in employees to take on board security policy practises and implementation is highly dependent on the role of top management.

Dinev et al. (2009) proposed a model comprising TPB and elements of the Technology Acceptance Model (TAM). The two domains of TAM, i.e., perceived ease of use and perceived usefulness, were posited as the antecedents of attitude, subjective norm, and perceived behavioural control. The model was further complemented by Hofstede's (1980) cultural domain of uncertainty avoidance, power distance, masculinity, individualism, and long-term orientation. The study assesses an organisation's employees' antispyware technology adoption to protect information technology in two different cultures, the U.S. and South Korea. Hofstede believes that cultural differences have a considerable impact on an employee's intentions and behaviour. The practical implication of Hofstede's cultural contention provides an in-depth understanding of different cultural practises and compliance to cybersecurity protocols in the organisation. As this study was conducted in 2009, an early stage in digital technology, it is probably one of the few studies that adapted TAM in its study. Interestingly, TAM was not found in any of the recent studies other than in that of Dinev et al. (2009).

Top management has a strong influence on employees' norms, values, and beliefs concerning security policies. Subordinates would be more willing to participate in cybersecurity practises if they believed that top management participated in related initiatives and programs. Top management is the party responsible for establishing and enforcing such policies. Perceived management participation was studied by Hu et al. (2012), based on the TPB model. Apart from that, perceived goal orientation and perceived rule-oriented findings show that top management in the study impacted subjective norms and perceived behavioural control, but not attitude. This is because attitude is derived from an individual's cognitive evaluation of compliance within their inner self-belief. Top management provides the extrinsic motivation or pressure on employees' compliance intentions, which encourages employees to conform to CIS security policies.

5. Integration of Three Theories

Considering the depth and critical impact of CIS on organisational safety and livelihoods, it is acceptable that a combination of more than two theories is sufficient to answer the fundamental issue in today's organisational context. Very few studies combine more than two theories due to considerable difficulty in explaining the reason for these theories concerning CIS studies. This review discovered that six studies integrated three theories to explain the CIS phenomenon.

5.1. PMT + TPB + GDT

PMT and TPB are the two most adapted theories in CIS studies, with five studies. Herath and Rao (2009) extended the model by incorporating it with GDT. The model is viewed as an Integrated Protection Motivation and Deterrence Model of Security Policy Compliance under Taylor–Todd's Decomposed TRA. Even though the study is considered to pass the current perspective in CIS, it could provide valuable insights for future researchers reviewing the possibility of drawing together the theoretical perspectives of threat and coping appraisal that can determine the attitude of security policies among employees. The model is claimed to be holistic, as it comprises the organisational commitment of employees and the intention to comply, as well as environmental factors in

the deterrence of facilitating conditions and social influence. Social influence is measured in the context of subjective and descriptive norms. This was one of the earliest studies to provide a theoretical focus on employees' policy compliance intentions. The findings provide a foundation for other scholars studying employee compliance behaviour. The study found that an employee's certainty around security breaches has little impact on security concerns. Employees were found to have low security-breach perceptions. When this study was conducted in the late 2000s, CIS breaches and threats were not as prevalent as they are now. Employees complied with security policies because they perceived that it was not a hindrance to their daily lives. Furthermore, organisations were not as conscious of, and had very little idea of, the severity of CIS threats and their implications for their systems and organisations as a whole.

5.2. PMT, TRA, and CET

PMT, the Theory of Reasoned Action, and Cognitive Evaluation Theory, were studied by Siponen et al. (2014). The model consists of several components of the theories, including attitude (TRA), threat and coping appraisal (PMT), and rewards (CET). CET is a theory that estimates the negative outcome of rewards on intrinsic motivation, particularly for tangible rewards such as prizes or awards (Siponen et al. 2014). CET posits that rewards are a negative element in the context of their acting as a tool for behavioural control. This is due to recipients feeling controlled, resulting in decreased feelings of self-determination and autonomy. It was believed that CET rewards would be directly linked to positive behaviour such as security compliance, but attitudes toward compliance with security policies are needed, as employees' affection toward the policy as well as regulated rules is highly associated with their attitude. Rewards, on the other hand, predict the detrimental effect of intrinsic motivation on individuals based on actual remuneration.

5.3. GDT + Neutralisation Theory + TPB

GDT successfully explains an employee's compliance, integrated with Neutralisation and TPB. A study of three theories (GDT, Neutralisation, and TPB), with the added inclusion of Hofstede's cultural value, was studied by Al-Mukahal and Alshare (2015) in relation to employees in Qatar. The integration of the cultural factors of Hofstede's uncertainty avoidance and collectivism delineated the CIS behaviour in a developing country. Uncertainty avoidance moderates the scope of policy and the violation of information security in the case of a country having high uncertainty avoidance. On the other hand, collectivism shows that in a society where trust influences the violation of information security, it correlates negatively with a society with high collectivism. The clarity of the CIS policy predicts employees' violations. An individual who does not understand or who has a different understanding of the management's views does not comprehend the need to comply with security policies. Policy violations, work environments, and policy scope are all moderated by the cultural dimensions of uncertainty avoidance and collectivism.

5.4. TPB + SCT + SBT

Ifinedo (2014) proposed a recomposed TPB model. It was integrated with Social Capital Theory and Social Bond Theory (SBT). The SCT consists of locus of control and self-efficacy, which are based on perceived behavioural control. The study tends to link socialisation and group influence through SBT, personal beliefs, and self-efficacy through TPB and SCT, and cognition through TPB. SBT describes the bonding of the social aspect within a group. Bonding involves commitment, attachment, personal norms, and involvement (Hirschi 2002). The theory explains that individuals who have built their relationships upon such bonding could reduce their antisocial behaviour. Ifinedo (2014) believes that attachment is inherent in SBT and reflects individual identification with organisational values. Commitment refers to the effort and energy to uphold organisational CIS policy, while involvement reflects the employee's relationship with subordinates. Personal norms are the views and values of employees in relation to CIS policy. It was found that the

socio-organisational element was critical in explaining an individual's security compliance behaviour. Socio-organisational factors predict individual intention positively through the attitude and subjective norms of CIS compliance. On the other hand, social influence and the perception of individuals of their competence and control in conforming to such compliance have a dominant impact on their compliance behaviour.

5.5. GDT, TPB, and Situational Crime Prevention Theory (SCPT)

One study combined GDT, TPB, and situational crime prevention factors. Situational crime prevention encourages employees to prevent misconduct within information security (Safa et al. 2019). Both theories have a positive impact on individual attitudes, albeit an outcome proven slightly different in its role. GDT focuses on perception and attitude, while Situational Crime Prevention Theory emphasises environmental restrictions that allow the organisation to mitigate the insider threat. The integration has tended to decrease insider threats to the organisation. SCPT is believed to have the same effect on individuals' attitudes. Altogether, the three theories are claimed to complete a "chain of behaviour change" in relation to violating the CIS. The study by Safa et al. (2019) conceptualised the scope of deterrence and prevention based on insider threats. The deterrence factors of employees can be examined through the lens of managerial aspects. The security breaches and violations within organisations can be managed by technology. More importantly, psychological factors should be subjected to substantial managerial action. The role of values and culture also has a considerable influence on employees' violations in CIS (Wiley et al. 2020).

5.6. GDT, Neutralisation, and Justice Theory

A comprehensive study by Alshare et al. (2018) integrated three theories (GDT, Neutralisation, and Justice Theory). Within Justice Theory, procedural and distributive justice were significant factors in employee violations of CIS in higher education in the United States. On the other hand, interactional justice was not significant. While the importance of sanction severity and certainty is undeniable, sanctions' celerity has not been seen as influential. This is crucial in managing CIS in organisations, as threats and risks can happen very quickly. As violations or compliance in an organisation are implemented, the issue of justice arises. An employee might be compliant and rewarded for their loyalty, while other employees who violate the protocols might not be sufficiently punished for their actions. This form of justice involves various dimensions and magnitudes that warrant further empirical investigation within the organisation. This could provide interesting findings in relation to whether justice prevails among employees through the implementation of cybersecurity practises in an organisation.

5.7. Other Theories

Other relevant theories adapted in these studies include the Health Belief Model (HBM) (Bonar and Rosenberg 2011; Dodel and Mesch 2019), Rational Choice Theory (Li et al. 2010; Vance and Siponen 2012), Social Bond Theory (Choi and Song 2018), Social Exchange Theory (D'Arcy and Greene 2014), Control Theory and Reactance Theory (Lowry and Moody 2015), Compensation Theory (Zhang et al. 2009), Personality (Shropshire et al. 2015; McCormac et al. 2017), and Norm Activation Theory (Yazdanmehr and Wang 2016). All these theories are relevant based on their contextual studies. The findings could provide considerable insights for practitioners based on the findings and the inferred justifications provided. The use of any of these theories has a justification for employing them. For example, in the case of using HBM, the context of the study should be to answer the organisation's perceived "health" on the verge of the CIS attack. As for the use of personality, it could be used to determine the relationship between personality and the individual traits that organisations perceive would be a risk to CIS.

6. Suggestions for Future Research

Based on this review, the directions for future studies are many. The frequency of cybersecurity and information breaches has become a norm; compliance with policies should be the number one policy goal in an organisation. Therefore, the organisation should make sure employees understand policy implementation and the reason it is being regulated. PMT predicted that employees who felt that security policies were inconvenient and believed that the cost of compliance was too high would be more likely to not comply (Vance and Siponen 2012). Gaps are discussed and provide possibilities for relevant future studies in the scope of CIS.

When deciphering the geographical context of CIS studies conducted, one of the main gaps is the locality of studies. Based on a geographical context, the majority of the studies (31) were conducted in the United States, representing more than half of all the studies reviewed. Within the magnitude of studies in the United States, it is well-accepted that organisations in the United States are aware of the need to study the role of cybersecurity issues in the country's organisations. They are acutely aware of safeguarding their assets and information and their vulnerability to cyber-attacks. Other countries have a high concentration of studies, including Canada (four studies), South Korea (four studies), Finland (three studies), and Malaysia (three studies). Of these four countries, Malaysia is considered the only developing country among the top four countries undertaking CIS-behaviour studies; this indicates that the CIS issue is a serious issue for the country's cybersecurity. European countries, on the other hand, have not displayed as much interest in the CIS field, with only a handful of studies. Except for Finland with three studies, other countries have only one study (the UK and Israel) and only two studies have been conducted across multiple European countries (Van Bavel et al. 2019; Silic et al. 2017). European countries do not focus as much on CIS studies, possibly for two main reasons. Firstly, security systems are well-coordinated in Europe; or secondly, the people in Europe are law-abiding citizens who do not see the need to conduct an in-depth CIS study.

Security policies should include the domain of reward and penalty, as suggested by Safa et al. (2015). Abiding by policies is not easy for some individuals due to their personalities. Hence, customising reward and penalty schemes would enhance the regulatory aspect of cybersecurity. Apart from that, intervention by the management in terms of knowledge sharing by experts and industrial partners conducting technical training on how to avoid and identify threats could serve as a new research avenue (Fauzi et al. 2018). Knowledge sharing by experts skilled in the area of cybersecurity coming from industry or academia would be able to develop individual susceptibility and resistance towards cyber threats and reduce the risk of cyber-attacks.

To date, the role of responsibility in relation to cybersecurity is still understudied; this includes personal responsibility and group responsibility. Personal responsibility is a normative belief of personal action that is required for an individual to achieve a desirable outcome (Boehmer et al. 2015). As studies employing personal responsibility are still scarce, future studies should employ this variable on personal grounds. One should take responsibility for taking care of one's cyber welfare, similar to health (Gaston and Prapavessis 2014). In a cybersecurity context, users should believe that they have the responsibility to fend off possible malicious threats via the internet and become more vigilant. Employees should also update their spyware protection and make sure that their security software is a programme that is reliable in preventing malware and spam.

Another critical issue of interest is the effect of gender on cybersecurity in the organisation. Due to biological and physiological differences, each gender perceives risk and threat differently; hence, there would be different dependent variables for cybersecurity practices. In a significant study by Anwar et al. (2017), it was revealed that men have more self-reported cybersecurity behaviour compared to women. Men tend to take risks, while women have a higher level of risk concern. Women are significantly impacted by perceived control and risk of privacy when using social networking sites when sharing information

(Hajli and Lin 2016). The impact of gender on CIS should be further investigated to mitigate the CIS issue in an organisation.

The underlying concern of this study is that the integration of theories serves to explain employee compliance and violations in CIS. Well-established and -adopted theories should be tested thoroughly before being extended or integrated, as suggested by Sommestad et al. (2014). The main issue of integrating different theories in studying the user's CIS is the effect size. Combining effect sizes from different adapted models may lead to a distortion of variables and an overlap of each other, as they can measure similar aspects from different theories. This causes one variable to have the effect size of other variables in the same model (Fauzi 2019). This issue is also apparent when researchers remove certain variables, as it will cause an increase in effect size. Hence, from a statistical point of view, each theory's adaptation should be carefully taken from well-proven theories, having been empirically tested individually in relation to information and cybersecurity practises such as PMT, TPB, and GDT. Other nonextensive theories should be adapted individually or as complementary theories.

7. Conclusions

The escalation of cyber and information usage in today's world warrants the need for a systematic implementation of security policies in an organisation. Despite having sophisticated security systems in organisations, humans will always be the most vulnerable point of attack and threat to an organisation's CIS system. In light of cybersecurity studies, this paper reviewed 60 recent adoptions of CIS in the last 13 years. Three theories have been extensively used to study employee compliance and violation behaviour in the organisational context. Empirical justifications are crucial in explaining the CIS phenomenon. PMT, TPB, and GDT were found to be of the most relevance and served as the basis of future underpinning theories. A review of these theories, together with other relevant theories in CIS studies, provides compelling insight for practitioners, particularly to mitigating the severity of security compliance as well as violation. Several gaps and mis-steps were identified in CIS studies, including the geographical context of studies conducted, the role of gender in complying with CIS, the role of responsibility, and the issue of theory integration. Related studies to understand the user's adoption of cyber-related regulations are reviewed in this paper. This review has proven that CIS is imperative for an organisation to stay relevant in this challenging digital age. Threat and risk are ever present when the human factor is included in the equation.

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References

- Al-Mukahal, Hasan M., and Khaled Alshare. 2015. An examination of factors that influence the number of information security policy violations in Qatari organisations. *Information & Computer Security* 22: 410–30.
- Alshare, Khaled A., Peggy L. Lane, and Michael R. Lane. 2018. Information security policy compliance: A higher education case study. *Information & Computer Security* 26: 91–108.
- Althonayan, A., and A. Andronache. 2018. Shifting from information security towards a cybersecurity paradigm. Paper presented at 2018 10th International Conference on Information Management and Engineering, Manchester, UK, September 22–24, pp. 68–79.
- Anwar, Mohd, Wu He, Ivan Ash, Xiaohong Yuan, Ling Li, and Li Xu. 2017. Gender difference and employees' cybersecurity behaviors. *Computers in Human Behavior* 69: 437–43. [CrossRef]
- Baashar, Yahia, Hitham Alhussian, Ahmed Patel, Gamal Alkawsi, Ahmed Ibrahim Alzahrani, Osama Alfarraj, and Gasim Hayder. 2020. Customer relationship management systems (CRMS) in the healthcare environment: A systematic literature review. Computer Standards & Interfaces 71: 103442.
- Barlow, Jordan B., Merrill Warkentin, Dustin Ormond, and Alan R. Dennis. 2013. Don't make excuses! Discouraging neutralization to reduce IT policy violation. *Computers & Security* 39: 145–59.
- Barton, Kevin A., Gurvirender Tejay, Michael Lane, and Steve Terrell. 2016. Information system security commitment: A study of external influences on senior management. *Computers & Security* 59: 9–25.
- Birkel, Hendrik, and Julian M. Müller. 2021. Potentials of industry 4.0 for supply chain management within the triple bottom line of sustainability—A systematic literature review. *Journal of Cleaner Production* 289: 125612. [CrossRef]
- Boehmer, Jan, Robert LaRose, Nora Rifon, Saleem Alhabash, and Shelia Cotten. 2015. Determinants of online safety behavior: Towards an intervention strategy for college students. Behavior & Information Technology 34: 1022–35.
- Bonar, Erin E., and Harold Rosenberg. 2011. Using the health belief model to predict injecting drug users' intentions to employ harm reduction strategies. *Addictive Behaviors* 36: 1038–44. [CrossRef]
- Bongiovanni, I. 2019. The least secure places in the universe? A systematic literature review on information security management in higher education. *Computers & Security* 86: 350–57.
- Boss, Scott R., Dennis F. Galletta, Paul Benjamin Lowry, Gregory D. Moody, and Peter Polak. 2015. What do systems users have to fear? Using fear appeals to engender threats and fear that motivate protective security behaviors. *MIS Quarterly (MISQ)* 39: 837–64. [CrossRef]
- Bulgurcu, Burcu, Hasan Cavusoglu, and Izak Benbasat. 2010. Information security policy compliance: An empirical study of rationality-based beliefs and information security awareness. MIS Quarterly 34: 523–48. [CrossRef]
- Burns, A. J., Clay Posey, Tom L. Roberts, and Paul Benjamin Lowry. 2017. Examining the relationship of organisational insiders' psychological capital with information security threat and coping appraisals. *Computers in Human Behavior* 68: 190–209. [CrossRef]
- Chen, Xiaofeng, Dazhong Wu, Liqiang Chen, and Joe K. L. Teng. 2018. Sanction severity and employees' information security policy compliance: Investigating mediating, moderating, and control variables. *Information & Management* 55: 1049–60.
- Cheng, Lijiao, Ying Li, Wenli Li, Eric Holm, and Qingguo Zhai. 2013. Understanding the violation of IS security policy in organisations: An integrated model based on social control and deterrence theory. *Computers & Security* 39: 447–59.
- Choi, Myeonggil, and Jeongseok Song. 2018. Social control through deterrence on the compliance with information security policy. *Soft Computing* 22: 6765–72. [CrossRef]
- Chou, Hui-Lien, and Chien Chou. 2016. An analysis of multiple factors relating to teachers' problematic information security behavior. Computers in Human Behavior 65: 334–45. [CrossRef]
- Cox, James. 2012. Information systems user security: A structured model of the knowing-doing gap. *Computers in Human Behavior* 28: 1849–58. [CrossRef]
- Cram, W. Alec, Jeffrey G. Proudfoot, and John D'arcy. 2017. Organisational information security policies: A review and research framework. *European Journal of Information Systems* 26: 605–41. [CrossRef]
- D'Arcy, John, and Gwen Greene. 2014. Security culture and the employment relationship as drivers of employees' security compliance. *Information Management & Computer Security* 22: 474–89.
- Dang-Pham, Duy, and Siddhi Pittayachawan. 2015. Comparing intention to avoid malware across contexts in a BYOD-enabled Australian university: A Protection Motivation Theory approach. *Computers & Security* 48: 281–97.
- Diney, Tamara, Jahyun Goo, Qing Hu, and Kichan Nam. 2009. User behavior towards protective information technologies: The role of national cultural differences. *Information Systems Journal* 19: 391–412. [CrossRef]
- Dodel, Matias, and Gustavo Mesch. 2019. An integrated model for assessing cyber-safety behaviors: How cognitive, socioeconomic and digital determinants affect diverse safety practices. *Computers & Security* 86: 75–91.
- Donalds, Charlette, and Kweku-Muata Osei-Bryson. 2019. Cybersecurity compliance behavior: Exploring the influences of individual decision style and other antecedents. *International Journal of Information Management* 51: 102056. [CrossRef]
- Fauzi, Muhammad Ashraf. 2019. Knowledge sharing in Asia Pacific via virtual community platform: A systematic review. *International Journal of Web Based Communities* 15: 368–94. [CrossRef]
- Fauzi, Muhammad Ashraf, Christine Nya-Ling Tan, and T. Ramayah. 2018. Knowledge sharing intention at Malaysian higher learning institutions: The academics' viewpoint. *Knowledge Management & E-Learning: An International Journal* 10: 163–76.
- Fauzi, Muhammad Ashraf, Christine Tan Nya-Ling, Ramayah Thurasamy, Adedapo Oluwaseyi Ojo, and Ibrahim Shogar. 2019. Muslim academics' knowledge sharing in Malaysian higher learning institutions. *Journal of Islamic Marketing* 10: 378–93. [CrossRef]

- Galvão, Anderson, Joao J. Ferreira, and Carla Marques. 2018. Entrepreneurship education and training as facilitators of regional development: A systematic literature review. *Journal of Small Business and Enterprise Development* 25: 17–40. [CrossRef]
- Gaston, Anca, and Harry Prapavessis. 2014. Using a combined protection motivation theory and health action process approach intervention to promote exercise during pregnancy. *Journal of Behavioral Medicine* 37: 173–84. [CrossRef]
- Gillam, Andrew R., and W. Tad Foster. 2020. Factors affecting risky cybersecurity behaviors by US workers: An exploratory study. Computers in Human Behavior 108: 106319. [CrossRef]
- Gratian, Margaret, Sruthi Bandi, Michel Cukier, Josiah Dykstra, and Amy Ginther. 2018. Correlating human traits and cyber security behavior intentions. *Computers & Security* 73: 345–58.
- Guo, Ken H., and Yufei Yuan. 2012. The effects of multilevel sanctions on information security violations: A mediating model. *Information & Management* 49: 320–26.
- Hajli, Nick, and Xiaolin Lin. 2016. Exploring the security of information sharing on social networking sites: The role of perceived control of information. *Journal of Business Ethics* 133: 111–23. [CrossRef]
- Hanus, Bartlomiej, and Yu Andy Wu. 2016. Impact of users' security awareness on desktop security behavior: A protection motivation theory perspective. *Information Systems Management* 33: 2–16. [CrossRef]
- Herath, Tejaswini, and H. Raghav Rao. 2009. Protection motivation and deterrence: A framework for security policy compliance in organisations. *European Journal of Information Systems* 18: 106–25. [CrossRef]
- Hina, Sadaf, Dhanapal Durai Dominic Panneer Selvam, and Paul Benjamin Lowry. 2019. Institutional governance and protection motivation: Theoretical insights into shaping employees' security compliance behavior in higher education institutions in the developing world. *Computers & Security* 87: 101594.
- Hirschi, Travis. 2002. Causes of Delinguency. New Brunswick: Transaction publishers.
- Hofstede, Geert. 1980. Culture and organisations. International Studies of Management & Organisation 10: 15-41.
- Hovav, Anat, and John D'Arcy. 2012. Applying an extended model of deterrence across cultures: An investigation of information systems misuse in the US and South Korea. *Information & Management* 49: 99–110.
- Hu, Qing, Tamara Dinev, Paul Hart, and Donna Cooke. 2012. Managing employee compliance with information security policies: The critical role of top management and organisational culture. *Decision Sciences* 43: 615–60. [CrossRef]
- Humaidi, Norshima, and Vimala Balakrishnan. 2015. The Moderating effect of working experience on health information system security policies compliance behavior. *Malaysian Journal of Computer Science* 28: 70–92.
- Hwang, Inho, Daejin Kim, Taeha Kim, and Sanghyun Kim. 2017. Why not comply with information security? An empirical approach for the causes of non-compliance. *Online Information Review* 41: 2–18. [CrossRef]
- Ifinedo, Princely. 2012. Understanding information systems security policy compliance: An integration of the theory of planned behavior and the protection motivation theory. *Computers & Security* 31: 83–95.
- Ifinedo, Princely. 2014. Information systems security policy compliance: An empirical study of the effects of socialization, influence, and cognition. *Information & Management* 51: 69–79.
- Johnston, Allen C., and Merrill Warkentin. 2010. Fear appeals and information security behaviors: An empirical study. MIS Quarterly 34: 549–66. [CrossRef]
- Johnston, Allen C., Merrill Warkentin, Maranda McBride, and Lemuria Carter. 2016. Dispositional and situational factors: Influences on information security policy violations. *European Journal of Information Systems* 25: 231–51. [CrossRef]
- Kabanda, Salah, Maureen Tanner, and Cameron Kent. 2018. Exploring SME cybersecurity practices in developing countries. *Journal of Organisational Computing and Electronic Commerce* 28: 269–82. [CrossRef]
- Karlsson, Fredrik, Ella Kolkowska, and Frans Prenkert. 2016. Inter-organisational information security: A systematic literature review. Information & Computer Security. Information & Computer Security 24: 418–51.
- Lebek, Benedikt, Jörg Uffen, Markus Neumann, Bernd Hohler, and Michael H. Breitner. 2014. Information security awareness and behavior: A theory-based literature review. *Management Research Review* 37: 1049–92. [CrossRef]
- Lee, Chunghun, Choong C. Lee, and Suhyun Kim. 2016. Understanding information security stress: Focusing on the type of information security compliance activity. *Computers & Security* 59: 60–70.
- Li, Han, Jie Zhang, and Rathindra Sarathy. 2010. Understanding compliance with internet use policy from the perspective of rational choice theory. *Decision Support Systems* 48: 635–45. [CrossRef]
- Li, Ling, Wu He, Li Xu, Ivan Ash, Mohd Anwar, and Xiaohong Yuan. 2019. Investigating the impact of cybersecurity policy awareness on employees' cybersecurity behavior. *International Journal of Information Management* 45: 13–24. [CrossRef]
- Liang, Huigang, and Yajiong Lucky Xue. 2010. Understanding security behaviors in personal computer usage: A threat avoidance perspective. *Journal of the Association for Information Systems* 11: 394–413. [CrossRef]
- Lowry, Paul Benjamin, and Gregory D. Moody. 2015. Proposing the control-reactance compliance model (CRCM) to explain opposing motivations to comply with organisational information security policies. *Information Systems Journal* 25: 433–63. [CrossRef]
- Maddux, James E., and Ronald W. Rogers. 1983. Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change. *Journal of Experimental Social Psychology* 19: 469–79. [CrossRef]
- McCormac, Agata, Tara Zwaans, Kathryn Parsons, Dragana Calic, Marcus Butavicius, and Malcolm Pattinson. 2017. Individual differences and information security awareness. *Computers in Human Behavior* 69: 151–56.
- Menard, Philip, Gregory J. Bott, and Robert E. Crossler. 2017. User motivations in protecting information security: Protection motivation theory versus self-determination theory. *Journal of Management Information Systems* 34: 1203–30.

- Meso, Peter, Yi Ding, and Shuting Xu. 2013. Applying protection motivation theory to information security training for college students. *Journal of Information Privacy and Security* 9: 47–67. [CrossRef]
- Mingers, John, Frederico Macri, and Dan Petrovici. 2012. Using the h-index to measure the quality of journals in the field of business and management. *Information Processing & Management* 48: 234–41.
- Moher, David, Larissa Shamseer, Mike Clarke, Davina Ghersi, Alessandro Liberati, Mark Petticrew, Paul Shekelle, and Lesley A. Stewart. 2015. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic Reviews* 4: 1–9. [CrossRef]
- Mongeon, Philippe, and Adèle Paul-Hus. 2016. The journal coverage of Web of Science and Scopus: A comparative analysis. Scientometrics 106: 213–28. [CrossRef]
- Nasir, Akhyari, Ruzaini Abdullah Arshah, Mohd Rashid Ab Hamid, and Syahrul Fahmy. 2019. An analysis on the dimensions of information security culture concept: A review. *Journal of Information Security and Applications* 44: 12–22.
- Ng, Boon-Yuen, Atreyi Kankanhalli, and Yunjie Calvin Xu. 2009. Studying users' computer security behavior: A health belief perspective. *Decision Support Systems* 46: 815–25.
- Posey, Clay, Tom L. Roberts, and Paul Benjamin Lowry. 2015. The impact of organisational commitment on insiders' motivation to protect organisational information assets. *Journal of Management Information Systems* 32: 179–214.
- Safa, Nader Sohrabi, Carsten Maple, Steve Furnell, Muhammad Ajmal Azad, Charith Perera, Mohammad Dabbagh, and Mehdi Sookhak. 2019. Deterrence and prevention-based model to mitigate information security insider threats in organisations. *Future Generation Computer Systems* 97: 587–97.
- Safa, Nader Sohrabi, Mehdi Sookhak, Rossouw Von Solms, Steven Furnell, Norjihan Abdul Ghani, and Tutut Herawan. 2015. Information security conscious care behavior formation in organisations. *Computers & Security* 53: 65–78.
- Shropshire, Jordan, Merrill Warkentin, and Shwadhin Sharma. 2015. Personality, attitudes, and intentions: Predicting initial adoption of information security behavior. *Computers & Security* 49: 177–91.
- Silic, Mario, Jordan B. Barlow, and Andrea Back. 2017. A new perspective on neutralization and deterrence: Predicting shadow IT usage. *Information & Management* 54: 1023–37.
- Siponen, Mikko, and Anthony Vance. 2010. Neutralization: New insights into the problem of employee information systems security policy violations. MIS Quarterly 34: 487–502. [CrossRef]
- Siponen, Mikko, M. Adam Mahmood, and Seppo Pahnila. 2014. Employees' adherence to information security policies: An exploratory field study. *Information & Management* 51: 217–24.
- Sommestad, Teodor, Jonas Hallberg, Kristoffer Lundholm, and Johan Bengtsson. 2014. Variables influencing information security policy compliance. *Information Management & Computer Security* 22: 42–75.
- Son, Jai-Yeol. 2011. Out of fear or desire? Toward a better understanding of employees' motivation to follow IS security policies. Information & Management 48: 296–302.
- Soomro, Zahoor Ahmed, Mahmood Hussain Shah, and Javed Ahmed. 2016. Information security management needs more holistic approach: A literature review. *International Journal of Information Management* 36: 215–25.
- Torten, Ron, Carmen Reaiche, and Stephen Boyle. 2018. The impact of security awarness on information technology professionals' behavior. *Computers & Security* 79: 68–79.
- Tsai, Hsin-yi Sandy, Mengtian Jiang, Saleem Alhabash, Robert LaRose, Nora J. Rifon, and Shelia R. Cotten. 2016. Understanding online safety behaviors: A protection motivation theory perspective. *Computers & Security* 59: 138–50.
- Van Bavel, René, Nuria Rodríguez-Priego, José Vila, and Pam Briggs. 2019. Using protection motivation theory in the design of nudges to improve online security behavior. *International Journal of Human-Computer Studies* 123: 29–39.
- Van Schaik, Paul, Debora Jeske, Joseph Onibokun, Lynne Coventry, Jurjen Jansen, and Petko Kusev. 2017. Risk perceptions of cyber-security and precautionary behavior. *Computers in Human Behavior* 75: 547–59.
- Vance, Anthony, and Mikko T. Siponen. 2012. IS security policy violations: A rational choice perspective. *Journal of Organisational and End User Computing* 24: 21–41.
- Von Solms, Rossouw, and Johan Van Niekerk. 2013. From information security to cyber security. Computers & Security 38: 97–102.
- Warkentin, Merrill, Allen C. Johnston, Jordan Shropshire, and William D. Barnett. 2016. Continuance of protective security behavior: A longitudinal study. *Decision Support Systems* 92: 25–35.
- Wenzel, Michael. 2004. The social side of sanctions: Personal and social norms as moderators of deterrence. *Law and Human Behavior* 28: 547–67.
- Wiley, Ashleigh, Agata McCormac, and Dragana Calic. 2020. More than the individual: Examining the relationship between culture and Information Security Awareness. *Computers & Security* 88: 101640.
- Workman, Michael, William H. Bommer, and Detmar Straub. 2008. Security lapses and the omission of information security measures: A threat control model and empirical test. *Computers in Human Behavior* 24: 2799–816.
- Yazdanmehr, Adel, and Jingguo Wang. 2016. Employees' information security policy compliance: A norm activation perspective. Decision Support Systems 92: 36–46.
- Yoon, C., and H. Kim. 2013. Understanding computer security behavioral intention in the workplace. *Information Technology & People*. 26: 401–19.
- Zhang, Jie, Brian J. Reithel, and Han Li. 2009. Impact of perceived technical protection on security behaviors. *Information Management & Computer Security* 17: 330–40.





Article

Psychological and Gender Differences in a Simulated Cheating Coercion Situation at School

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Abstract: This study aimed to analyze gender, anxiety, and psychological inflexibility differences of high school students' behaviors in a simulated situation of peer coercion into academic cheating. Method: A total of 1147 volunteer adolescents participated, (Men: N = 479; Mage = 16.3; Women: N = 668; Mage = 16.2). The participants saw 15 s animated online video presenting peer coercion into an academic cheating situation, including a questionnaire about their reactions to face the situation. They also answered the State—Trait Anxiety Inventory for children and adolescents and the Avoidance and Fusion Questionnaire for Youth (AFQ-Y). Gender was associated with the behaviors facing the situation. Higher state anxiety and inflexibility were present in those participants that avoided aggressive behaviors facing the situation; on the other hand, trait anxiety was present in those who reacted aggressively. Finally, higher anxiety and inflexibility were associated with the used moral disengagement mechanisms, but also with peers' perception as sanctioning or being against the participants' decision. The most aggressive students were more flexible and less stressed than those who tried to solve assertively. Expectations about peers seem to be relevant to the decision-making facing moral dilemmas and peer victimization.

Keywords: peer victimization; moral disengagement; bullying; disruptive behavior

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1. Introduction

Legitimacy is considered the moral basis of social interaction (Kelman 2001). This construct has been used to describe beliefs that justified different punishable actions as they were normal or socially accepted (Martínez-González et al. 2021). Studies have focused on children's evaluation of the situation (Cardozo-Rusinque et al. 2019; Fernández Villanueva 2009; Martínez-González et al. 2019), the moral disengagement mechanisms they use (Bandura 1999, 2002), and the expectations about peers and adults as legitimizers of violence (Martínez-González et al. 2021).

The moral disengagement mechanisms refer to beliefs that people use to maintain a positive self-concept and reduce their guilt when acting against moral standards (Bandura 1999, 2002). There are (a) *moral justifications*, which link a violent act to a heroic or social desire; (b) *euphemistic labeling*, which changes the destructive connotation of the act; (c) *advantageous comparison*, which reduces the immoral act comparing it with another more despicable; (d) *displacement of responsibility*, transferring blame to an authority figure; (e) *diffusion of responsibility* when the perception of guilt is reduced as a consequence of acting in a group; (f) *distorting the consequences*, which reduces the damaging effects of a

behavior; (g) *victim blaming*, considering the victim as the motivator of the situation; and (h) *dehumanization*, depriving people of their human qualities to facilitate abusing them.

The moral disengagement mechanisms allow explaining immoral acts from genocide (Bandura 1999) to daily acts of corruption (Martínez-González et al. 2020; Zhao et al. 2019) such as academic cheating (Barbaranelli et al. 2018) or peer victimization (Meter et al. 2019). It was found that students more sensitive to social pressure are more likely to academically cheat than those who give greater emphasis to their moral identity (Wowra 2007).

Clear rules established justly and equitably positively impact students' moral identity development and auto-understanding (Ramberg and Modin 2019; Riekie et al. 2017). In contrast, dishonest acts, distrust, and manipulation have been associated with bullying behaviors (Andreou 2004), and these generate internalizing problems as well as health problems (Arana et al. 2018; Dirks et al. 2017; Iyer-Eimerbrink and Jensen-Campbell 2019; Joseph and Stockton 2018).

These behaviors have been related to anxiety, which could fluctuate in different situations or evolutionary stages of life, presenting women with higher anxiety levels and internalizing problems, especially in adolescents (Hernandez Rodriguez et al. 2020; Storch et al. 2003). The incidence of state anxiety has been associated with maturational and reproductive processes, social pressure in adolescence, negative affect with stress, anxiety, and depression (McLean and Anderson 2009; Mercader-Yus et al. 2018). Many of these situations occur at school, where young conflicts find their natural scenario.

Social pressure at school could nudge the students to resort to academic cheating in contexts where this is adopted as a practice legitimized by their peers (Barbaranelli et al. 2018; Farnese et al. 2011; Griebeler 2019) but also could be a situation that generates conflicts between students. In this line, children's expectations about peers play an important role when they face school conflicts (Cardozo-Rusinque et al. 2019).

On the other hand, violence in the family and community as a legitimate way to solve conflicts has been associated with early violence legitimation (Cardozo-Rusinque et al. 2019; Martínez-González et al. 2016). Those environments reduce prosocial behaviors (Galán Jiménez 2018), expose children to the risk of reproducing violence in their daily relationships (Kim et al. 2019a, 2019b) and in the society that they will constitute in adulthood (Goodman et al. 2020), and also expose them to chronic stress, compromising their health (Finegood et al. 2020).

We proposed the present research to analyze gender, anxiety, and psychological inflexibility differences of high school students' behaviors in a simulated situation of peer coercion into academic cheating.

Our hypotheses were (i) gender differences would be present in the behavior facing peer coercion into academic cheating; (ii) higher anxiety and inflexibility would be present in those participants that reacted aggressively facing the situation; (iii) higher anxiety and inflexibility would be associated with the rejection of moral disengagement mechanisms; (iv) higher anxiety and inflexibility would be associated with peers' perception as sanctioners or opposed to the decision made facing the situation.

2. Results

This study aimed to analyze gender, anxiety, and psychological flexibility differences in teenagers' behavior facing a simulated situation of peer coercion into academic cheating. Hypothesis i was confirmed, since the gender of participants and the gender of the offenders was associated with the behaviors facing the situation; Hypothesis ii was partially confirmed since higher state anxiety and inflexibility were present in those participants that avoided aggressive behaviors facing the situation, but trait anxiety was present in those who reacted aggressively; Hypothesis iii was rejected since higher trait anxiety and inflexibility were associated with the used moral disengagement mechanisms. Hypothesis iv was accepted, considering that higher trait anxiety and inflexibility were associated with perceiving witnesses as sanctioners. Next, we will explain these results.

Differences were found in the reactions associated with the gender of the participant and the peer who pressed academic fraud (p = 0.10). Most of the female participants were inclined to avoid conflict or assertively resolve the situation. The males resolved it assertively and, secondly, avoided the conflict. A more significant proportion of males presented aggressive behavior compared to females (Table 1).

Table 1. Gender differences in the participant's behavior when faced with coercion to commit fraud.

	Behavior When Faced with Coercion to Commit Fraud						
Gender		Aggressive	Social Support	Assertive	Avoidance	Passive	Total
	Count	59.00	106.0	153.0	147.0	14.00	479.0
Men	% within row	12.3%	22.1%	31.9%	30.7%	2.9%	100.0%
	% within column	54.6%	40.9%	44.6%	36.4%	42.4%	41.8%
	Count	49.00	153.0	190.0	257.0	19.00	668.0
Women	% within row	7.3%	22.9%	28.4%	38.5%	2.8%	100.0%
	% within column	45.4%	59.1%	55.4%	63.6%	57.6%	58.2%
	Count	108.00	259.0	343.0	404.0	33.00	1147.0
Total	% within row	9.4%	22.6%	29.9%	35.2%	2.9%	100.0%
	% within column	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			Chi-Squared Tes	ts			
	Value	df	р				
X ²	13.37	4	0.010				
N	1147						

When the peer that pressured someone into academic fraud was female, significant differences were found in their responses associated with the gender of the peer that pressured someone into academic fraud (p = 0.017). There were more aggressive responses when the peer was a man and more assertive responses when the peer was a woman (Table 2).

Table 2. Gender differences in the participant's and aggressor's behavior when faced with coercion to commit fraud.

		Behavior When Faced with Coercion to Commit Fraud						
Participant Gender	Aggressor Gender		Aggressive	Social Support	Assertive	Avoidance	Passive	Total
		Count	34.00	67.00	84.00	87.00	6.00	278.0
	Men	% within row	12.2%	24.1%	30.2%	31.3%	2.2%	100.0%
		% within column	57.6%	63.2%	54.9%	59.2%	42.9%	58.0%
		Count	25.00	39.00	69.00	60.00	8.00	201.0
Men	Women	% within row	12.4%	19.4%	34.3%	29.9%	4.0%	100.0%
		% within column	42.4%	36.8%	45.1%	40.8%	57.1%	42.0%
	Total	Count	59.00	106.00	153.00	147.00	14.00	479.0
		% within row	12.3%	22.1%	31.9%	30.7%	2.9%	100.0%
		% within column	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Men	Count	29.00	82.00	77.00	121.00	5.00	314.0
		% within row	9.2%	26.1%	24.5%	38.5%	1.6%	100.0%
		% within column	59.2%	53.6%	40.5%	47.1%	26.3%	47.0%
		Count	20.00	71.00	113.00	136.00	14.00	354.0
Women	Women	% within row	5.6%	20.1%	31.9%	38.4%	4.0%	100.0%
		% within column	40.8%	46.4%	59.5%	52.9%	73.7%	53.0%
		Count	49.00	153.00	190.00	257.00	19.00	668.0
	Total	% within row	7.3%	22.9%	28.4%	38.5%	2.8%	100.0%
		% within column	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 2. Cont.

		Behavior When Faced with Coercion to Commit Fraud							
Participant Gender	Aggressor Gender		Aggressive	Social Support	Assertive	Avoidance	Passive	Total	
		Count	63.00	149.00	161.00	208.00	11.00	592.0	
	Men	% within row	10.6%	25.2%	27.2%	35.1%	1.9%	100.0%	
		% within column	58.3%	57.5%	46.9%	51.5%	33.3%	51.6%	
		Count	45.00	110.00	182.00	196.00	22.00	555.0	
Total	Women	% within row	8.1%	19.8%	32.8%	35.3%	4.0%	100.0%	
		% within column	41.7%	42.5%	53.1%	48.5%	66.7%	48.4%	
	Total	Count	108.00	259.00	343.00	404.00	33.00	1147.0	
		% within row	9.4%	22.6%	29.9%	35.2%	2.9%	100.0%	
		% within column	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
			Chi-Squar	ed Tests					
Participant Gender		Value	df	p					
3.6	X ²	3.189	4	0.527					
Men	N	479							
	X^2	12.052	4	0.017					
Women	N	668							

No significant differences were found in state anxiety (p = 0.086), trait anxiety (p = 0.341), and psychological inflexibility (p = 0.301) related to gender when facing coercion into academic fraud. However, these variables showed significant differences between those who decided to attack and those who did not. Although state anxiety was higher than trait anxiety, it was higher in participants who decided not to attack. They also evidenced high psychological inflexibility. Trait anxiety was higher in participants who reacted aggressively (Table 3).

Table 3. Differences in aggressive behaviors depending on the state anxiety, trait anxiety, and psychological inflexibility of participants.

Scale	Behavior	Mean	SD	N	F	р
Chata Amriatry	Attack	28.20	2.941	137	5.342	0.021
State Anxiety	No attack	28.77	2.675	1010		
Trait Anxiety	Attack	26.29	4.613	137	6.513	0.011
Ifalt Alixiety	No attack	25.26	4.430	1010		
Psychological Inflexibility	Attack	15.50	3.567	137	6.859	0.009
r sychological fillexibility	No attack	16.33	3.446	1010		

The state anxiety did not show significant differences associated with the different mechanisms of moral disconnection. In contrast, trait anxiety presented significant differences when moral disengagement mechanisms, such as moral justification, distorting the consequences, victim blaming, and dehumanization were used. The psychological inflexibility showed significant differences related to the use of advantageous comparison and dehumanization. The participants who showed higher trait anxiety considered their reaction as morally correct. The same happened to the participants who considered that they did not hurt the offender and those who did not blame the peer for initiating the situation. The participants who showed greater inflexibility avoided comparing their behavior with a worse one to justify their reaction. Finally, trait anxiety evidenced significant differences regarding witness peers' expectations, being higher in those who perceived them as sanctioning or legitimizing their reaction facing the situation. A greater inflexibility was found in the participants who perceived the witness peers as neutral or opposed to their reaction to the situation presented (Table 4).

Table 4. Differences in moral disengagement mechanisms and expectations of peers by trait anxiety and psychological inflexibility.

	Moral Disengagement Mechanism and Expectative about Peers			SD	N	F	р
		Neutral	26.05	4.752	170	3.809	0.022
	Moral justification	Absence	25.22	4.366	947		
		Presence	26.67	5.346	30		
	Distorting the	Neutral	24.83	4.173	157	8.203	< 0.001
	0	Absence	25.12	4.176	687		
T	consequences	Presence	26.25	5.090	303		
Trait Anxiety		Neutral	25.00	4.082	283	6.333	0.002
	Victim blaming	Absence	26.95	4.940	84		
		Presence	25.35	4.511	780		
	Expectative about peers	Neutral	25.40	4.355	575	8.386	< 0.001
		Reject	25.04	4.386	474		
		Legitimize	26.67	4.937	95		
	•	Sanction	35.00	5.292	3		
	A d	Neutral	16.29	3.514	823	3.243	0.039
	Advantageous	Absence	16.64	2.830	128		
D 1 1 1	comparison	Presence	15.71	3.614	196		
Psychological Inflexibility		Neutral	16.21	3.328	575	3.325	0.019
manexionity	Expectative about	Reject	16.35	3.621	474		
	peers	Legitimize	15.95	3.406	95		
		Sanction	10.33	3.512	3		

3. Discussion

Analyzing the gender differences in coercion into academic fraud, female adolescents were more avoidant, while male adolescents were more aggressive, coinciding with previous studies about peer aggression in adolescence (McNaughton Reyes et al. 2019). We found how the reaction to the situation was more aggressive if the offender was a man and more assertive if the partner was a woman. In this regard, boys suffered more significant and different types of victimization than girls (Hernandez Rodriguez et al. 2020; Joseph and Stockton 2018). These trends in gender differences are linked to the way interpersonal relationships are built in childhood from an early age, as well as the expectations of behavior associated with each gender (Card et al. 2008; Cardozo-Rusinque et al. 2019; Martínez-González et al. 2016; Martínez-González et al. 2021). In consequence, the use of conciliatory strategies, seeking help from adults, or avoiding confrontation may become a factor of greater risk of victimization by peers if these alternatives are used by male teenagers (Dirks et al. 2017), even when the group rejects peer victimization (Guimond et al. 2018). One reason is that assertiveness and assent to dialogue are associated with female stereotypes (Mehta and Dementieva 2017). However, men receive more social pressure from peers and adults to use violence as an accepted way of solving conflicts in their daily relationships (Cardozo-Rusinque et al. 2019; Farrell et al. 2011; Kim et al. 2019a, 2019b). Thus, assertiveness is a strategy generally seen as socially skillful and would be associated with less victimization, but only for youth who experience less aggression from their peers (Dirks et al. 2017).

Regarding avoidance as a reaction of female adolescents facing coercion into academic cheating, new evidence indicates that women can assume avoidant attitudes or maintain silence when facing moral dilemmas that benefit or even disadvantage them (Bossuyt and Kenhove 2018). In this line, several studies evidenced that girls tend to suffer more social manipulation from their peer group than boys (Hernandez Rodriguez et al. 2020; Joseph and Stockton 2018). The position of avoidance and silence in situations of victimization may be related to greater social need, fear of abandonment, difficulty in managing emotions, and more binding relationships (Benenson et al. 2014). These situations place the women

at risk of several future forms of violence (Pokharel et al. 2020) with implications even for their moral functioning (Bossuyt and Kenhove 2018). Therefore, it is important to design interventions at this stage for the students to be aware of this type of behavior and the implications it has for their individual future and the way they will interact socially.

Concerning state anxiety and psychological inflexibility results, it was found that both were higher in participants who decided not to attack. In contrast, trait anxiety was significantly higher in the participants who reacted aggressively. These characteristics of the population that responded aggressively can be related to the conditions of the Colombian context, where there is a high exposure to violence in everyday relationships (Cardozo-Rusinque et al. 2019; Martínez-González et al. 2016). These responses are socially legitimized as the correct procedure and are seen as usual (Martínez-González et al. 2016).

In this regard, people with high reactivity to fear in the face of threats have shown more evasive responses to a threat or provocation in a conflict situation (Beyer et al. 2017; Vogel and Schwabe 2019), while people characterized by traits with a high level of motivation were more likely to participate in aggressive interactions when provoked (Beyer et al. 2017). The fight or escape elections in a conflict situation have been mainly driven by the possibility of retaliating against the aggressor (Beyer et al. 2017). Thus, anxious symptoms are associated with less support for aggressive responses to challenging hypothetical peer situations and peer victimization (Dirks et al. 2017; Wright et al. 2010), in contraposition to the trait anxiety.

High trait anxiety causes a higher reactivity to any threat; therefore, it will be easier to show an attacking or aggressive behavior to face a threat. However, the state anxiety, a feeling that participant will experience when the controllability perception of the environment is low, and the certainty of the lack of resources to face any eliciting situation that appears, will provoke a flight reaction (Bustamante-Sánchez et al. 2020; Tornero-Aguilera et al. 2020). In this line, psychological inflexibility produces a similar response. Lower psychological flexibility would be related to lower cognitive adaptability to the changing environment, eliciting a larger number of uncontrollable feelings, especially when a stressor occurs (e.g., aggression). Previous authors have shown how psychological inflexibility is linked to an increased modulation of the sympathetic autonomic nervous system, which regulates the stress response (Beltrán-Velasco et al. 2021; Sánchez-Conde et al. 2019). In this physiological situation, it has also been possible to verify how information processing decreases and more irrational decisions tend to be made (Delgado-Moreno et al. 2019; Tornero-Aguilera and Clemente-Suárez 2018). Therefore, if we combine high psychological inflexibility, a decrease in information processing, and high state anxiety, it is predictable that the expected response would be an avoidance rather than a confrontational or attacking behavior to face the eliciting situation.

The participants who showed greater trait anxiety avoided aggression and considered this reaction to be morally correct, without consequences to the offender, and did not blame him for causing the situation. Furthermore, trait anxiety was also more significant in those adolescents who expected sanction or legitimation from witnesses. These teenagers could tend toward group acceptance and avoiding conflict. They may be more likely to yield to academic cheating by being more sensitive to social pressure when fraud is a legitimized practice by peers (Barbaranelli et al. 2018; Farnese et al. 2011; Griebeler 2019; Wowra 2007). Consequently, children's and adolescents' expectations of their peers as legitimizers of transgressive behaviors play an important role when facing school conflicts (Cardozo-Rusinque et al. 2019; Martínez-González et al. 2021) and require attention to implement intervention programs.

Regarding the participants who showed greater inflexibility, they avoided comparing their behavior with a worse one to justify their reaction and considered the witnesses as neutral or in opposition to this. These teenagers could exhibit more consistent and rigid moral behaviors, thus avoiding falling into fraud (Wowra 2007). However, they may also have more difficulties adapting to the group rules and experiencing more loneliness, which could lead to the appearance of internalizing symptoms if they are victims of intimidation

and social victimization (Arana et al. 2018; Iyer-Eimerbrink and Jensen-Campbell 2019). Negative experiences of friendship, aggressive conflicts, and low reciprocal friendship levels exacerbate the adverse effects of maladaptive coping associated with a higher feeling of school loneliness and continuous victimization experiences among peers (Gardner 2019). While higher anxiety symptoms are associated with less aggressive responses, higher levels of depressive symptoms have been related to aggressive behavior and, for girls, the reduction of assertive strategies (Cuttini 2017; Dirks et al. 2014). Those findings suggest that anxiety may be associated with a less problematic response than depression facing peer victimization (Cuttini 2017).

These gender differences consistently evident in peer victimization literature have implications for preventing and reducing social bullying in its different manifestations. Specific intervention at school, at home, and other social interventions are needed to stop the increasing tendency in bullying cases. The information provided in the present research could be used to design and apply this program with the teenage population.

Moral disengagement may serve as an important risk indicator for the appearance of more aggression in conflict situations among adolescents, characterized by the perception of injustice and sustained victimization over time. Identifying how adolescents handle situations involving moral dilemmas and their perception of the offenders and witnesses could help develop effective interventions to promote the resolution of conflicts using socially acceptable strategies. Interventions to promote empathy and prosociality are crucial for victims, offenders, and witnesses who can advocate against victimization (Meter et al. 2019). Preserving clear rules established fairly and impartially may help adolescents' moral behavior and help them understand themselves (Ramberg and Modin 2019; Riekie et al. 2017).

4. Materials and Methods

4.1. Participants

A total of 1147 volunteer adolescents participated, aged between 12 and 18 years (Men: N = 479; M = 16.3; SD = 1.1; Women: N = 668; M = 16.2; SD = 0.9) with a stratified random sampling of simple affixation in which the sample was collected from schools with different socioeconomic levels in the city of Barranquilla (Colombia). All the procedures were conducted following the Helsinki Declaration (as revised in Brazil, 2013) and approved by the University Ethical Committee (approval code 094). The data were collected anonymously. Before participation, all participants, parental or guardian, and their professors were informed about the experimental procedures, indicating the right to withdraw from the study at any time and providing written informed consent.

4.2. Procedure

This study relied on the use of animated video that simulated a cheating coercion situation at school with a different combination of peer and teacher genders as the authority figure to evaluate different behaviors from participants, as well as the influence of gender, anxiety, and psychological inflexibility on the high school students' behavior. The use of simulated scenarios of violence has been effectively used by previous specific researchers (Hyatt et al. 2019; Martínez-González et al. 2019; Cardozo-Rusinque et al. 2019; Anderson et al. 2016; Rayburn et al. 2007). The teenagers were contacted in several high schools, and the sample was formed from students who accepted, and had parents who accepted, their participation. Groups of 30 participants completed the task in a computer room, sitting randomly according to their gender. We prepared the computers with the situations according to gender, two lines for males and two lines for females, varying the gender of the aggressor. Then, when students entered the classroom, we asked them to sit in the line corresponding to their gender identity. First, they read the objectives of the research and consented to participation. Next, the instructions and demographic questions appeared; they watched the video and answered the questions proposed to analyze their behavior. Finally, the participants filled out an anxiety questionnaire.

4.3. Instruments

4.3.1. Test Used to evaluate Anxiety

Anxiety was measured by the State–Trait Anxiety Inventory for children and adolescents (Castrillón-Moreno and Borrero-Copete 2005). It is composed of two scales, the first to measure State Anxiety, with 20 items (reliability: McDonald's $\omega=0.72$ on this study), and the second to measure Trait Anxiety, with 20 items (reliability: McDonald's $\omega=0.91$ on this study).

4.3.2. Test Used to Evaluate Psychological Inflexibility

This variable was measured by the Avoidance and Fusion Questionnaire for Youth (AFQ-Y). It is a 7-item questionnaire where the participant must respond on a 1 to 7 scale (Valdivia-Salas et al. 2017) (reliability: McDonald's $\omega = 0.87$ on this study).

4.3.3. Instrument to Assess Participant's Behavior in the Academic Cheating Coercion at School

Participants saw a 15 s animated online video presenting peer coercion into an academic cheating situation. There were four different stimuli, varying the gender of the peer. The stimulus presented an exam staged in the classroom. A voice-over described the situation to generate identification with the main character, as follows: "During an evaluation, a classmate asks you for the answer to a question. When you refuse to tell him, he responds by insulting you. Given this, what do you do?". There was no presence of authority figures in the scene. See the videos here:

Female (victim)—Female (offender): https://youtu.be/lBDIXJN88Sg Female (victim)—Male (offender): https://youtu.be/dlN6uQk-rvs Male (victim)—Female (offender): https://youtu.be/x9Nl00x3if0 Male (victim)—Male (offender): https://youtu.be/jrDtAfRfbYU Some images taken from the videos could be seen in Figure 1.



Figure 1. Stimulus simulating academic cheating coercion at school. In each box, the offender's character is on the right and the participant's character on the left.

The video is embedded in a Google form. After being played, the following response options appeared:

- I respond the same, with rudeness (aggressive).
- I ask the teacher to change my position (avoidant).
- I call the teacher to come over (supportive).
- I give him/her the answer to avoid being attacked (submissive).

- I tell him/her that his/her evaluation could be canceled (assertive).

The answers were registered as assertive, avoidant, aggressive, submissive, and supportive behaviors. For this aim, the categories were integrated as "no attack" when the responses were alternatives to violence, and the aggressive responses were integrated as "attack".

After this, questions inspired by moral disengagement mechanisms theory (Bandura et al. 1996; Bandura 1999, 2002) and questions about violence legitimation perceived from peers and adults were presented to analyze the participant behavior. These items were registered as nominal variables (Table 5):

Table 5. Nominal variables to evaluate moral disengagement mechanisms (Bandura) and violence legitimation from peers and adults.

Variable	Dimension	Question	Response Options		
	Moral justification	Do you think your reaction was?	GoodRegularBad		
	Euphemistic labeling	What have you done?	To save your baconYou don't knowActing in the wrong way		
	Advantageous comparison	If someone else was in your position	 He/She would act worse than you You don't know how He/She would act He/She would act the same as you 		
Moral disengagement mechanisms	Displacement of responsibility	Who started the problem?	He/She didYou don't knowYou did		
mechanisms	Diffusion of responsibility	If your friends find out about the incident and decide to confront him/her, who would be responsible for the situation?	 No one, because it would happen in a group You do not know Everyone, including you 		
	Distorting the consequences	Do you think you hurt your classmate?	 No, you don't think you have hurt him/her You don't know Yes, you think you have hurt him/her 		
	Victim blaming	Do you think your classmate deserved what you did?	 Yes, because He/She was disrespectful You don't know No, He/She didn't deserve it 		
	Dehumanization	The classmate who wanted to cheat is:	A donkey You don't know Irresponsible		

Table 5. Cont.

Variable	Dimension	Question	Response Options
	From peers	What would your classmates do when they found out about your reaction	 They would support you. They wouldn't say anything. They would criticize you. They would reject the situation.
Legitimation perceived	From adults	Realizing the situation, what will the teacher do?	 He/She will punish your classmate. He/She will do nothing. He/She will get you a warning. He/She would reject the situation.

4.4. Statistical Analysis

JASP statistical software was used to analyze the data. Chi-square test and ANOVA were used to analyze anxiety and gender differences related to the proposed situations' behavior. The level of significance was set at $p \le 0.05$.

5. Conclusions

In a situation of coercion into academic fraud, female adolescents were more avoidant, and male adolescents were more aggressive. The most aggressive students presented lower psychological inflexibility and stress and higher trait anxiety than those who tried to solve assertively. Non-aggressive behaviors were associated with higher psychological inflexibility and state anxiety. Finally, expectations about peers were shown to be relevant for decision making facing moral dilemmas and peer victimization.

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References

Anderson, RaeAnn E., Amanda M. Brouwer, Angela R. Wendorf, and Shawn P. Cahill. 2016. Women's behavioral responses to the threat of a hypothetical date rape stimulus: A qualitative analysis. *Archives of Sexual Behavior* 45: 793–805. [CrossRef] Andreou, Eleni. 2004. Bully/Victim Problems and Their Association with Machiavellianism and Self-Efficacy in Greek Primary School

Children. British Journal of Educational Psychology 74: 297–309. [CrossRef]

- Arana, Allyson A., Erin Q. Boyd, Maria Guarneri-White, Priya Iyer-Eimerbrink, Angela Liegey Dougall, and Lauri Jensen-Campbell. 2018. The Impact of Social and Physical Peer Victimization on Systemic Inflammation in Adolescents. *Merrill-Palmer Quarterly* 64: 12. [CrossRef]
- Bandura, Albert. 1999. Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review* 3: 193–209. [CrossRef] [PubMed]
- Bandura, Albert. 2002. Selective Moral Disengagement in the Exercise of Moral Agency. *Journal of Moral Education* 31: 101–19. [CrossRef] Bandura, Albert, Claudio Barbaranelli, Gian Vittorio Caprara, and Concetta Pastorelli. 1996. Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology* 71: 364–74. [CrossRef]
- Barbaranelli, Claudio, Maria L. Farnese, Carlo Tramontano, Roberta Fida, Valerio Ghezzi, Marinella Paciello, and Philip Long. 2018. Machiavellian Ways to Academic Cheating: A Mediational and Interactional Model. Frontiers in Psychology 9: 695. [CrossRef]
- Beltrán-Velasco, Ana Isabel, Paula Sánchez-Conde, Domingo Jesús Ramos-Campo, and Vicente Javier Clemente-Suárez. 2021.

 Monitorization of autonomic stress response of nurse students in hospital clinical simulation. *BioMed Research*. [CrossRef]
- Benenson, Joyce F., Melissa N. Kuhn, Patrick J. Ryan, Anthony J. Ferranti, Rose Blondin, Michael Shea, Chalice Charpentier, Melissa Emery Thompson, and Richard W. Wrangham. 2014. Human Males Appear More Prepared Than Females to Resolve Conflicts with Same-Sex Peers. Human Nature 25: 251–68. [CrossRef] [PubMed]
- Beyer, Frederike, Macià Buades-Rotger, Marie Claes, and Ulrike M. Krämer. 2017. Hit or Run: Exploring Aggressive and Avoidant Reactions to Interpersonal Provocation Using a Novel Fight-or-Escape Paradigm (FOE). Frontiers in Behavioral Neuroscience 11: 190. [CrossRef]
- Bossuyt, Saar, and Patrick Van Kenhove. 2018. Assertiveness Bias in Gender Ethics Research: Why Women Deserve the Benefit of the Doubt: Marketing and Consumer Behavior. *Journal of Business Ethics* 150: 727–39. [CrossRef]
- Bustamante-Sánchez, Alvaro, José Francisco Tornero-Aguilera, Valentín E. Fernández-Elías, Alberto J. Hormeño-Holgado, Athanasios A. Dalamitros, and Vicente Javier Clemente-Suárez. 2020. Effect of Stress on Autonomic and Cardiovascular Systems in Military Population: A Systematic Review. *Cardiology Research and Practice*. [CrossRef]
- Card, Noel A., Brian D. Stucky, Gita M. Sawalani, and Todd D. Little. 2008. Direct and Indirect Aggression During Childhood and Adolescence: A Meta-Analytic Review of Gender Differences, Intercorrelations, and Relations to Maladjustment. *Child Development* 79: 1185–229. [CrossRef]
- Cardozo-Rusinque, Aura Alicia, Marina B. Martínez-González, Adriana Angélica De La Peña-Leiva, Inírida Avedaño-Villa, and Tito José Crissien-Borrero. 2019. Factores Psicosociales Asociados al Conflicto Entre Menores En El Contexto Escolar. Educação & Sociedade 40: e0189140. [CrossRef]
- Castrillón-Moreno, Diego Alonso, and Pablo Emilio Borrero-Copete. 2005. Validación del inventario de Ansiedad Estado-Rasgo (STAIC) en niños escolarizados entre los 8 y 15 años. *Acta Colombiana de Psicología* 8: 79–90. Available online: https://bit.ly/2QIuQyd (accessed on 8 July 2021).
- Cuttini, Laura A. 2017. Early Adolescents' Reported Responses to Victimization by Peers: Links to Type of Provocation and Internalizing Symptoms. Ph.D. thesis, McGill University, Montreal, QC, Canada. Available online: https://escholarship.mcgill.ca/concern/theses/pv63g270z?locale=en (accessed on 7 July 2021).
- Delgado-Moreno, Rosa, Jose Juan Robles-Pérez, Susana Aznar-Laín, and Vicente Javier Clemente-Suárez. 2019. Effect of experience and psychophysiological modification by combat stress in soldier's memory. *Journal of Medical Systems* 43: 1–8. [CrossRef] [PubMed]
- Dirks, Melanie A., Teresa A. Treat, and V. Robin Weersing. 2014. Youth's Responses to Peer Provocation: Links to Symptoms of Anxiety and Depression. *Journal of Psychopathology and Behavioral Assessment* 36: 339–49. [CrossRef]
- Dirks, Melanie A., Laura A. Cuttini, Addison Mott, and David B. Henry. 2017. Associations Between Victimization and Adolescents' Self-Reported Responses to Peer Provocation Are Moderated by Peer-Reported Aggressiveness. *Journal of Research on Adolescence* 27: 436–51. [CrossRef] [PubMed]
- Farnese, Maria Luisa, Carlo Tramontano, Roberta Fida, and Marinella Paciello. 2011. Cheating Behaviors in Academic Context: Does Academic Moral Disengagement Matter? *Procedia—Social and Behavioral Sciences* 29: 356–65. [CrossRef]
- Farrell, Albert D., David B. Henry, Sally A. Mays, and Michael E. Schoeny. 2011. Parents as Moderators of the Impact of School Norms and Peer Influences on Aggression in Middle School Students: Parent Protective Factors for Aggression. *Child Development* 82: 146–61. [CrossRef] [PubMed]
- Fernández Villanueva, Icíar. 2009. Justificación y Legitimación de La Violencia En La Infancia: Un Estudio Sobre La Legitimación Social de Las Agresiones En Los Conflictos Cotidianos Entre Menores. Ph.D. thesis, Universidad Complutense de Madrid, Servicio de Publicaciones, Madrid, Spain. Available online: https://eprints.ucm.es/id/eprint/8436/ (accessed on 7 July 2021).
- Finegood, Eric D., Edith Chen, Jennifer Kish, Katherine Vause, Adam K.K. Leigh, Lauren Hoffer, and Gregory E. Miller. 2020. Community Violence and Cellular and Cytokine Indicators of Inflammation in Adolescents. *Psychoneuroendocrinology* 115: 104628. [CrossRef]
- Galán Jiménez, Jaime Sebastián F. 2018. Exposición a La Violencia En Adolescentes: Desensibilización, Legitimación y Naturalización. Diversitas 14: 55–67. [CrossRef]
- Gardner, Sarah. 2019. Coping with School-Based Peer-Victimisation: The Role of Peers. Ph.D. thesis, Nottingham University, Nottingham, UK. Available online: http://irep.ntu.ac.uk/id/eprint/37966/ (accessed on 7 July 2021).

- Goodman, Michael L., Andrea Hindman, Philip H. Keiser, Stanley Gitari, Katherine Ackerman Porter, and Ben G. Raimer. 2020. Neglect, Sexual Abuse, and Witnessing Intimate Partner Violence During Childhood Predicts Later Life Violent Attitudes Against Children Among Kenyan Women: Evidence of Intergenerational Risk Transmission From Cross-Sectional Data. *Journal of Interpersonal Violence* 35: 623–45. [CrossRef]
- Griebeler, Marcelo de C. 2019. "But Everybody's Doing It!": A Model of Peer Effects on Student Cheating. *Theory and Decision* 86: 259–81. [CrossRef]
- Guimond, Fanny-Alexandra, Mara Brendgen, Stephanie Correia, Lyse Turgeon, and Frank Vitaro. 2018. The Moderating Role of Peer Norms in the Associations of Social Withdrawal and Aggression with Peer Victimization'. *Developmental Psychology* 54: 1519–27. [CrossRef]
- Hernandez Rodriguez, Juventino, Samantha J. Gregus, James T. Craig, Freddie A. Pastrana, and Timothy A. Cavell. 2020. Anxiety Sensitivity and Children's Risk for Both Internalizing Problems and Peer Victimization Experiences. *Child Psychiatry & Human Development* 51: 174–86. [CrossRef]
- Hyatt, Courtland S., Amos Zeichner, and Joshua D. Miller. 2019. Laboratory aggression and personality traits: A meta-analytic review. Psychology of Violence 9: 675–89. [CrossRef]
- Iyer-Eimerbrink, Priya A., and Lauri A. Jensen-Campbell. 2019. The Long-term Consequences of Peer Victimization on Physical and Psychological Health: A Longitudinal Study. *Journal of Applied Biobehavioral Research* 24. [CrossRef]
- Joseph, Stephen, and Hannah Stockton. 2018. The Multidimensional Peer Victimization Scale: A Systematic Review. *Aggression and Violent Behavior* 42: 96–114. [CrossRef]
- Kelman, Herbert C. 2001. Reflections on the social and psychological processes of legitimization and delegitimization. In *The Psychology of Legitimacy: Emerging Perspectives on Ideology, Justice, and Intergroup Relations*. Edited by John. T. Jost and Brenda Major. Cambridge: Cambridge University Press, pp. 54–73.
- Kim, Jeongsuk, Bora Lee, and Naomi B. Farber. 2019a. Where Do They Learn Violence? The Roles of Three Forms of Violent Socialization in Childhood. *Children and Youth Services Review* 107: 104494. [CrossRef]
- Kim, Jeongsuk, Youn Kyoung Kim, and Naomi B. Farber. 2019b. Multiple Forms of Early Violent Socialization and the Acceptance of Interpersonal Violence Among Chinese College Students. *Violence and Victims* 34: 474–91. [CrossRef] [PubMed]
- Martínez-González, Marina B., Claudia Robles-Haydar, José Amar-Amar, and Fernando Crespo-Romero. 2016. Crianza y Desconexión Moral En Infantes: Su Relación En Una Comunidad Vulnerable de Barranquilla. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud* 14: 315–30.
- Martínez-González, Marina B., Claudia Robles-Haydar, José Amar-Amar, Raimundo Abello, Daladier Jabba, and Jairo Pimentel. 2019. Role-Playing Game as a Computer-Based Test to Assess the Resolution of Conflicts in Childhood. *Interciencia*. Available online: https://www.redalyc.org/articulo.oa?id=33960068012 (accessed on 7 July 2021).
- Martínez-González, Marina Begoña, Claudia A. Robles-Haydar, and Judys Alfaro-Álvarez. 2020. Concepto de desconexion moral y sus manifestaciones contemporaneas/Moral disengagement concept and its contemporary manifestations. *Utopía y Praxis Latinoamericana* 25. [CrossRef]
- Martínez-González, Marina B., Yamile Turizo-Palencia, Claudia Arenas-Rivera, Mónica Acuña-Rodríguez, Yeferson Gómez-López, and Vicente J. Clemente-Suárez. 2021. Gender, Anxiety, and Legitimation of Violence in Adolescents Facing Simulated Physical Aggression at School. *Brain Sciences* 11: 458. [CrossRef] [PubMed]
- McLean, Carmen P., and Emily R. Anderson. 2009. Brave Men and Timid Women? A Review of the Gender Differences in Fear and Anxiety. Clinical Psychology Review 29: 496–505. [CrossRef]
- McNaughton Reyes, H. Luz, Vangie A. Foshee, May S. Chen, and Susan T. Ennett. 2019. Patterns of Adolescent Aggression and Victimization: Sex Differences and Correlates. *Journal of Aggression, Maltreatment & Trauma* 28: 1130–50. [CrossRef]
- Mehta, Clare M., and Yulia Dementieva. 2017. The Contextual Specificity of Gender: Femininity and Masculinity in College Students' Same- and Other-Gender Peer Contexts. Sex Roles 76: 604–14. [CrossRef]
- Mercader-Yus, Esther, M. Carmen Neipp-López, Pedro Gómez-Méndez, Fernando Vargas-Torcal, Melissa Gelves-Ospina, Laura Puerta-Morales, Alexandra León-Jacobus, Kattia Cantillo-Pacheco, and Malka Mancera-Sarmiento. 2018. Ansiedad, autoestima e imagen corporal en niñas con diagnóstico de pubertad precoz. Revista Colombiana de Psiquiatría 47: 229–36. [CrossRef]
- Meter, Diana J., Ting-Lan Ma, and Samuel E. Ehrenreich. 2019. Telling, Comforting, and Retaliating: The Roles of Moral Disengagement and Perception of Harm in Defending College-Aged Victims of Peer Victimization. *International Journal of Bullying Prevention* 1: 124–35. [CrossRef]
- Pokharel, Bijaya, Kathy Hegadoren, and Elizabeth Papathanassoglou. 2020. Factors Influencing Silencing of Women Who Experience Intimate Partner Violence: An Integrative Review. Aggression and Violent Behavior 52: 101422. [CrossRef]
- Ramberg, Joacim, and Bitte Modin. 2019. School Effectiveness and Student Cheating: Do Students' Grades and Moral Standards Matter for This Relationship? ' Social Psychology of Education 22: 517–38. [CrossRef]
- Rayburn, Nadine Recker, Lisa H. Jaycox, Daniel F. McCaffrey, Emilio C. Ulloa, Megan Zander-Cotugno, Grant N. Marshall, and Gene A. Shelley. 2007. Reactions to dating violence among Latino teenagers: An experiment utilizing the Articulated Thoughts in Simulated Situations paradigm. *Journal of Adolescence* 30: 893–915. [CrossRef]
- Riekie, Helen, Jill M. Aldridge, and Ernest Afari. 2017. The Role of the School Climate in High School Students' Mental Health and Identity Formation: A South Australian Study. British Educational Research Journal 43: 95–123. [CrossRef]

- Sánchez-Conde, Paula, Ana Isabel Beltrán-Velasco, and Vicente Javier Clemente-Suárez. 2019. Influence of psychological profile in autonomic response of nursing students in their first hospital clinical stays. *Physiology & Behavior* 207: 99–103. [CrossRef]
- Storch, Eric A., Marla R. Brassard, and Carrie L. Masia-Warner. 2003. The Relationship of Peer Victimization to Social Anxiety and Loneliness in Adolescence. *Child Study Journal* 33: 1–18.
- Tornero-Aguilera, José Francisco, and Vicente Javier Clemente-Suárez. 2018. Effect of experience, equipment and fire actions in psychophysiological response and memory of soldiers in actual underground operations. *International Journal of Psychophysiology* 128: 40–46. [CrossRef]
- Tornero-Aguilera, José Francisco, José Juan Robles-Pérez, and Vicente Javier Clemente-Suárez. 2020. Could Combat Stress Affect Journalists' News Reporting? A Psychophysiological Response. *Applied Psychophysiology and Biofeedback* 45: 231–39. [CrossRef]
- Valdivia-Salas, Sonsoles, José Martín-Albo, Pablo Zaldivar, Andrés S. Lombas, and Teresa I. Jiménez. 2017. Spanish validation of the Avoidance and Fusion Questionnaire for Youth (AFQ-Y). Assessment 24: 919–931. [CrossRef]
- Vogel, Susanne, and Lars Schwabe. 2019. Stress, Aggression, and the Balance of Approach and Avoidance. *Psychoneuroendocrinology* 103: 137–46. [CrossRef]
- Wowra, Scott A. 2007. Moral Identities, Social Anxiety, and Academic Dishonesty Among American College Students. *Ethics & Behavior* 17: 303–21. [CrossRef]
- Wright, Mark, Robin Banerjee, Willemijn Hoek, Carolien Rieffe, and Sheida Novin. 2010. Depression and Social Anxiety in Children: Differential Links with Coping Strategies. *Journal of Abnormal Child Psychology* 38: 405–19. [CrossRef] [PubMed]
- Zhao, Huanhuan, Heyun Zhang, and Yan Xu. 2019. Effects of Perceived Descriptive Norms on Corrupt Intention: The Mediating Role of Moral Disengagement: Descriptive norms facilitate corruption. *International Journal of Psychology* 54: 93–101. [CrossRef] [PubMed]



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Sexual Assault Myths Acceptance in University Campus: Construction and Validation of a Scale

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Abstract: The study related to the myths of rape has been carried out since the 1980s at different scales. However, the interaction between the acceptance of these rape myths (myths related to sexual abuse) and the nightlife scene—where alcohol consumption becomes the epicenter of this particular context—has not been specifically evaluated. In this work, a questionnaire has been developed considering different scales. It has been tested online in a population of 367 first-year undergraduate students at the University of Alcalá (Spain). The results of the exploratory and confirmatory factor analysis, as well as the reliability ones, indicate the adequacy of the scale construction and validation process for the university student population. In addition, the results obtained, in line with the specialized literature, indicate that the consumption of alcohol and other drugs appear as justifying elements of sexual violence, exonerating the aggressors and perpetrating the victim.

Keywords: scale; validation; university campus; rape myths; sexual assault

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1. Introduction

The aim of this research is to develop our own instrument to better measure the acceptance of myths of sexual assault on university campuses, paying special attention to those aspects related to partying and nightlife. For this, the existing scales and those items that, according to the literature, were more representative of the discourses and beliefs of this type of violence in the context of nightlife, have been reviewed. The new scale has been applied to a sample of 367 first-year students of various degrees at the University of Alcala, during the 2020–2021 academic year, through an online questionnaire conducted through the SurveyMonkey platform. The article is presented as follows: first a review is made on the measurement of the rape myths, and then the methodology followed during the construction of the scale and the field work is presented. Third, the results of the validation are presented to end with the conclusions.

Measuring the Rape Myths

Any myth can be defined as a set of schemes, or ideas of meanings that a major percentage of the population recognises and has internalised, and therefore circulates as a discourse of authority (Barjola 2018). Among these beliefs and stereotypes, the existence of rape myths stand out, which refer to false, stereotypical beliefs about the victims, the aggressors and the situational conditions that derive in a social judgement of an act such as a sexual aggression or a consensual sexual encounter (Saldívar Hernández et al. 2015; Sinko et al. 2020). Rape myths were introduced as a concept in a sociologic and a feminist context since the 70s (Payne et al. 1999), although it was not until the next decade, when Martha Burt created the first instrument to measure it (Burt 1980). In the case of rape myths, there are a shared set of beliefs, constant in time, that deny or justify the sexual aggression that took place, supporting and perpetuating male sexual violence against women (Bohner 1998; Lonsway and Fitzgerald 1994; Payne et al. 1999; Romero 2012; Saldívar Hernández et al. 2015). Furthermore, these myths in particular move the focus

point of aggression and the aggressor toward the victim and their behaviour, judging these last two aspects to a greater extent (Sipsma et al. 2000; Velte 2019). They add to their definition that they are wrong myths in an ethical sense (Gerger et al. 2007).

Rape myths can be descriptive or prescriptive (Bohner 1998), and depending on the object to which they are addressed, they can be classified into four broad categories. First, there are those who blame the victim, for example, how she was dressed or how much she had drunk; secondly, they highlight those related to the aggression itself, define what is understood by rape and determine what requirements the aggression must meet in order to truly be considered an aggression; thirdly, there are those who exonerate the aggressor; and fourth and last, those that determine the types of women and their respectability and credibility (Gerger et al. 2007; Romero 2012). The persistence of many of them over time is unquestionable. For example, regarding the exoneration of the aggressor, rape has been justified since the 18th century through the belief that the male must calm his sexual needs, a model that has been called "steam boiler" (Sanyal 2019). In fact, others derive from the myth of male sexual incontinence, such as those related to provocative clothing or the amount of alcohol ingested by the victim, since by having these behaviours, the victim exposes themself to male sexual desire, which can be uncontrollable by their primary/ primal needs (Sanyal 2019). As can be seen, these examples transfer the guilt to the victim and exonerate the aggressor. Examples of myths about "what a rape must look like to really be rape" include those who claim that for it to be a sexual assault, the victim must resist or there must be physical contact. Finally, in those related to the types of women and their behaviours, those who defend that a woman who has had many sexual partners does not have as much credibility of that when women says no, they actually mean yes (Romero 2012; Sipsma et al. 2000).

The scientific measurement of the acceptance of these myths began in the 1980s, from Burt's work (1980). She developed an instrument for this purpose, the Rape Myth Acceptance Scale (RMAS). However, it should be noted that there was a previous scale, which instead of measuring beliefs, it was focused on attitudes: the Attitudes Toward Rape Scale (ATR), created by Feild (Field 1978; Schlegel and Courtois 2019). Given the moderate quality of this scale, and the non-use of myth terminology, its use was not as widespread as it was with Burt's work (Schlegel and Courtois 2019). In fact, since the publication of Martha Burt, many others have been developed, replicating it, adapting it to other geographical and temporal contexts or analysing the relationship between these myths with a wide range of variables related to other beliefs, attitudes, and behaviours (Briere et al. 1985; Costin 1985; Expósito et al. 2014; Janos and Espinosa 2018; Malamuth 1981; Megías et al. 2011; Payne et al. 1999; Quackenbush 1989). In this way, there has been an important development of RMAs in the last forty years (Gerger et al. 2007).

Among the variants derived from Burt's first work, the Illinois Rape Myth Acceptance (IRMA) stands out for its extensive use. A scale developed by Payne et al. improves the psychometric properties and the validity of the construct and includes a less ambiguous language, which facilitates its application (Bergenfeld et al. 2020; Payne et al. 1999). Payne et al. developed two versions of the same scale: one made up of 45 items; and a shorter and more adaptable one, with 20 items (Payne et al. 1999). A second scale, widely used and more current, is the one developed by Gerger, Kley, Bohner and Siebler, the Acceptance of Modern Myths About Sexual Agression (AMMSA) (Megías et al. 2011; Tardón 2017). These authors observed in the scales used that the scores were located in the lowest options. As the distributions did not maintain the shape of the normal, therefore, they made their statistical analysis difficult. These results lead them to think that the participants are increasingly aware of what is politically correct (social desirability) in relation to sexual assaults (Gerger et al. 2007; Schlegel and Courtois 2019). In addition, they consider that, as stated by Swim et al., attitudes and beliefs towards racism or sexism are becoming more subtle, leading to a modernisation of beliefs (Swim et al. 1995). Faced with such hypotheses, they elaborated the AMMSA scale (e.g., Acceptance of Modern Myths about

Sexual Aggression), achieving considerable improvements in its results in the distribution of scores among the participants (Gerger et al. 2007). The psychometric properties of this scale have been tested in English, German, Greek and Spanish versions (Hantzi et al. 2015; Megías et al. 2011; Schlegel and Courtois 2019).

In recent years, as a result of Illinois Rape Myth Acceptance, McMahon and Farmer have updated the item language of this scale to build a new one that measures the most subtle myths, finally made up of a total of 22 items. Their results, even with limitations, indicate that men have a higher rate of acceptance of these myths (McMahon and Farmer 2011). Their work is validated in the Italian context by Martini, Tartaglia and de Piccoli in 2021, however, these authors exclude items related to alcohol intoxication from the scale (Mara Martini and Piccoli 2021). Another very interesting scale to highlight is the Alcohol and Sexual Consent Scale, an instrument composed of 12 items, focused on the dimensions of alcohol consumption, sexual habits and sexual victimization in the specific environment of university campuses (Rose Marie Ward et al. 2012). These researchers designed this scale with the intention of measuring the attitude towards sexual consent in the presence of alcohol. Among their results, it is observed that a more permissive attitude towards the acceptance of sexual consent under the influence of alcohol is associated with a higher level of rape-supportive attitudes.

In the Spanish context, three different scales have been adapted and implemented on the subject matter of this study. First, Megías et al. adapted the AMMSA scale designed by Gerger and his team into Spanish, applying it to students at the University of Granada. For the validation of the instrument, two studies were carried out with 305 and 263 students respectively. Their results show high internal consistency, and, in addition, they achieve high scores on the scales, with distributions close to normal, which suggests the correct adaptation and good measurement adjustment of the AMMSA scale in the Spanish context took place (Megías et al. 2011). Of the 30 items included by Megías et al., two of them are linked to sexual assaults in festive settings and alcohol consumption: "If a woman invites a man to have a drink at home after having gone out at night, it means she wants to have sex and alcohol is often the cause of a man raping a woman.". Secondly, Expósito et al. adapted the Illinois Sexual Harassment Myth Acceptance (ISHMA) using a double sample: on the one hand university students (339 participants), on whom the exploratory analysis is carried out; and, on the other, the general population (326 participants), a sample that is used to confirm the results found in the exploratory analysis (Expósito et al. 2014). The ISHMA scale was originally developed by Lonsway et al. in 2008, and focuses on sexual harassment mythology, giving exceptional weight to sexual harassment in the work environment (Lonsway et al. 2008). However, statements are made that reproduce situations and beliefs that do occur in nightlife contexts (Velte 2019): "If a woman is sexually harassed, she had to have done something to provoke it". Finally, in 2017 the Sociological Research Center (CIS, Centro de Investigaciones Sociológicas, in Spanish) carried out a study on the social perception of sexual violence in a sample of 2465 participants over 16 years of age, from all over Spain. In the questionnaire, several questions are included in a battery (Likert type 0–5) on common beliefs related to sexual violence (Centro de Investigaciones Sociológicas 2017). Specifically, question number 6 sets out beliefs about the responsibility of women in the event of being sexually assaulted. Among the 6 items that make up this question, this explicitly related to the DFSA study, it is stated: "If a woman is sexually assaulted while drunk, she is partly to blame for having lost control". In Peru, Janos and Espinosa developed the scale Acceptance of Myths about Sexual Violence, which is brought up for not only its usefulness in research in Spanish-speaking contexts but also its recent application (2018) and the breadth of the focus to be studied, due to the fact that it does not only focus on rape myths, but also considers them in a general context, on false beliefs associated with sexual violence. This scale is made up of 20 items with Likert-type response options (1-4), constructed from a qualitative research carried out by the same authors (Janos and Espinosa 2015, 2018).

Despite the diversity of scales and contexts in which they have been applied, there is an agreement that men present a higher degree of acceptance of this type of myth than women do (Expósito et al. 2014; Megías et al. 2011). However the results obtained in the investigations do not reach robust conclusions in relation to other sociodemographic variables (Payne et al. 1999). According to the literature, an association has been found between RMA scores and the probability of: perpetrating sexual violence; not intervening as a witness; not reporting the assault; or not feeling danger or vulnerability to rape in the case of women. The higher the score on the RMA scale, the greater the probability of having the aforementioned behaviours (Bergenfeld et al. 2020; Bohner et al. 2009; Bohner and Lampridis 2004; Megías et al. 2011).

After this review, there is a lack of measurement instruments that specifically reflect the acceptance of myths about sexual assault in university campus contexts, where the consumption of alcohol and other drugs in parties becomes a central element. For this reason, the aim of this research is to develop our own instrument to better measure the acceptance of myths of sexual assault on university campuses, paying special attention to those aspects related to partying and nightlife. To do this, the existing scales have been reviewed and selected those items that were more representative of the discourses and beliefs of this type of violence in the context of nightlife, where there is a strong presence of alcohol and drug consumption. The new developed scale has been applied to a sample of 367 first-year students of various degree programmes from the University of Alcalá, during the 2020–2021 academic year, through an online questionnaire conducted through the SurveyMonkey platform. In addition, the ultimate goal of this work is to promote the achievement of Sustainable Development Goal number 5—equality for women and girls—to achieve a more just, peaceful, and democratic world, according to the United Nations (General Assembly of the United Nations 2015).

2. Method

2.1. Scale Construction

For the elaboration of our instrument, five scales related to the acceptance of sexual assault myths have been used, all of them listed in detail in Table 1. In several cases, the scales share identical or similar items, although the response options vary and Likert-type responses of 4, 5 or 7 values are used, as shown in Table 1.

Authorship	Year	Participants	Scale	Items	Likert's Range	Cronbach's α	Country
Payne et al.	1999	University students	IRMA-SF	20	1–7	0.87	United States
Megías et al.	2011	University students	AMMSA	30	1–7	0.91	Spain
Expósito et al.	2014	University student and general population	ISHMA	20	1–7	0.91	Spain
CIS	2017	Resident population	_	6	0-5	0.72	Spain
Janos and Espinosa	2018	Resident population	SVMA	20	1-4	0.90-0.76	Peru

Table 1. Different scales used in the elaboration of the instrument ¹.

¹ Note: IRMA-SF = Illinois Rape Myth Acceptance—Short Form, AMMSA = Acceptance of Modern Myths about Sexual Aggression, ISHMA = Illinois Sexual Harassment Myth Acceptance, SVMA = Sexual Violence Myths Acceptance. *Source*: Own elaboration.

The recommendations for the application of the expert judgment in the selection of items were incorporated in our instrument (Cabero Almenara and Osuna 2013). Therefore, 4 academic experts in the specific content to be measured collaborated –the acceptance of drug-facilitated sexual assault myths–, as well as an expert in social research methodology. To reach the expert judgment, the consensus method as nominal group technique was chosen, which favours reaching a consensus among the participants in a small group on the identification of the problem, the development of solutions and the establishment of priorities. This method is widely used in health care and research, as well as in education and social services (Manera et al. 2019; Potter et al. 2004).

The design of the instrument was carried out between the months of November 2019 and April 2020. The items incorporated in the scale are listed in Table 2. The scale consists

of 13 items, measured in a Likert-type format of 4 values (4 = strongly agree; 1 = strongly disagree). The intermediate option (neither agree nor disagree) has been eliminated to constrain the student body under study to position themselves and avoid what Schuman and Presser call "intermediate alternative floats" (Schuman and Presser 2017). In all the items, the option "no answer" has been given, thus respecting the participant's voluntary nature (Bisquerra and Pérez-Escoda 2015; Díaz de Rada 2001; Gilljam and Granber 1993).

Table 2. Items incorporated in the scale ¹.

- E1—A woman who dresses provocatively should not be surprised if a man tries to force her to have sex.
- E2—If a woman is sexually assaulted while drunk, she is partly to blame for having lost control.
- E3—A woman who has had many sexual partners has less credibility if she reports an assault.
- E4—If a woman does not intend to have sex with a man, she should not flirt with him.
- E5—A woman is more likely to be raped by a stranger than by an acquaintance.
- E6—For men it is a biological need to release their accumulated sexual tension from time to time.
- E7—Although women like to be shy, that does not mean they do not want sex.
- E8—Alcohol is often the cause of a man raping a woman.
- E9—Many women tend to interpret well-intentioned gestures as sexual harassment.
- E10—If a woman is sexually harassed, she must have done something to provoke it.
- E11—Almost all types of sexual harassment would end if the woman simply told the man to stop.
- E12—For an act of sexual violence to take place, there must always be physical contact.
- E13—When a woman allows herself to be invited to drinks at a disco by a man, it means that she wants sex with him.

Of the 13 items incorporated, three of them explicitly mention alcohol consumption as a justifying or contextual element of the aggression, clearly linked to the DFSA cases. The rest of the items that make up the scale, even not explicitly mentioning the festive atmosphere or the consumption of alcohol or other drugs, the experts agreed on the importance of their incorporation in the study. Hence, on the one hand, the link between these and social discourses in cases of high impact and controversial drug-facilitated sexual assaults in Spanish society, such as the well-known case of La Manada (Aurrekoetxea-Casaus 2020; Larrondo et al. 2019; Navarro and Coromina 2020; Robles et al. 2019; Velte 2019), expressed by Sanyal as the Spanish #MeToo moment (Sanyal 2019). On the other hand, the work carried out in Spain by the Noctámbul@s Observatory has been key in the selection of items. From 2014 to 2018, the date of the last published report, this institution investigated the relationship between drug use and sexual violence in nightlife spaces, releasing figures on the incidence of the phenomenon in Spanish youth (Observatorio Noctámbul@s 2014, 2015, 2016, 2017, 2018).

2.2. Instrument Validation

2.2.1. Participants

The scale developed has been tested in a convenience sample made up of 367 first-year undergraduate students from the University of Alcalá (Alcalá de Henares, Madrid, Spain) through the implementation of an online questionnaire carried out on the SurveyMonkey platform. Regarding the sociodemographic traits that characterise the sample, 126 are men (34.3%) and 241 (65.7%) are women. The mean age for the sample as a whole is 18.8 years (SD = 2.0) and its ideological position is 4.6 (SD = 2.3), having been measured on a scale where 1 is extreme left and 10 extreme right. 67.7% of the participants (243 cases) come from the health sciences areas of study and 32.3% (116 cases) from the social sciences. Regarding nationality, 326 (89.3%) have Spanish nationality, 22 (6.0%) have dual nationality (Spanish and other) and 17 (4.7%) have another nationality. Finally, 40 (11.6%) declare themselves practicing Catholics, 77 (22.3%) non-practicing Catholics, 16 (4.6%) believers of another religion, 61 (17.7%) agnostic, 82 (23.8%) atheist and for 69 (20.0%) religion is an indifferent matter to him/her.

¹ Source: Own elaboration.

Participation has been on a voluntary and anonymous basis, providing students with a link through which to access the questionnaire. In order to access the survey, they had to read and accept basic information about the study, such as the nature of the survey, the average duration, contact information, voluntary participation, etc. In this way, the informed consent of all the participants was obtained. In addition, the ethical aspects of the research have been supervised and approved by the Committee of Research Ethics and Animal Experiments of the University of Alcalá (CEI/HU/2020/21).

2.2.2. Statistical Analysis

For the statistical analysis, the IMB SPSS v.25 Statistical Package and the equation modelling software, AMOSTM 22.0 were used. An exploratory factor analysis (EFA) was performed on the sample, using the maximum likelihood extraction method (ML) and the Varimax rotation method. The selection of the final model after the EFA was agreed based on the following indicators: (a) size of the determinant of the correlation matrix; (b) measure of Kaiser, Meyer and Olkin (KMO) sample adequacy; (c) significance from Bartlett's sphericity test;(d) values of the diagonal of the anti-image correlation matrix; (e) values of the commonalities of each variable; and, (f) the total variance explained by the model; along with the principles of parsimony and interpretability (Díaz de Rada 2018; Méndez Martínez and Sepúlveda 2012). Through this analysis, the aim was to discover the number of factors underlying the scale, as well as which variables or items on the scale were indicators of what was to be measured (Fernández Aráuz 2015).

After obtaining a relevant model, the reliability of the scale that they make up was checked using Cronbach's alpha coefficient measure (Cronbach 1951). The Cronbach coefficient is a measure of the internal consistency of the scale, which indicates the covariance of the items and the presence of the object of study in these items (Oviedo and Campo-Aria 2005; Ventura-León 2017; Ventura-León and Caycho-Rodríguez 2017). This statistic tries to collect the capacity of the scale to be designed to measure consistently and accurately the characteristics that it claims to measure (Pérez López 2009). To consider that a scale has good consistency, an alpha value greater than 0.7 is required (Martín Arribas 2004).

Finally, we wanted to know the fit of the factorial model obtained by performing a confirmatory factor analysis (CFA) using equation modelling software (AMOS™ 22.0) on the same sample (Damar et al. 2020). The aim of exploring a structure with EFA and successively conduct a CFA in the same sample is to test the validity of those restrictions implied by the CFA which were not part of the EFA (Doğan et al. 2017; Steinmetz et al. 2020).

The CFA indicators that determine the fit of the model are: (a) the model chi-square and degrees of freedom; (b) the comparative fit index (CFI); and (c) the root mean square error of approximation (RMSEA) (Bollen 1989; Browne and Cudeck 1993; Custers and McNallie 2016; Plaza-Vidal et al. 2020). For a good fit of the model, scores lower than 0.06 are required for the RMSEA and values above 0.90 for the CFI (Custers and McNallie 2016; Plaza-Vidal et al. 2020).

3. Results

3.1. Exploratory Factor Analysis

In the exploratory factor analysis, together with the model's goodness-of-fit indicators, there are two principles that should govern the researcher's decisions: (a) the principle of scientific parsimony and (b) that of interpretability. The first refers to the fact that the best solution is the simplest, that is, that the phenomenon studied is possible to explain with the least number of factors. In addition, solution must be understandable, have a meaning based on the theory on which the understanding of the phenomenon is based (Díaz de Rada 2018; Pérez López 2009). After factorial exploration, in which up to five models with different numbers of factors and variables have been tested (see Table 2), according to the indicators and principles of factor analysis set out above, a model composed of 10 of the 13 variables was obtained (items of the original scale). Three factors were

eliminated: (E7), (E11) and (E13) (see Table 3). The first two due to their low communalities (less than 0.4) and the third because they belong to a factor composed solely by itself.

Table 3. Communalities ¹.

Items	Communalities
E1—A woman who dresses provocatively should not be surprised if a man tries to force her to have sex.	0.645
E2—If a woman is sexually assaulted while drunk, she is partly to blame for having lost control.	0.730
E3—A woman who has had many sexual partners has less credibility if she reports an assault.	0.574
E4—If a woman does not intend to have sex with a man, she should not flirt with him.	0.490
E5—A woman is more likely to be raped by a stranger than by an acquaintance.	0.578
E6—For men it is a biological need to release their accumulated sexual tension from time to time.	0.400
E8—Alcohol is often the cause of a man raping a woman.	0.638
E9—Many women tend to interpret well-intentioned gestures as sexual harassment.	0.562
E10—If a woman is sexually harassed, she must have done something to provoke it.	0.778
E12—For an act of sexual violence to take place, there must always be physical contact.	0.587

¹ Source: Own elaboration.

With the applied factorial model, a KMO equal to 0.792 was obtained, a statistically significant Bartlett's sphericity test (Chi-square = 685.557; p-value < 0.05) and which explained 59.83% of variance. The determinant of the correlation matrix was low (0.075), indicating the intercorrelation of the variables and the possibility of reducing their dimensions (Pérez López 2009). On the other hand, the values of the diagonal of the anti-image correlation matrix, indicators that follow the same logic as the KMO statistic (the closer to the unit, the better fit of the model) and indicate the adequacy of each variable to the model (Díaz de Rada 2018), were high and adequate, all of them being between 0.700 and 0.889. The communalities, reflected in Table 3, had a sufficiently high value to admit the model, although it is true that two items are obtained with communalities with values between 0.5 and 0.4.

Table 4 shows the results of the matrix of rotated components, where the saturation of each variable in each factor is represented. After the Varimax rotation, the first factor (FACT1) explains 23.33% of the variance of the phenomenon, the second (FACT2) 20.76% and the third (FACT3) 15.74%. The higher the saturation value of the variable in the factor –in absolute terms, since the \pm 1 sign indicates the direction of the variable-factor relationship–, the more said variable will be identified or belong to the factor (Comrey 1985; Díaz de Rada 2018).

Table 4. Rotated Component Matrix ¹.

Item	FACT1	FACT2	FACT3
E1—A woman who dresses provocatively should not be surprised if a man tries to force her to have sex	0.784	0.159	0.077
E2—If a woman is sexually assaulted while drunk, she is partly to blame for having lost control	0.813	0.207	0.161
E3—A woman who has had many sexual partners has less credibility if she reports an assault	0.39	-0.044	0.647
E4—If a woman does not intend to have sex with a man, she should not flirt with him	0.197	0.671	0.042
E5—A woman is more likely to be raped by a stranger than by an acquaintance	-0.138	0.413	0.623
E6—For men it is a biological need to release their accumulated sexual tension from time to time	0.045	0.629	-0.044
E8—Alcohol is often the cause of a man raping a woman	0.02	0.064	0.796
E9—Many women tend to interpret well-intentioned gestures as "sexual harassment".	0.243	0.674	0.219
E10—If a woman is sexually harassed, she must have done something to provoke it	0.84	0.261	-0.062
E12—For an act of sexual violence to take place, there must always be physical contact	0.282	0.68	0.214

¹ Source: Own elaboration.

Based on these criteria, it is stated that the first factor (FACT1), which explains 23.33% of the variance of the phenomenon being measured, is made up of the variables:

- (E1) "A woman who dresses provocatively should not be surprised if a man tries to force her to have sex";
- (E2) "If a woman is sexually assaulted while drunk, she is partly to blame for having lost control of her";
- (E10) "If a woman is sexually harassed, she had to do something to provoke it".

It was decided to call this factor "Responsibility of the Victim", since they are the a group of items on the scale that pose the responsibility of women, who are victims of sexual violence, based on different behaviours that she demonstrates, such as the clothes she wears (E1) (Gerger et al. 2007; Romero 2012).

Regarding the second factor (FACT2, 20.76% of total variance), it is made up of the following items:

- (E4) "If a woman has no intention of having sex with a man, she should not flirt with him";
- (E6) "For men it is a biological need to release their accumulated sexual tension from time to time";
- (E9) "Many women tend to exaggeratedly interpret well-intentioned gestures";
- (E12) "For an act of sexual violence to take place there must always be physical contact".

The grouping of items in FACT2 leads researchers to name this factor as "Social Conventions of Sexuality", when collecting recommendations as well as descriptions related to sexuality and sexual relations (Sanyal 2019; Velte 2019).

Finally, in the third factor (FACT3, 15.74% of the total variance) the following items of the scale are grouped:

- (E3) "A woman who has had many sexual partners has less credibility if she reports an assault";
- (E5) "A woman is more likely to be raped by a stranger than by an acquaintance";
- (E8) "Alcohol is often the cause of a man raping a woman".

The set of variables grouped in the FACT3 lead to it being named by the research team as "Context of Sexual Assault", since the items that it comprises are related to contextual elements (Gerger et al. 2007; Romero 2012; Sanyal 2019; Tardón 2017; Velte 2019).

3.2. Reliability Analysis

The reliability analysis included 270 cases out of 367 in total, excluding those that had some missing value. For the analysis, Cronbach's α was calculated for the sample as a whole and for subsets of that, in order to observe if the value of the statistic remains constant. The complete results are given in Table 5. A high value of Cronbach's α is obtained, 0.738, which is why the scale is considered to have good internal consistency, as it is higher than 0.700 (Martín Arribas 2004). In general terms, the statistic maintains values above 0.700 for the proposed sample subsets, with the exception of women, where it decreases slightly. In the case of Health Sciences students, Cronbach's α is 0.752; for Social Sciences students it is 0.715; for women 0.675 and for men 0.764. Given these results, it can be affirmed that the reliability of the scale obtained after the exploratory factor analysis is high and therefore is suitable for the purposes of the research. In addition, the reliability of each of the factors found is analyzed. In the case of FACT1 (E1, E2 and E10), a high Cronbach's alpha (0.746) is obtained, however, in FACT2 (E4, E6, E9 and E12) and in FACT3 (E3, E5 and E8) the indices of reliability decreased slightly, obtaining 0.666 and 0.544 respectively.

Table 5. Cronbach's Alpha study ¹.

Item	Total Sample	H.S. Students	S.S. Students	Women	Men
Valid cases	270	175	90	176	91
Cronbach's Alpha	0.738	0.752	0.715	0.675	0.764
Cronbach's Alpha if item is removed E1—A woman who dresses provocatively should not be surprised if a man tries to force her to have sex	0.725	0.741	0.702	0.659	0.754
E2—If a woman is sexually assaulted while drunk, she is partly to blame for having lost control	0.711	0.726	0.7685	0.634	0.745
E3—A woman who has had many sexual partners has less credibility if she reports an assault	0.723	0.729	0.722	0.674	0.729
E4—If a woman does not intend to have sex with a man, she should not flirt with him	0.712	0.734	0.663	0.647	0.748
E5—A woman is more likely to be raped by a stranger than by an acquaintance	0.724	0.740	0.703	0.664	0.746
E6—For men it is a biological need to release their accumulated sexual tension from time to time	0.731	0.748	0.697	0.664	0.761
E8—Alcohol is often the cause of a man raping a woman	0.735	0.747	0.726	0.659	0.769
E9—Many women tend to interpret well-intentioned gestures as "sexual harassment".	0.691	0.707	0.663	0.635	0.720
E10—If a woman is sexually harassed, she must have done something to provoke it	0.723	0.740	0.690	0.654	0.752
E12—For an act of sexual violence to take place, there must always be physical contact	0.685	0.700	0.657	0.628	0.704

¹ Note: H.S.= Health Science; S.S. = Social Science. Source: Own elaboration.

3.3. Confirmatory Factor Analysis

In order to evaluate the factorial structure, a confirmatory factor analysis (CFA) was performed considering three first-order dimensions. The fit of the model of three correlated latent factors was evaluated: Responsibility of the Woman Victim, Social Conventions of Sexuality and Context of Sexual Assault. After adjusting the three-factor model, the following results are observed: CMIN/DF = 1338; CFI = 0.954; GFI = 0.985 and RMSEA = 0.036. According to the scientific literature, the values of the adjustment indices are within theoretically expected (Bollen 1989; Browne and Cudeck 1993; Byrne 1989; Custers and McNallie 2016; Kaplan 2009; Plaza-Vidal et al. 2020). A significant value of the Chi-Square test is presented, which allows CMIN/DF < 2 (Byrne 1989), the mean square error RMSEA is less than 0.05 (Kaplan 2009; Mulaik 2009), which is recommended, and the Comparative fit index (CFI) is within the range > 0.95 (Geiser et al. 2012). Based on these indices, we can affirm that the model developed is good and fits well with the empirical data (Cole and Maxwell 1985). Thus, the results confirm the construct validity and allow us to affirm that the model is relevant to verify the objectives proposed in this work, as can be seen in Figure 1, where the composition of the model obtained in the confirmatory factor analysis is represented.

Figure 1 shows the relationship between the factors (FACT1, FACT2 and FACT3), the scale items in each factor (E1, E2, E3, etc.) and the measurement errors of each of the items (e1, e2, e3, etc.). For a better understanding of Figure 1, the ovals correspond to the latent variables (factors), the rectangles to the observed variables (items) and the circles to the residual error. The pathways connecting the ovals represent interrelationships of latent variables; the paths from the ovals to the squares represent relationships of the latent variables over the observed ones. The direction of the arrows shows the causal relationships between the variables predicted by the model. The numbers above the arrows correspond to the standardized parameters (in which the effect that other variables may have on that relationship has been extracted). The numbers above the rectangles correspond to the communalities (the part of the variance explained by the factor associated with the variable).

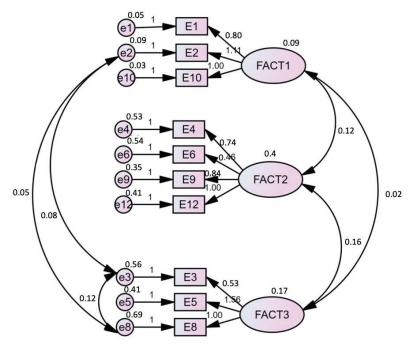


Figure 1. Confirmatory Factor Analysis.

4. Conclusions

A scale to measure the acceptance of drug-facilitated sexual assaults myths is an indicator of the beliefs and stereotypes that a population has around this type of violence. Therefore, the scale is a useful instrument to diagnose those areas in which a greater effort must be made to change such beliefs, which make it difficult to report and eradicate sexual violence in contexts in which there is consumption of psychoactive substances (Isorna and Rial 2015; Krug et al. 2002; Prego-Meleiro et al. 2020). As stated at the beginning, this work seeks to build a specific instrument for the measurement of sexual assault when there has been substance use by the victim and/or aggressor, an instrument that is in turn not very extensive, and can be included in larger questionnaires.

The results obtained support the construction and validation of a new scale for measuring the acceptance of drug-facilitated sexual assaults myths in the universitary population. In general terms, the scale shows adequate properties: high reliability and construct validity. The exploratory factor analysis demonstrates the existence of dimensions or latent variables of a greater degree of abstraction present in the scale, whose composition is theoretically consistent with the specialised literature by highlighting dimensions related to the responsibility of the victim, the beliefs about how it is a "true violation" and the influence of exogenous factors (Gerger et al. 2007; Romero 2012; Sanyal 2019). In addition, the reliability of the scale that results from the factorial model obtained is high, both for the sample as a whole and for the subsamples. On the other hand, the confirmatory factor analysis ends up indicating the goodness of fit of the model, supporting the construction of the scale.

According to the literature, the consumption of alcohol and other drugs is an element that, when present in a sexual assault, is used discursively and even judicially, as an element that exonerates the aggressor or aggressors (Menéndez 1991) at the same time as blames or holds the victim responsible (Observatorio Noctámbul@s 2018; Schuller and Wall 1998; Velte 2019). The results obtained in this research point in the same direction since those items that explicitly mentioned the consumption of alcohol or the state of intoxication of the victim are located in the factors "responsibility of the victim" and "context of sexual

assault". Precisely, the myth that alcohol is the cause of the aggression appears represented in the same factor as the item that indicates that it is more common for the aggressor to be an unknown person than known to the victim. This is another one of the major issues reported in DFSA cases, where most attacks are committed by someone close to the victim, highlighting a partner, ex-partner or friend (Barreto 2018; Isorna and Rial 2015).

The results of this research should be interpreted with caution due to the following limitations: it is a convenience/convenient sample in a specific context, since it involves young university students in the first year of their studies at the University of Alcalá, (Madrid, Spain); therefore, they cannot be generalized for the country as a whole. Furthermore, the contribution made by Rose Marie Ward et al. (2012) on alcohol-mediated sexual consent provides a new dimension that should be incorporated in future improvements to this scale. Given these limitations, it is necessary to replicate the results for other regions of the country to be able to definitively validate this scale for the Spanish case, considering adding items incorporated into the Alcohol and Sexual Consent Scale (Rose Marie Ward et al. 2012).

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References

Aurrekoetxea-Casaus, Maite. 2020. San fermines #la manada case: An exploratory analysis of social support for victims of sexual violence on Twitter. *Computers in Human Behavior* 108. Available online: https://www.sciencedirect.com/science/article/abs/pii/S0747563220300546?via%3Dihub (accessed on 19 November 2021). [CrossRef]

Barjola, Nerea. 2018. Microfísica sexista del poder. El caso Alcàsser y la construcción del terror sexual. Barcelona: Virus.

Barreto, Magali. 2018. Testimonio, segunda victimización y reparación. Movilización feminista frente a un caso de violación sexual en la Universidad. Sexualidad, Salud y Sociedad 29: 215–34. [CrossRef]

Bergenfeld, Irina, Gabriella Lanzas, Quach T. Trang, Jessica Sales, and Kathryn M. Yount. 2020. Rape Myths Among University Men and Women in Vietnam: A Qualitative Study. *Journal of Interpersonal Violence*. Available online: https://journals.sagepub.com/doi/10.1177/0886260520928644 (accessed on 19 November 2021). [CrossRef] [PubMed]

Bisquerra, Rafel, and Núria Pérez-Escoda. 2015. ηPueden las escalas Likert aumentar en sensibilidad? Revista d'Innobació i Recerca En Educació 8: 129–47. [CrossRef]

Bohner, Gerd. 1998. Vergewaltigungsmythen [Rape Myths]. Landau: Verlag Empirische Pädagogik.

Bohner, Gerd, and Efthymios Lampridis. 2004. Expecting to meet a rape victim affects women's self-esteem: The moderating role of rape myth acceptance. *Group Processes and Intergroup Relations* 7: 77–88. [CrossRef]

Bohner, Gerd, Friederike Eyssel, Afroditi Pina, Frank Siebler, and Tendayi Viki. 2009. Rape myth acceptance: Cognitive, affective and behavioural effects of beliefs that blame the victim and exonerate the perpetrator. In *Rape: Challenging Contemporary Thinking*. Edited by Miranda A. H. Horvath and Jennifer M. Brown. New York: Willan Publishing, pp. 17–45.

Bollen, Kenneth A. 1989. Structural Equations with Latent Variables. Toronto: John Wiley and Sons. [CrossRef]

Briere, John, Neil M. Malamuth, and James V. Check. 1985. Sexuality and rape-supportive beliefs. *International Journal of Women's Studies* 8: 398–403.

Browne, Michael W., and Robert Cudeck. 1993. Alternative ways of assessing model fit. In *Testing Structural Equation Models*. Edited by Kenneth A. Bollen and J. Scott Long. Newbury Park: Sage, pp. 136–62.

Burt, Martha R. 1980. Cultural myths and supports for rape. Journal of Personality and Social Psychology 38: 217-30. [CrossRef]

Byrne, Barbara M. 1989. Multigroup Comparisons and the Assumption of Equivalent Construct Validity Across Groups: Methodological and Substantive Issues. *Multivariate Behavioral Research* 24: 503–23. [CrossRef] [PubMed]

Cabero Almenara, Julio, and Julio Barroso Osuna. 2013. La utilización del juicio de experto para la evaluación de TIC: El coeficiente de competencia experta. Revista de Pedagogía 65: 25–38. [CrossRef]

Centro de Investigaciones Sociológicas (CIS). 2017. Percepción social de la Violencia Sexual (3182). Available online: http://www.cis.es/cis/opencm/ES/2_bancodatos/estudios/ver.jsp?estudio=14354 (accessed on 4 March 2021).

Cole, David A., and Scott E. Maxwell. 1985. Multitrait-multimethod comparisons across populations: A confirmatory factor analytic approach. *Multivariate Behavioral Research* 20: 398–417. [CrossRef]

Comrey, Andrew. L. 1985. Manual de Análisis Factorial. Madrid: Cátedra.

Costin, Frank. 1985. Beliefs about rape and women's social roles. Archives of Sexual Behavior 14: 319–25. [CrossRef]

Cronbach, Lee J. 1951. Coefficient alpha and the internal structure of test. Psychometrika 16: 297-334. [CrossRef]

Custers, Kathleen, and Jenna McNallie. 2016. The Relationship between television sports exposure and rape myth acceptance: The mediating role of sexism and sexual objectification of women. *Violence against Women* 23: 813–29. [CrossRef] [PubMed]

Damar, Arif, Zülbiye Kaçay, Ersin Eskiler, and Fikret Soyer. 2020. Adaptation of the Global Academic Performance Scale: Reliability and Validity Study. Sakarya University Journal of Education 10: 560–76. [CrossRef]

Díaz de Rada, Vidal. 2001. Diseño y Elaboración de Cuestionarios Para la Investigación Comercial. Madrid: ESIC Editorial.

Díaz de Rada, Vidal. 2018. Técnicas Multivariantes de Interdependencia. Casos Reales y Prácticos de Investigación. Madrid: Ra-Ma.

Doğan, Nuri, Sümeyra Soysal, and Haydar Karaman. 2017. Aynı örnekleme açımlayıcı ve doğrulayıcı faktör analizi uygulanabilir mi? [Can exploratory and confirmatory factor analysis be applied to the same sample?]. In *Küreselleşen Dünyada Eğitim*. Edited by Özcan Demirel and Serkan Dinçer. Ankara: Pegem Akademi, pp. 373–400.

Expósito, Francisca, Antonio Herrera, Inmaculada Valor-Segura, Carmen Herrera, and Luis M. Lozano. 2014. Spanish adaptation of the Illinois Sexual Harassment Myth Acceptance. Spanish Journal of Psychology 17: 1–13. [CrossRef]

Fernández Aráuz, Andrés. 2015. Aplicación del análisis factorial confirmatorio a un modelo de medición del rendimiento académico en lectura. Ciencias Económicas 33: 39–66. [CrossRef]

Field, Hubert S. 1978. Attitudes toward rape: A comparative analysis of police, rapists, crisis counselors and citizens. *Journal of Personality and Social Psychology* 36: 156–79. [CrossRef]

Geiser, Christian, Michael Eid, Stephen G. West, Tanja Lischetzke, and Fridtjof W. Nussbeck. 2012. A Comparison of Method Effects in Two Confirmatory Factor Models for Structurally Different Methods. Structural Equation Modeling: A Multidisciplinary Journal 19: 409–36. [CrossRef]

General Assembly of the United Nations. 2015. Transforming Our World: The 2030 Agenda for Sustainable Development. *A New Era in Global Health*. Available online: https://sdgs.un.org/2030agenda (accessed on 19 November 2021).

Gerger, Heike, Hanna Kley, Gerd Bohner, and Frank Siebler. 2007. The Acceptance of Modern Myths About Sexual Aggression Scale: Development and Validation in German and English. *Aggressive Behavior* 33: 422–40. [CrossRef]

Gilljam, Mikael, and Donald Granber. 1993. Should we take don't know for an answer? *Public Opinion Quarterly* 57: 348–57. [CrossRef] Hantzi, Alexandra, Efthymios Lampridis, Katerina Tsantila, and Gerd Bohner. 2015. Validation of the Greek acceptance of modern myths about sexual aggression (AMMSA) scale: Examining its relationships with sexist and conservative political beliefs. *International Journal of Conflict and Violence* 9: 121–33. [CrossRef]

Isorna, Manuel, and Antonio Rial. 2015. Drogas facilitadoras del asalto sexual y sumisión química. Health and Addictions 15: 137.

Janos, Erika, and Agustín Espinosa. 2015. Representaciones Sociales sobre Roles de Género y su relación con la Aceptación de Mitos y Creencias sobre la Violencia Sexual. Límite Revista de Filosofía y Psicología 33: 5–15.

Janos, Erika, and Agustín Espinosa. 2018. Sexismo ambivalente y su relación con la aceptación de mitos sobre la violencia sexual en una muestra de Lima. *Revista de Investigación Psicológica* 19: 61–74.

Kaplan, David. 2009. Structural Equation Modeling: Foundations and Extensions. California: Sage. [CrossRef]

Krug, Etienne G., Linda L. Dahlberg, James A. Mercy, Anthony B. Zwi, and Rafael Lozano. 2002. World Report on Violence and Health. Available online: https://apps.who.int/iris/bitstream/handle/10665/42495/9241545615_eng.pdf (accessed on 5 June 2021).

Larrondo, Ainara, Jordi Morales i Gras, and Julen Orbegozo Terradillos. 2019. Feminist hashtag activism in Spain: Measuring the degree of politicization of online discourse on #YoSiTeCreo, #HermanaYoSiTeCreo, #Cuéntalo y #NoEstásSola. Communication and Society 32: 207–21. [CrossRef]

Lonsway, Kimberly A., and Louise F. Fitzgerald. 1994. Rape Myths: In Review. *Psychology of Women Quarterly* 18: 133–64. [CrossRef] Lonsway, Kimberly. A., Lilia M. Cortina, and Vicki J. Magley. 2008. Sexual Harassment Mythology: Definition, Conceptualization and Measurement. *Sex Roles* 58: 599–615. [CrossRef]

Malamuth, Neil. M. 1981. Rape proclivity among males. Journal of Social Issues 37: 138-57. [CrossRef]

Manera, Karine, Camilla S. Hanson, Talia Gutman, and Allison Tong. 2019. Consensus Methods: Nominal Group Technique. In *Handbook of Research Methods in Health Social Sciences*. Edited by Pranee Liamputtong. Singapure: Springer. [CrossRef]

- Martín Arribas, María Concepción. 2004. Diseño y validación de cuestionarios. Matronas Profesión 5: 23-29.
- Mara Martini, Stefano Tartaglia, and Norma de Piccoli. 2021. Assessing Rape Myth Acceptance: A Contribution to Italian Validation of the Measure for Assessing Subtle Rape Myth (SRMA-IT). Sexual Abuse 107: 2411–502. [CrossRef]
- McMahon, Sarah, and G. Lawrence Farmer. 2011. An Update Measure for Assessing Subtle Rape Myths. *Social Work Research* 35: 71–81. [CrossRef]
- Megías, Jesús L., Mónica Romero-Sánchez, Mercedes Durán, Miguel Moya, and Gerd Bohner. 2011. Spanish validation of the Acceptance of Modern Myths about Sexual Aggression Scale (AMMSA). *The Spanish Journal of Psychology* 14: 912–25. [CrossRef] [PubMed]
- Méndez Martínez, Carolina, and Martín A. Rodón Sepúlveda. 2012. Introducción al análisis factorial exploratorio. *Revista Colombiana de Psiquiatría* 41: 197–207. [CrossRef]
- Menéndez, Eduardo L. 1991. Antropología del Alcoholismo en México. Los Límites Culturales de la Economía Política 1930–79. México: Centro de Investigaciones y Estudios Superiores en Antropología Social.
- Mulaik, Stanley A. 2009. Linear Causal Modeling with Structural Equations. New York: CRC Press Taylor and Francis Group.
- Navarro, Celina, and Óscar Coromina. 2020. Discussion and mediation of social outrage on Twitter: The reaction to the judicial sentence of La Manada. *Communication and Society* 33: 93–106. [CrossRef]
- Observatorio Noctámbul@s. 2014. 1o Informe Anual 2013–2014. Available online: https://www.drogasgenero.info/wp-content/uploads/Informe-Noctambulas1.pdf (accessed on 5 June 2021).
- Observatorio Noctámbul@s. 2015. 20 Informe Anual 2014–2015. Available online: https://www.drogasgenero.info/wp-content/uploads/Informe-Noctambulas-2014-2015.pdf (accessed on 5 June 2021).
- Observatorio Noctámbul@s. 2016. 3o Informe Anual 2015–2016. Available online: https://www.drogasgenero.info/wp-content/uploads/3er-Informe-Anual-Observatorio-Noctambul@s-2015-2016.pdf (accessed on 5 June 2021).
- Observatorio Noctámbul@s. 2017. 4o Informe Anual 2016–2017. Available online: https://www.drogasgenero.info/wp-content/uploads/4InformeNoct_2016-201717.pdf (accessed on 5 June 2021).
- Observatorio Noctámbul@s. 2018. 5o Informe Anual 2017–2018. Available online: https://www.drogasgenero.info/wp-content/uploads/5InformeNoctambulas_2017-18.pdf (accessed on 5 June 2021).
- Oviedo, Heidi C., and Adalberto Campo-Aria. 2005. Aproximación al uso del coeficiente Alpha de Cronbach. *Revista Colombiana de Psiquiatría* 34: 572–80.
- Payne, Diana L., Kimberly A, Lonsway, and Louise F. Fitzgerald. 1999. Rape myth acceptance: Exploration of its structure and its measurement using Illinois Rape Myth Acceptance Scale. *Journal of Research in Personality* 33: 27–68. [CrossRef]
- Pérez López, César. 2009. Técnicas Estadísticas Multivariantes con SPSS. Madrid: Ibergaceta Publicaciones.
- Plaza-Vidal, Rolando, Marcela Ibagon-Parra, and Pablo Vallejo-Medina. 2020. Spanish translation, adaptation and validation of the Multidimensional Condom Attitudes Scale with Young Colombian Men and Women. *Archives of Sexual Behavior* 50: 2729–40. [CrossRef] [PubMed]
- Potter, Margaret, Sandy Gordon, and Peter W. Hamer. 2004. The Nominal Group Technique: A useful consensus methodology in physiotherapy research. NZ Journal of Physiotherapy 32: 70–75.
- Prego-Meleiro, Pablo, Gemma Montalvo, Óscar Quintela-Jorge, and Carmen García-Ruiz. 2020. Increasing awareness of the severity of female victimization by opportunistic drug-facilitated sexual assault: A new viewpoint. Forensic Science International 315: 110460. [CrossRef] [PubMed]
- Quackenbush, Robert L. 1989. A comparison of androgynous, masculine sex-typed, and undifferentiated males on dimensions of attitudes toward rape. *Journal of Research in Personality* 23: 318–42. [CrossRef]
- Robles, José M., Julia Atienza, Daniel Gómez, and Juan A. Guevara. 2019. La polarización de "La Manada": El debate público en España y los riesgos de la comunicación política digital. *Tempo Social* 31: 193–216. [CrossRef]
- Romero, Mónica. 2012. Percepción Social de las Agresiones Sexuales Hacia Mujeres: El Papel del Alcohol y los Mitos Sobre la Violación. Granada: Universidad de Granada.
- Saldívar Hernández, Gabriela, Alberto Jiménez Tapia, Reyna Gutierrez Reynaga, and Martha Romero Mendoza. 2015. Sexual coercion associated with the myths of rape and sexual attitudes in college students. Salud Mental 38: 27–32. [CrossRef]
- Sanyal, Mithu. 2019. Violación. Aspectos de un crimen, de Lucrecia al #MeToo. Barcelona: Penguin Random House.
- Schlegel, Agnès, and Robert Courtois. 2019. Scales for evaluating the Acceptance of the Rape Myth: Benefits and limitations. *International Journal of Risk and Recovery* 2: 23–26. [CrossRef]
- Schuller, Regina A., and Anne-Marie Wall. 1998. The effects of defendant and complainant intoxication on mock jurors' judgments of sexual assault. *Psychology of Women Quarterly* 22: 555–73. [CrossRef]
- Schuman, Howard, and Stanley Presser. 2017. Preguntas y Respuestas en Encuestas de Actitud. Experimentos con Formatos de Preguntas, Redacción y Contexto. Madrid: Centro de Investigaciones Sociológicas.
- Sinko, Laura, Michelle Munro-Kramer, Terri Conley, and Denise Saint Arnault. 2020. Internalized Messages: The role of sexual violence normalization on meaning-making after campus sexual violence. *Journal of Aggression, Maltreatment and Trauma* 30: 565–85. [CrossRef]
- Sipsma, Eric, José-Antonio Carribles, Ignacio Montorio Cerrato, and Walter Everaerd. 2000. Sexual Aggression Against Women by Men Acquaintances: Attitudes and Experiences among Spanish University Students. Spanish Journal of Psychology 3: 14–27. [CrossRef]

- Steinmetz, Holger, Michael Bosnjak, and Rodrigo Isidor. 2020. Meta-analytische Strukturgleichungsmodelle. Potenziale und Grenzen illustriert an einem Beispiel aus der Organisationspsychologie [Meta-analytical Structural Euqation Modeling. Potentials and Limitations Illustrated with an Example from Organizational Psychology]. *Psychologische Rundschau* 71: 111–18. [CrossRef]
- Swim, Janet, Kathryn J. Aikin, Wayne S. Hall, and Barbara Hunter. 1995. Sexism and racism: Old-fashioned and modern prejudices. *Journal of Personality and Social Psychology* 68: 199–214. [CrossRef]
- Tardón, Bárbara. 2017. La Violencia Sexual: Desarrollos Feministas, Mitos y Respuestas Normativas Globales. Madrid: Universidad Autónoma de Madrid.
- Velte, Samara. 2019. Yo sí te creo. La Cultura de la Violación y el Caso de Sanfermines. Tafalla: Txalaparta.
- Ventura-León, José Luis. 2017. Intervalos de confianza para coeficiente Omega: Propuesta para el cálculo. *Adicciones* 30: 77. [CrossRef] Ventura-León, José Luis, and Tomás Caycho-Rodríguez. 2017. El coeficiente Omega: Un método alternativo para la estimación de la confiabilidad. *Revista Latinoamericana de Ciencias Sociales*, *Niñez y Juventud* 15: 625–27.
- Rose Marie Ward, Molly R. Matthews, Judith Weiner, Kathryn M. Hogan, and Halle C. Popson. 2012. Alcohol and Sexual Consent Scale: Development and Validation. *American Journal of Health Behavior* 36: 746–56. [CrossRef] [PubMed]





Article

Stifled Screams: Experiences of Survivors of Sexual Harassment in First-Generation Universities in Southwestern Nigeria

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Abstract: The aim of this study was to explore the lived experience of survivors of sexual harassment, as well as reportage factors and outcomes, psychosocial sequelae, and how survivors coped in first-generation higher-education institutions in Southwestern Nigeria. A qualitative exploration of the experience of 12 (11 females and 1 male) participants using in-depth interviews was conducted. The findings were grouped into four broad themes, namely: (i) experience of sexual harassment, (ii) reporting patterns, (iii) coping strategies, and (iv) the physical and emotional impact of sexual harassment. Most survivors had experienced sexual harassment multiple times and same-sex harassment occurs in higher-education institutions. Survivors did not report to university authorities because of the perception that the support from the environment was poor. Many shared information with their support networks or visited a psychologist for mental health care. Others used maladaptive coping mechanisms such as increased alcohol consumption. Mental health symptoms ranged from mild to severe. Institutes of higher education need to take decisive actions to improve the environment and to promote the prompt reporting of sexual harassment by survivors; they must also provide access to support to prevent the development of mental health problems, which are a common post-event occurrence, as identified in the present study.

Keywords: sexual harassment; Southwestern Nigeria; universities; survivors

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1. Introduction

Globally, there is a pervasive culture of silence around sexual harassment, especially in higher-education settings, despite it being widespread and a recurring problem (National Academies of Sciences and Medicine 2018). Sexual harassment is often the result of the power imbalance in these settings (National Academies of Sciences and Medicine 2018; Ogunbamero 2006; Imonikhe et al. 2012; Gaba 2010), partly because it is not easy to define (Joseph 2015; Bello 2020). Sexual harassment often includes quid pro quo harassment which is typified by exchanging sex for benefits (performance or academic favors), and or to avoid some form of disadvantage (e.g., a demotion at work or academic failure). It is often perpetrated in a hostile environment, where speech or conduct creates an intimidating or humiliating environment that negatively affects an individual's academic or job performance (MacKinnon and MacKinnon 1979; Equal Employment Opportunity Commission 1997).

Sexual harassment is often associated with physical and verbal assault, emotional violence, bullying, coercion, discrimination, and intimidation, which often affect the physical and emotional health of the survivor (National Academies of Sciences and Medicine 2018). These effects include suboptimal academic fulfillment resulting from absenteeism, changing courses or advisors, and even leaving school entirely (Huerta et al. 2006; Fitzgerald 1990); psychological distress with symptoms of depression, stress, and anxiety, self-blame, lowered self-esteem and impaired psychological well-being (Bond et al. 2004; Cortina et al. 2002; Langhout et al. 2005; Lim and Cortina 2005; Taiwo et al. 2014); and physical health issues such as headaches, exhaustion, sleep problems, gastric problems, nausea, respiratory complaints, musculoskeletal pain, and weight loss or gain (De Haas et al. 2009; Wasti et al. 2000). Sexual harassment committed by a superior is sometimes more harmful than peer-perpetrated harassment (O'Connell and Korabik 2000).

Sexual harassment in colleges and universities is grossly underreported (Joseph 2015). This is often because of unequal power relations, a fear of the loss of one's status, marks, or job as retaliation, and the attendant stigma that it brings. Survivors cope with sexual harassment in many ways including ignoring or appeasing the harasser or seeking social support (National Academies of Sciences and Medicine 2018). Higher rates of sexual harassment are reported in environments that tolerate sexual harassment, as is reflected by the absence of institutional responses to complaints, failure to sanction perpetrators, and protecting complainants from retaliation (National Academies of Sciences and Medicine 2018). The silence around sexual harassment is widespread in higher-education institutions in Nigeria. Several studies have investigated its prevalence and associated factors in Nigeria (Owoaje and Olusola-Taiwo 2010; Okeke et al. 2021) but few have explored the reasons why sexual harassment is underreported, what can be done to improve reporting, and the lived experience of survivors.

The present study recognizes that sexual harassment is a multidimensional problem. This study was therefore framed using multiple theoretical frameworks to identify the factors associated with the reporting of sexual harassment by students in higher-education institutions in Nigeria. The sex role spillover theory, which highlights the carryover of gender-based roles into workspaces, explains why the biological and socio-cultural dominance of men over women in societies makes the education space more likely to be accepting of men (as superiors) responding sexually towards women (Gutek and Morasch 1982). The hierarchical structure of the higher institutions entrenches power and authority relations, which implicitly encourage harassment based on embedded power relations between men and women, as highlighted by the organizational theory (Gruber 1992). This power imbalance can also be extended to the lecturer-student relationship. Sociocultural theory highlights that the socialization of men into roles of sexual assertion and women as submissive makes sexual harassment a way for men to express dominance; hence, they are more likely to be the perpetrators and females the most likely victims (Kitzinger and Thomas 1997). This present study, however, conceptualized survivors and perpetrators based on the unequal power relations between male and female students and also between students and lecturers.

There is, however, a lack of a conceptual framework for the study of sexual harassment responses and coping mechanisms, which constitute a multidimensional construct that cannot be represented by a single continuum. We recognize that responses vary from self-focused responses (coping strategies that do not involve the perpetrator) to initiator-focused responses (addressing the perpetrator and the event directly, such as by reporting the case) (Knapp et al. 1997). The present study explored both forms of response and assessed the impact of the forms of response on the social and mental health sequelae of sexual harassment among survivors.

The present study aimed to investigate the experience of sexual harassment by men and women in heterosexual and same-sex situations in first-generation universities in South West Nigeria. We explored the lived experience of SH survivors, the social and mental health sequelae of sexual harassment among survivors, factors associated with reportage, the outcome of reportage, and how survivors coped and their recommendations for their institutions.

2. Materials and Methods

The present study is part of a larger mixed-method study (Mapayi et al. 2023) that was conducted in three Nigerian universities to explore the perceptions that drive heterosexual and same-sex sexual harassment among students and staff, the institutional mechanisms that exist to prevent and respond to sexual harassment, the social and mental health consequences among survivors, determinants of the decision to report, the resultant actions taken, and the lived experience of survivors.

Study design: the present report is a qualitative study using in-depth interviews (IDIs) to explore the reporting of sexual harassment, coping strategies, and the impact of sexual harassment on the social and mental health of student survivors who experienced sexual harassment in first-generation higher-education institutions in South West Nigeria, where the culture is largely homogenous.

Study sites: the study sites were the oldest public universities that were established between the end of the 1940s and the beginning of the 1960s. These were the University of Ibadan, the Obafemi Awolowo University, and the University of Lagos (Statista 2018). These universities have a large student and staff population from all the major tribes in Nigeria.

Sample: the target population for this study comprised students of the selected universities. Only students who were above 18 years old, who had survived sexual harassment, and who gave consent for study participation were recruited for the study. Students who were physically or emotionally ill and could not participate in the study were excluded. Students who consented took part in this research study between August and December 2022. Participants were able to read and communicate in the English language.

Procedure: a purposive participant selection approach was adopted to identify and recruit survivors. Recruitment was conducted through interactions with the core units of each of the three universities (the Directorate of Student Affairs, counseling, security, personnel units, and centers for gender studies) that have had interactions with sexual harassment survivors. Key officers in these units interacted with the survivors and introduced the study to them, and interested study volunteers were referred to the study team. Participants consented, and the medium for the conduct of the interviews (face-to-face interview, telephone interview, or video interview), as well as the day and time for the IDI, was chosen by the study participants. The interviews explored the experience and the consequences of sexual harassment by the survivor, whether the event was reported or not, the outcomes of either decision, the perception of the outcome, and how the survivor coped. The interview process ensured privacy, confidentiality, and the participants' freedom to share their experiences without reservation. Research assistants were trained on how to offer psychological first aid to survivors as well as psychological support to cope with vicarious trauma.

Instruments: the interview guide used for the present study was developed by the authors after a desk review of similar studies in the global literature. This guide was shared with survivors and other stakeholders during the community entry stakeholders' meetings for their inputs and revisions. The guide was then revised with input from survivors before use.

Data analysis: analysis of the interviews commenced with the verbatim transcription of the audio recordings. The accuracy, integrity, and completeness of all transcriptions were verified by passing the transcripts through 2-level proofreading. At each level, the recordings were listened to and read along with the typed transcripts to ensure all transcription discrepancies were corrected. Thereafter, all transcripts were coded by three experts, a thematic analysis was conducted using NVivo 12 Pro, and areas of divergence were resolved through discussions between the study leads (M.B.M., O.I.O., and O.J.O.). Deductive analysis was conducted, and the findings were synthesized and presented in response to the research questions.

Ethical considerations: the research protocol was submitted for ethical review and approval received from the Institute of Public Health Research Ethics Committee (IPH/OAU/12/2028), Obafemi Awolowo University; the University of Ibadan Health Research Ethics Committee (UI/EC/22/0313); and the University of Lagos Health Research Ethics Com-

mittee (CMUL/HREC/08/22/1082). Written consent was obtained from the participants. Confidentiality was ensured and psychological first aid was offered to all participants. Referrals for therapy were made for participant who exhibited or reported distress.

3. Results

3.1. Background Information

Four IDIs were conducted in each of the three institutions. In all, 18 people were approached at the three universities. Two did not meet the inclusion criteria (they were not students when the sexual harassment occurred) and four declined to participate. The non-responders were mostly sexual minority individuals who had been sexually harassed by male lecturers and students. One female respondent declined because she was not ready to tell her story.

The ages of the 12 participants that consented and were interviewed at the time the sexual harassment occurred ranged between 18 and 25 years. All survivors were students and ten survivors knew the perpetrator. There were 11 female participants and 1 male participant. The forms of the sexual harassment experienced ranged from physical touch to assault, attempted rape, and rape. The locations of the incidents included the perpetrator's abode or office, a lecture room/theatre, the school library, and a party (Table 1). The results are grouped into four broad themes, namely, (i) the experience of sexual harassment, (ii) reporting patterns, (iii) coping strategies, and (iv) the physical and emotional impact of sexual harassment.

3.2. Experience of Sexual Harassment

For this study, the experience of SH ranged from physical touch to assault, attempted rape, and rape. The perpetrators of sexual harassment ranged from students (n=6) to lecturers (n=5) and non-academic staff (n=1). Half of the survivors (n=6) had experienced sexual harassment multiple times.

"This was in a public area, the library, we were just talking, and then all of a sudden, he just grabbed me and started touching me in sensitive parts. And I was telling him to stop but he kept on doing it." (Female survivor 1 Uni 3)

"I think it has created a pattern where in sexual experiences I tend to be taken advantage of generally and I think that's what has led to this repetitive sexual assault." (Male survivor 2 Uni 1)

3.3. Reporting Pattern of Sexual Harassment

The formal reporting of cases of sexual harassment was poor. Only three of the survivors reported the event to the school authorities, while none reported it to a law-enforcement agency. Reasons for not formally reporting ranged from avoiding stigma (n = 7), the feelings of internal self-blame, guilt, and shame (n = 5), to poor handling of previously reported cases by the school authorities (n = 4), to the protection of the perpetrators (n = 3), and the highly influential positions of the perpetrator's families (n = 3). Further reasons for not reporting include a perception of not having enough proof (n = 3); the fear of negative repercussions following reportage (n = 3); being begged not to report (n = 2); unsupportive staff (n = 1); and past negative experiences with law-enforcement agents (n = 1) (Table 2).

"When the lecturers came and asked me what happened and I told them they were begging me to leave him alone when they heard that he was a student with a carryover You know. people that are even much older than my mum was kneeling for me. I did not have any choice." (Female survivor 5 Uni 2)

"The last time I tried to report to law enforcement, they were like Oh, wow when they saw blood all over me. The moment the guy appeared and they know he is a cultist they were like I should better run away for my life." (Female survivor 5 Uni 2)

"... I feel like it is my fault and there is something that I could have done to change it but I did not so, I just have to just leave it and live with the pain and guilt." (Female survivor 11 Uni 3)

One survivor who experienced same-sex sexual harassment did not report it to protect the identity and reputation of the sexual minority community and the perpetrator.

"I felt it was homosexual, and was also protecting him and preserving the person's reputation. I know how hard it is for non-traditional men when it comes to sexuality and so, I just didn't take it up." (Male survivor 2 Uni 1)

3.4. Coping Strategies for Sexual Harassment

The identified coping strategies for sexual harassment by survivors were categorized into normalization, engagement, help-seeking, and detachment. Normalization encompasses acceptance, denial, refusal, grief, silence, and tolerance. Engagement involves confrontation, negotiation, retaliation/threatening, and discrimination of the perpetrators. Help-seeking involves discussing with friends, complaining to school authorities, consulting professionals, and confronting perpetrators. Lastly, detachment includes withdrawal, distancing, or leaving school (Worke et al. 2021). Some of these strategies can be maladaptive, with significant negative impacts on the lives of survivors (Ford and Ivancic 2020). According to the current study, survivors used several coping mechanisms ranging from talking with peers, joining a church community and receiving support from the church, joining social clubs, and heavy drinking; two survivors sought professional help. One survivor developed a risky fetish.

"I started drinking a lot. I drank heavily around that period. The alcohol was temporary for that moment you forget" (Female survivor 4 Uni 1)

"I joined like my church community . . . I was able to tell my pastor (hmm) and I really like the way he's handling it . . . " (Female survivor 1 Uni 1)

"Then I talked to a therapist . . . a psychiatrist . . . I just had to . . . because it was just messing with my head." (Female survivor 4 Uni 1)

"I think at some point, I felt it was a badge of honor to have a sexual encounter with a lecturer, but I started realizing how problematic that is. I had started fetishizing power play being at the receiving end of the entire thing and people using their power to get sexual favors from me. I started fetishizing that." (Male survivor 2 Uni1)

Most of the survivors (n = 9) shared their experiences of sexual harassment with close friends, roommates, and family members. The three survivors who had not disclosed their experience to anyone before the interview were concerned about being blamed and judged by others.

3.5. The Physical and Emotional Impacts of Sexual Harassment

Participants in the current study felt a range of emotions following the sexual harassment. Half (n = 6) felt sad, depressed, or low; five felt bad, awful, terrible, traumatized, or horrible; and four reported crying and being teary. Other emotions that were felt include feeling used, angry, and guilty. The majority (n = 9) became suspicious of men or people, stopped trusting men/people, were scared of men, or did not feel safe around men. Some had suicidal thoughts and flashbacks of the event, or became clinically depressed.

"I feel like it's becoming a problem for me because, at this age, I don't want to be emotionally attached to anybody, any male, My Twitter account was banned because a lot of people reported my account because I always talk about my hate for men. I just don't see that gender as a gender I want to like spend the rest of my life with, I feel I'm better off being alone." (Female survivor 1 Uni 1)

"Instead of me being totally disgusted, I think it made me want to have other sexual experiences with maybe someone that was also a staff and maybe older than me. I think it kind of intensified the reason to be submissive in a power game." (Male Survivor 2 Uni 1)

Table 1. Background information on survivors of sexual harassment.

1. Sunvi/Unil Female 2 19 Total Pode Male Lecturer's apartment Self-blame No. Suncidad No. Suncidad and miltiple No. dill plane Opposition of the analysis of the control of the contr	S/No	Code	Sex	Age	Age at SH	Level at SH	Type of SH	Sex of Perp	Role of Perp	Location of SH	Emotions after SH	Tell Any- one?	Psychosocial Sequelae	Reportage	Reasons for Not Reporting	Coping Mecha- nism
Surv2/Unil Female 21 20 Rape Male Lecturer Lecturer Felt tiened Year, Suspticious Suspticious No Protecting perpetation Surv3/Unil Female 13 17 100 L Rape Male Student Perprise Felt used parents Yea, Trising people Yea, Gepperation School Peopperation Surv3/Unil Female 23 20 400 L Rape Male Student Lecturer Felt used parents Yea, Findents No Peopperation Surv5/Uni2 Female 22 20 400 L Attempted Male Student Lecturer Lecturer Felt used parents Yea, Felt people No People people No People people Surv5/Uni2 Female 22 100 L Rape Male Student Lecturer Lec	1.	Surv1/Uni1	Female	22	19	100 L	Tapped her buttocks	Male	Lecturer	Lecturer's apartment	Self-blame	No	Suicidal thoughts	No	Fear, people will blame me	My church commu- nity
Surv3/Unil Female 17 100L Rape Male Student Pemps Felt used Yes, are ments Stopped numbral Yes Reported numbral No. 9 Perpetation numbral No. 9 Perpetation numbral Perpetation numbral No. 1	5		Male	21	20	200 L	Rape	Male	Lecturer	Lecturer's apartment	Felt dirty, devalued	Yes, friends	Suspicious of people	No	Protecting the perpetrator	Talked to friends
Surv3/Uni2 Female 2 2 400 L Rape Male Lecturer Perp's Betrayed, friend Yes, Flashbacks, friend No. Survaluable depression, and depression, and depression, and an analysing and	છ	Surv3/Uni1	Female	19	17	100 L	Rape	Male	Student	Perp's apartment	Felt used	Yes, parents	Stopped trusting men	Yes— school	Reported	Avoidance
Surv3/Uni2 Female 2 100 L Attempted Male Student Lecture room Cried of friends friends friends trust people friends No Begged not to report to roeport Surv6/Uni2 Female 2 19 200 L Rape Male Student Lecture awind Surpisedfelt room man Trusting No Evidence roided room friends Surv6/Uni2 Female 26 2 100 L Rape Male Student Lecturer's friends Steption No Evidence roided room friends Surv9/Uni3 Female 25 2 2 Chabbed bed bed bed bed bed bed bed bed bed	4,	Surv4/Uni1	Female	23	20	400 L	Rape	Male	Lecturer	Perp's office	Betrayed, dirty	Yes, friend	Flashbacks, depression, Suspicion	No	Perpetrator was 'un- touchable'	heavy alcohol drinking
Surv7/Uni2 Female 25 19 200 L Groped Male Student Lecturer integrated Surprisedled room mate mate awful mate integrated in the student in the student integrated in the stu	ю	Surv5/Uni2	Female	22	20	100 L	Attempted rape	Male	Student	Lecture	Felt low, Cried	Yes, Her friends	Does not trust people	No	Begged not to report	heavy alcohol drinking
Surv8/Uni2 Female 25 25 200L Rape Male Cecturer Lecturer's triends of people Rabbed Male Student Aparty Surv8/Uni3 Female 21 17 100L Kissing, Male Student Library Surv1/Uni3 Female 20 10 200L Attempted Male Student Pept's Triends Aparty Relt guilty, Yes, a Stopped Men Student Relating Surv11/Uni3 Female 20 100L Kissing, Male Student Pept's Triends Aparty Relt guilty, Yes, a Scared of No Geveryone No of everyone No of every	.9	Surv6/Uni2	Female	22	19	200 L	Groped	Male	Student	Lecture theatre	Surprisedfelt awful	Yes, room mate	Stopped trusting men	No	Lack of evidence	Joined 'Kegite club'
Surv8/Uni3 Female 25 20 Labbed Male Student A party Surv1/Uni3 Female 20 19 100 Labbed Male Student Surv1/Uni3 Female 20 20 Labbed Male Student Surv1/Uni3 Female 20 20 Labbed Male Student A party Surv1/Uni3 Female 20 20 Labbed Male Student A party Surv1/Uni3 Female 20 20 Labbed Male Student A party Surv1/Uni3 Female 20 20 Labbed Male Student A student A party Surv1/Uni3 Female 20 20 Labbed Male Student A student A party Surv1/Uni3 Female 20 20 Labbed Male Student A stary A student A stary A student A stary A student A stary A student A stud	7.	Surv7/Uni2	Female	26	25	100 L	Rape	Male	Staff	Perp's apartment	traumatized, bad	Yes, her friends	Suspicious of people	No	Fear of effect on reputation	Plays music, Avoidance
Surv9/Uni3 Female 22 11 200L her buttock Male Student A party Sad, angry friends friends Student A party Surv1/Uni3 Female 20 19 100L kissing, Broping Surv12/Uni3 Female 20 20 200L Attempted Male Student hostel hostel felt guilty, Nes, a Suspicious No Geveryone Survial field guilty and teary friends Mole Student hostel felt guilty No Geveryone No Geveryone No Geveryone Judgment	∞	Surv8/Uni2	Female	25	25	200 L	Rape	Male	Lecturer	Lecturer's office	Felt depressed	No	People talking about her	Yes—school	Reported	A CSO Prayers
Surv10/Uni3 Female 20 19 100 L Attempted Male Student apartment bad, tearly close trusting men trouchable' men bad, tearly friends men trouchable' was 'un-touchable' bad, tearly friends men bad, tearly friends men trouchable' bad, tearly friends men trouchable' bad, tearly friends men bad, tearly friends men bad, tearly friends men judgment judgment between Judgment hostel felt guilty. No Suspicious No deveryone judgment j	6	Surv9/Uni3	Female	22	21	200 L	Grabbed her buttock	Male	Student	A party	Sad, angry	Yes, friends	Flashbacks	Yes—school	Reported	
Surv11/Uni3 Female 20 19 100 L kissing, Male Student Library and teary friend men judgment groping Male Student Perp's Teary and Suspicious No of everyone Feared Surv12/Uni3 Female 20 20 200 L Attempted Male Student hostel felt guilty No of everyone judgment judgment	10.	Surv10/Uni3	Female	21	17	100 L	Attempted rape	Male	Student	Perp's apartment	Felt really bad, teary	Yes, close friends	Stopped trusting men	No	Perpetrator was 'un- touchable'	Support from friends
Surv12/Uni3 Female 20 20 200 Attempted Male Student Perp's Teary and No Suspicious No others' judgment judgment	11.	Surv11/Uni3	} Female	20	19	100 L	Forceful kissing, groping	Male	Student	Library	Felt guilty, and teary	Yes, a friend	Scared of men	No	Feared others' judgment	Support from friends
	12.	Surv12/Uni3	Female	20	20	200 L	Attempted rape	Male	Student	Perp's hostel	Teary and felt guilty	No	Suspicious of everyone	No	Feared others' judgment	Crying

 Table 2. Reasons for not reporting the experience of sexual harassment.

S/No	Reasons for Not Reporting Sexual Harassment	Surv1/Uni1	Surv2/Uni1	Surv4/Uni1	Surv5/Uni2	Surv6/Uni2	Surv7/Uni2	Surv10/Uni3	Surv10/Uni3 Surv11/Uni3 Surv12/Uni3	Surv12/Uni3
1.	Stigma	>			>		>	>	>	
2.	Self-blame, guilt, and shame	>				>		>	>	>
6	Outcome of previous cases	>		>				>	>	
4	Lack of evidence	>		>		>				
5.	Lack of courage to report or fear of a negative repercussion	>		>						>
6.	The belief that the system would protect the perpetrators			>				>		
7.	The perpetrator's family is highly influential			>				>		
80	People not believing them over the perpetrator	>		>						
.6	People begging them not to report				>					
10.	Not wanting their parents to find out								>	>
11.	Protecting the identity of the perpetrator		>							
12.	Previous encounters with law enforcement agents				>					
13.	Took pride in the encounter		>							
14.	The attitude of other members of staff	>								

4. Discussion

This is the first study conducted in Nigeria to explore the experiences of survivors of sexual harassment in higher institutions, despite the multiple reports and publications on the occurrence of this phenomenon (Akpotor 2013; Bello 2020; Imonikhe et al. 2012; Ladebo and Shopeju 2004; Ogunbamero 2006; Okeke et al. 2021; Omorogiuwa 2018; Onasoga et al. 2019; Suleiman 2017; Taiwo et al. 2014). This study found that survivors had experienced sexual harassment from diverse community members of higher-education institutions; most participants do not report cases of sexual harassment; both adaptive and maladaptive coping strategies are used; and most survivors experience short- and long-term physical and mental health difficulties associated with their experience of sexual harassment.

Similarly, to the findings of other studies (Rosenthal et al. 2016; Wood et al. 2021), the survivors we interviewed had experienced sexual harassment perpetrated by students and academic and non-academic staff members of their institution. Additionally, as was the case in other studies, (Cantor et al. 2015; Sivertsen et al. 2019), sexual harassment took many forms including unwanted physical contact, sexual advances, sexual comments, and rape.

Unlike any prior report in the literature on sexual harassment in Nigeria, our study determined that sexual minority individuals also experience sexual harassment from faculty members. This is an under-explored area of research in Nigeria, where there is a culture of silence not only around rape but also around sexual identity (Makanjuola et al. 2018; Ojoniyi 2018). The stigma and the physical and emotional consequences of openly identifying as a gender minority individual in Nigeria increases the risk of the non-reporting of sexual harassment by community members. Same-sex relationships are criminalized in Nigeria (Adamu 2019) and some survivors may struggle with their sexual expression and report greater sexuality-related stigma after the experience (Davies 2002). These factors may impede the survivor from reporting the incident and seeking support, thereby increasing the risk for the experience to have a long-term mental health impact. A past study indicated that sexual minority individuals were more likely than straight individuals to report sexual harassment and sexual abuse (Smith et al. 2022). The reasons for their high risk for sexual harassment are poorly understood, though they may be related to homophobic attacks in the form of harassment (Lauckner et al. 2019). Our study did not explore this context either. However, we noted that some other survivors and the sexual minority interviewee had experienced sexual harassment multiple times.

The immediate management of all sexual harassment survivors may reduce the health impact of sexual harassment. We observed that some survivors sought support from friends and family, counseling services and support groups, engaged in self-care activities, or had sought legal action in the past. These actions were all self-driven and not supported by the institutions where the event took place. While it may have been possible for the institution to offer therapeutic support, it appears that the environment in higher-education institutions in Nigeria makes access to and uptake of such services difficult for survivors (Behre 2017; Linder and Myers 2018). Where access to therapeutic support is limited, as it may be in the case of sexual minority individuals, individuals may resort to the adoption of maladaptive coping strategies such as the use of psychoactive substances that can increase the risk for further sexual harassment (Oginni et al. 2019; Filipas and Ullman 2006).

When sexual harassment happens between peers, the perpetrator is often perceived to have greater personal power, and there was a repeated history of harassment. Most survivors of sexual harassment in schools had had multiple such experiences (Rapidah et al. 2017). The perceived causes of the repeated experience of sexual harassment are keeping silent and not reporting the offenders, the use of alcohol and drugs, the portrayal of women as sex objects in the media, inadequate security on campus, and indecent dressing (Onasoga et al. 2019). Generally, individuals who have experienced sexual violence or trauma in the past may be more vulnerable to sexual harassment (Follette et al. 1996). This can be due to feelings of shame and guilt, or a lack of trust in others (Vidal and Petrak 2007). They may also utilize risky behaviors, such as substance use, which can increase the likelihood of sexual harassment, as they can impair a person's judgment and ability to protect themselves

from unwanted advances (Caron and Mitchell 2022). The repeated nature of sexual harassment can make it particularly difficult for victims to address or report, as they may feel intimidated or fear retaliation (Wright and Bean 1993). Repeated sexual harassment can create a toxic and hostile environment, affecting not only the victim but also their ability to learn, work, or participate in social activities (Schneider et al. 1997; National Academies of Sciences and Medicine 2018). It can lead to feelings of isolation, anxiety, depression, and post-traumatic stress disorder (PTSD) among victims (Mason and Lodrick 2013).

Sexual harassment is associated with an increased risk of anxiety, depression, and posttraumatic stress disorder, as well as diminished self-esteem, self-confidence, and psychological well-being (Okeke et al. 2021). Some survivors may also withdraw from school, have worsening school grades, or start to engage in risky sexual behaviors (Kaltiala-Heino et al. 2018). As depicted by the results of this study, sexual harassment survivors reported experiencing all the listed emotional and mental health challenges inclusive of academic difficulties and physical health problems (Duffy et al. 2004; Huerta et al. 2006; Cortina et al. 2002; Langhout et al. 2005; Lim and Cortina 2005; Taiwo et al. 2014). Considering that not all participants demonstrated mental health difficulties, these mental health difficulties may be more pronounced in those with pre-existing genetic risks (Manuck and McCaffery 2014). Alternatively, given the stigma associated with mental health disorders (Adewuya and Makanjuola 2008), some participants may have been unwilling to disclose these difficulties during the interview. Some survivors utilized maladaptive coping strategies such as drinking alcohol excessively as a means of dealing with the trauma experienced, while others found solace in the communities around them and received positive support from those communities. This is viable option for survivors, which can be strengthened by raising awareness in all communities (Holland and Cortina 2017; Scarduzio et al. 2018).

There are multiple reports on the silence around sexual harassment and sexual abuse in Nigeria (Ajuwon and Adegbite 2008; Akoja and Anjorin 2020; Awaah 2019). While the #MeToo movement had tremendous impacts in the US and parts of Europe (Hillstrom 2018; Sweeny 2020), the same cannot be said for other parts of Europe (Gersen 2017) and Nigeria, where the culture of silence is still rife. As indicated in the present study, the culture of silence is heightened when perpetrators are spared the physical fear of being prosecuted and survivors are begged to remain silent, their 'screams stifled into silence', and they live with the invisible scars of emotional trauma. Other reasons that were identified earlier are the fear of retaliation, the fear of not being believed, the fear of being stigmatized, shame, blame, and embarrassment, a lack of trust in the institution's ability to be just and fair, the belief that nothing will change, the feeling of helplessness and a lack of agency, the desire for privacy, concerns about one's career or academic advancement, trauma, and emotional distress (Spencer et al. 2017; Alaggia and Wang 2020; Caron and Mitchell 2022).

The limitations of this study included the presence of the researcher during the data gathering, considering the sensitive nature of the subject; however, this was mitigated by offering different platforms for the interviews and, indeed, all survivors opted for the virtual interface as opposed to face-to-face interviews. Another limitation is that, because of the issues around same-sex relationship criminalization in Nigeria, a number of same-sex sexual harassment survivors declined to participate in the study.

The implications of the findings from the present study call for universities to improve their support resources for survivors of sexual harassment. The need to educate the campus community on ways to offer support during and after disclosures is essential, as many survivors seek help from the community around them. Institutions must create a safe and supportive environment where victims feel empowered to report harassment and receive appropriate support and care, regardless of whether they choose to make a formal report (Smith and Freyd 2014). Hirsch and Khan (2020) offered an extensive discussion of the tortuous journey for survivors within a Columbia University in the book *Sexual Citizens*. At the same time, advocates working on sexual harassment should invest resources in increasing public awareness of the physical and emotional disorders associated with sexual harassment and improve the information for survivors on how to manage experiences

when they are 'screamed into silence' by multiple environmental factors that make the reporting of cases difficult. Future studies are needed to explore the trajectories of survivors who used positive coping strategies so that such successful approaches may be scaled up.

5. Conclusions

Sexual harassment occurs in higher-education institutions in Southwest Nigeria; survivors often do not report these incidents because of the perceived poor environmental support to do so. Moreover, survivors adopt adaptive and maladaptive coping mechanisms to deal with the emotional challenges associated with the experience of sexual harassment. Same-sex harassment also occurs in higher-education institutions in Nigeria. Future studies are needed to explore the factors that enable survivors to adopt adaptive rather than maladaptive coping strategies when dealing with sexual harassment, and efforts should be made to scale up these self-care-promoting factors in Nigerian higher-education institutions. Self-reports that delve into gender dynamics and sexual harassment may also help us to understand issues around repressed sexuality due to bans on same-sex relationships.

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References

Adamu, Hannatu. 2019. The Same-Sex Marriage Prohibition Act 2014: Nigeria's Rejection of a Western Secular Trend. *Usmanu Danfodio University Sokoto Law Journal* 1: 160–83.

Adewuya, Abiodun, and Roger Makanjuola. 2008. Social distance towards people with mental illness in southwestern Nigeria. Australian & New Zealand Journal of Psychiatry 42: 389–95.

- Ajuwon, Ademola J., and Olufunmilola Adegbite. 2008. Ethical and methodological challenges involved in research on sexual violence in Nigeria. Research Ethics 4: 3–9. [CrossRef]
- Akoja, Mofoluke I., and Abimifoluwa Glory Anjorin. 2020. Social media and women's culture of silence on sexual violence: Perception of Babcock University's female undergraduates. Communication Cultures in Africa 2: 1–27. [CrossRef]
- Akpotor, Julie. 2013. Sexism and sexual harassment in tertiary institutions. Gender and Behaviour 11: 5237-43.
- Alaggia, Ramona, and Susan Wang. 2020. "I never told anyone until the# metoo movement": What can we learn from sexual abuse and sexual assault disclosures made through social media? Child Abuse & Neglect 103: 104312.
- Awaah, Fred. 2019. Sexually transmitted grades and the Culture of Silence: Will female students blow the Whistle? In Selected Papers for COREVIP. Accra: Association of African Universities, pp. 55–72. ISSN 2704-4858.
- Behre, Kelly Alison. 2017. Ensuring Choice and Voice for Campus Sexual Assault Victims: A Call for Victims' Attorneys. *Drake Law Review* 65: 293.
- Bello, Paul O. 2020. Combating Sexual Harassment in Ivory Tower in Nigeria: Mixed feelings. Bangladesh e-Journal of Sociology 17: 173–89.
- Bond, Meg A., Laura Punnett, Jean L. Pyle, Dianne Cazeca, and Manuela Cooperman. 2004. Gendered work conditions, health, and work outcomes. *Journal of Occupational Health Psychology* 9: 28. [CrossRef]
- Cantor, David, Bonnie Fisher, Susan Chibnall, Shauna Harps, Reanne Townsend, Gail Thomas, Hyunshik Lee, Vanessa Kranz, Randy Herbison, and Kristin Madden. 2015. Report on the AAU Campus Climate Survey on Sexual Assault and Sexual Misconduct. Rockville: Westat.
- Caron, Sandra L., and Deborah Mitchell. 2022. "I've Never Told Anyone": A Qualitative Analysis of Interviews with College Women Who Experienced Sexual Assault and Remained Silent. Violence against Women 28: 1987–2009. [CrossRef]
- Cortina, Lilia M., Louise F. Fitzgerald, and Fritz Drasgow. 2002. Contextualizing Latina experiences of sexual harassment: Preliminary tests of a structural model. *Basic & Applied Social Psychology* 24: 295–311. [CrossRef]
- Davies, Michelle. 2002. Male sexual assault victims: A selective review of the literature and implications for support services. *Aggression and Violent Behavior* 7: 203–14. [CrossRef]
- De Haas, Stans, Greetje Timmerman, and Mechtild Höing. 2009. Sexual harassment and health among male and female police officers. Journal of Occupational Health Psychology 14: 390. [CrossRef] [PubMed]
- Duffy, Jim, Stacey Wareham, and Margaret Walsh. 2004. Psychological consequences for high school students of having been sexually harassed. Sex Roles 50: 811–21. [CrossRef]
- Equal Employment Opportunity Commission. 1997. Fact Sheet: Sexual Harassment Discrimination. Available online: https://www.eeoc.gov/laws/guidance/fact-sheet-sexual-harassment-discrimination (accessed on 12 June 2022).
- Filipas, Henrietta H., and Sarah E. Ullman. 2006. Child sexual abuse, coping responses, self-blame, posttraumatic stress disorder, and adult sexual revictimization. *Journal of Interpersonal Violence* 21: 652–72. [CrossRef]
- Fitzgerald, Louise F. 1990. Sexual Harassment: The Definition and Measurement of a Construct. In *Ivory Tower: Sexual Harassment on Campus*. Edited by Michele A. Paludi. Albany: State University of New York, vols. 21, 24–30, pp. 21–44.
- Follette, Victoria M., Melissa A. Polusny, Anne E. Bechtle, and Amy E. Naugle. 1996. Cumulative trauma: The impact of child sexual abuse, adult sexual assault, and spouse abuse. *Journal of Traumatic Stress* 9: 25–35. [CrossRef] [PubMed]
- Ford, Jessica L., and Sonia R. Ivancic. 2020. Surviving organizational tolerance of sexual harassment: An exploration of resilience, vulnerability, and harassment fatigue. *Journal of Applied Communication Research* 48: 186–206. [CrossRef]
- Gaba, S. 2010. Sexual Harassment in Nigeria tertiary institution. The Psychologist 5: 319–21.
- Gersen, Claire. 2017. Tagging onto #MeToo. Masters of Media. Available online: http://mastersofmedia.hum.uva.nl/blog/2017/11/16/tagging-onto-metoo/ (accessed on 23 February 2023).
- Gruber, James E. 1992. A typology of personal and environmental sexual harassment: Research and policy implications for the 1990s. Sex Roles 26: 447–64. [CrossRef]
- Gutek, Barbara A., and Bruce Morasch. 1982. Sex-ratios, sex-role spillover, and sexual harassment of women at work. *Journal of Social Issues* 38: 55–74. [CrossRef]
- Hillstrom, Laurie C. 2018. The# Metoo Movement. Santa Barbara: ABC-CLIO.
- Hirsch, Jennifer S., and Shamus Khan. 2020. Sexual Citizens: A Landmark Study of Sex, Power, and Assault on Campus. New York: WW Norton & Company.
- Holland, Kathryn J., and Lilia M. Cortina. 2017. "It happens to girls all the time": Examining sexual assault survivors' reasons for not using campus supports. *American Journal of Community Psychology* 59: 50–64. [CrossRef] [PubMed]
- Huerta, Marisela, Lilia M. Cortina, Joyce S. Pang, Cynthia M. Torges, and Vicki J. Magley. 2006. Sex and power in the academy: Modeling sexual harassment in the lives of college women. *Personality and Social Psychology Bulletin* 32: 616–28. [CrossRef]
- Imonikhe, Justina, Philipa Idogho, and Oyaziwo Aluede. 2012. A Survey of Teachers' and Students' Perception of Sexual Harassment in Tertiary Institutions of Edo State, Nigeria. *African Research Review* 5: 412–23.
- Joseph, Janice. 2015. Sexual Harassment in Tertiary Institutions: A Comparative Perspective. TEMIDA. pp. 125–44. Available online: http://www.doiserbia.nb.rs/img/doi/1450-6637/2015/1450-66371502125H.pdf (accessed on 4 January 2022).
- Kaltiala-Heino, Riittakerttu, Hanna Savioja, Sari Fröjd, and Mauri Marttunen. 2018. Experiences of sexual harassment are associated with the sexual behavior of 14- to 18-year-old adolescents. *Child Abuse & Neglect* 77: 46–57.

- Kitzinger, Celia, and Alison M. Thomas, eds. 1997. Sexual Harassment: Contemporary Feminist Perspectives. Oxford: Open University Press.
- Knapp, Deborah Erdos, Robert H. Faley, Steven E. Ekeberg, and Cathy L. Z. Dubois. 1997. Determinants of target responses to sexual harassment: A conceptual framework. *Academy of Management Review* 22: 687–729. [CrossRef]
- Ladebo, Olugbenga, and James Shopeju. 2004. Sexual harassment: Perceptions and coping strategies among undergraduate students in Nigeria. *Acta Academica* 36: 223–38.
- Langhout, Regina Day, Mindy E. Bergman, Lilia M. Cortina, Louise F. Fitzgerald, Fritz Drasgow, and Jill Hunter Williams. 2005. Sexual harassment severity: Assessing situational and personal determinants and outcomes. *Journal of Applied Social Psychology* 35: 975–1007. [CrossRef]
- Lauckner, Carolyn, Natalia Truszczynski, Danielle Lambert, Varsha Kottamasu, Saher Meherally, Anne Marie Schipani-McLaughlin, Erica Taylor, and Nathan Hansen. 2019. "Catfishing," cyberbullying, and coercion: An exploration of the risks associated with dating app use among rural sexual minority males. *Journal of Gay & Lesbian Mental Health* 23: 289–306.
- Lim, Sandy, and Lilia M. Cortina. 2005. Interpersonal mistreatment in the workplace: The interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology* 90: 483–96. [CrossRef]
- Linder, Chris, and Jess S. Myers. 2018. Institutional betrayal as a motivator for campus sexual assault activism. *NASPA Journal About Women in Higher Education* 11: 1–16. [CrossRef]
- MacKinnon, Catharine A., and Catharine A. MacKinnon. 1979. Sexual Harassment of Working Women: A Case of Sex Discrimination. New Haven: Yale University Press, vol. 19.
- Makanjuola, Olumide, Morenike Oluwatoyin Folayan, and Olakunle A. Oginni. 2018. On being gay in Nigeria: Discrimination, mental health distress, and coping. *Journal of Gay & Lesbian Mental Health* 22: 372–84.
- Manuck, Stephen B., and Jeanne M. McCaffery. 2014. Gene-environment interaction. *Annual Review of Psychology* 65: 41–70. [CrossRef] [PubMed]
- Mapayi, Boladale, Ibidun Oloniniyi, Olakunle Oginni, and Abigail Harrison. 2023. The sound of silence: A protocol for interrogating the culture around sexual harassment in federal universities in Southwestern Nigeria. *Unpublished*. [CrossRef]
- Mason, Fiona, and Zoe Lodrick. 2013. Psychological consequences of sexual assault. Best Practice & Research Clinical Obstetrics & Gynaecology 27: 27–37.
- National Academies of Sciences and Medicine. 2018. Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine. Washington, DC: The National Academies Press. [CrossRef]
- O'Connell, Colleen E., and Karen Korabik. 2000. Sexual harassment: The relationship of personal vulnerability, work context, perpetrator status, and type of harassment to outcomes. *Journal of Vocational Behavior* 56: 299–329. [CrossRef]
- Oginni, Olakunle A., Boladale M. Mapayi, Olusegun T. Afolabi, Ikenna D. Ebuenyi, Adesanmi Akinsulore, and Kolawole S. Mosaku. 2019. Association between risky sexual behavior and a psychosocial syndemic among Nigerian men who have sex with men. *Journal of Gay & Lesbian Mental Health* 23: 168–85.
- Ogunbamero, Olakunle A. 2006. Sexual Harassment in Nigeria Tertiary Institutions. Ibadan: Spectrum Books Ltd.
- Ojoniyi, Olabode W. 2018. Forbidden sexuality in Kunle Afolayan's October 1 contentious sexual space. *International Journal of Pedagogy, Innovation, and New Technologies* 5: 68–73. [CrossRef]
- Okeke, Nkechi U., Elizabeth I. Anierobi, and Anthony O. Ezennaka. 2021. Impact of sexual harassment on psychosocial adjustment of female undergraduate students in higher institutions in Anambra State. Social Sciences and Education Research Review 8: 198.
- Omorogiuwa, Tracy B. E. 2018. Sexual Harassment among University Students in Nigeria: Prevalence, Psychosocial Factors, and Prevention. *Bangladesh Education Journal* 17: 26–33.
- Onasoga, Olayinka A., Joel Adeleke Afolayan, F. M. Rejuaro, and Ozioma R. Onwordi. 2019. Perceived knowledge of causes and prevention strategies for sexual violence among university students in the Niger Delta region of Nigeria. *The Journal of Positive Psychology and Counselling* 3: 29–40.
- Owoaje, Eme T., and Omolara Olusola-Taiwo. 2010. Sexual Harassment Experiences of Female Graduates of Nigerian Tertiary Institutions. *International Q Community Health Education* 30: 337–48. [CrossRef] [PubMed]
- Rapidah, O., A. Shafini, S. Khalid, M. Masliza, and M. Nurulnadwan. 2017. Sexual harassment in campus: Awareness, risk factor, and effect among students in higher learning institutions. *Journal of Fundamental and Applied Sciences* 9: 1087–96. [CrossRef]
- Rosenthal, Marina N., Alec M. Smidt, and Jennifer J. Freyd. 2016. Still second class: Sexual harassment of graduate students. *Psychology of Women Quarterly* 40: 364–77. [CrossRef]
- Scarduzio, Jennifer A., Sarah E. Sheff, and Mathew Smith. 2018. Coping and sexual harassment: How victims cope across multiple settings. *Archives of Sexual Behavior* 47: 327–40. [CrossRef]
- Schneider, Kimberly T., Suzanne Swan, and Louise F. Fitzgerald. 1997. Job-related and psychological effects of sexual harassment in the workplace: Empirical evidence from two organizations. *Journal of Applied Psychology* 82: 401. [CrossRef]
- Sivertsen, Børge, Morten Birkeland Nielsen, Ida E. H. Madsen, Marit Knapstad, Kari Jussie Lønning, and Mari Hysing. 2019. Sexual harassment and assault among university students in Norway: A cross-sectional prevalence study. *BMJ Open* 9: e026993. [CrossRef]
- Smith, Carly Parnitzke, and Jennifer J. Freyd. 2014. Institutional betrayal. American Psychologist 69: 575. [CrossRef]

- Smith, Davey M., Nicole E. Johns, and Anita Raj. 2022. Do Sexual Minorities Face Greater Risk for Sexual Harassment, Ever and at School, in Adolescence? Findings From a 2019 Cross-Sectional Study of U.S. *Adults. Journal of Interpersonal Violence* 37: NP1963–NP1987. [CrossRef]
- Spencer, Chelsea, Allen Mallory, Michelle Toews, Sandra Stith, and Leila Wood. 2017. Why sexual assault survivors do not report to universities: A feminist analysis. Family Relations 66: 166–79. [CrossRef]
- Statista. 2018. Universities in Nigeria—Statistics and Facts. Available online: https://www.statista.com/topics/8520/university-innigeria/#dossierKeyfigures (accessed on 4 January 2022).
- Suleiman, Mohammed S. 2017. Perception of Sexual Harassment among Female Students of Tertiary Institutions in Northern Nigeria. *Ife Social Sciences Review* 25: 80–89.
- Sweeny, JoAnne. 2020. The #metoo movement in comparative perspective. *American University Journal of Gender, Social Policy & the Law* 29: 33–88.
- Taiwo, Modupe O., Oluwakemi C. Omole, and O. E. Omole. 2014. Sexual harassment and psychological consequence among students in higher education institution in Osun State, Nigeria. *International Journal of Applied Psychology* 4: 13–18.
- Vidal, Maria E., and Jenny Petrak. 2007. Shame and adult sexual assault: A study with a group of female survivors recruited from an East London population. *Sexual and Relationship Therapy* 22: 159–71. [CrossRef]
- Wasti, Arzu, Mindy Bergman, Theresa Glomb, and Fritz Drasgow. 2000. Test of the cross-cultural generalizability of a model of sexual harassment. *Journal of Applied Psychology* 85: 766. [CrossRef]
- Wood, Leila, Sharon Hoefer, Matt Kammer-Kerwick, José Rubén Parra-Cardona, and Noël Busch-Armendariz. 2021. Sexual harassment at institutions of higher education: Prevalence, risk, and extent. Journal of Interpersonal Violence 36: 4520–44. [CrossRef] [PubMed]
- Worke, Mulugeta Dile, Zewdie Birhanu Koricha, and Gurmesa Tura Debelew. 2021. Coping strategies and perceived barriers of women hospitality workplace employees to sexual harassment in Bahir Dar city, Ethiopia: A grounded theory approach. BMC Psychology 9: 143. [CrossRef]
- Wright, Phillip C., and Shirley Ann Bean. 1993. Sexual harassment: An issue of employee effectiveness. *Journal of Managerial Psychology* 8: 30–36. [CrossRef]

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Article

Predicting Frequent and Feared Crime Typologies: Individual and Social/Environmental Variables, and Incivilities

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Abstract: The lack of organisation in urban spaces plays a decisive role in the level of integration, communication and social bonds of the residents, impacting the citizens' feelings of trust and security. Different personal variables and contextual characteristics have been associated with the fear of crime (FOC). The main objective of this study is to analyse how individual and social/environmental variables, and incivilities, predict crime against people and property, crime that has either happened or is feared to happen. Five hundred and fifty-four residents (M = 43.82; SD = 18.38) in the Historic Centre of Porto (HCP), Portugal, answered 61 items of the Diagnosis of Local Security (DLS) Questionnaire. The results of this study show that in the most frequent crime category, 72% of occurrences represent crime against property. In the feared crime category, there is a preponderance of crime against people (61%). Age of the respondents predicted the most frequent and feared crime, while sex predicted the most feared crime only. Social/environmental variables, as well as incivilities, also predict the frequent and feared crime in two typologies, i.e., crime against people and crime against property. Practical implications to reduce FOC and areas for further investigation are discussed.

Keywords: fear of crime (FOC); individual and social/environmental variables; incivilities; crime

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1. Introduction

Past research shows that the physical and social characteristics of a given community/urban space play a crucial role in people's perception of security (Adams 2012), adversely impacting the quality of life of citizens and their physical and mental health (Rader and Haynes 2012). Consequently, socially disorganized urban spaces tend to significantly impact the level of integration, communication and the social bond of residents, which are essential to promote and build feelings of trust and security in the population (Swatt et al. 2013). Accordingly, the existence of disorder in the surrounding community has often been associated with the fear of crime (FOC) (Scarborough et al. 2010). Despite the absence of conceptual consensus (cf. Valente and Pertegas 2018), FOC has been conceptualized in this study as an emotional response, likely to promote fear or anxiety about crime or other indicators associated with crime (Ferraro 1995). Considered as a social problem (Lewis and Salem 2017), FOC has been associated with several negative individual and societal outcomes (Solymos et al. 2020). It has been argued that, faced with the threat of victimization, people tend to restrict their daily activities by avoiding specific places or

interacting with certain people, increasing social isolation and, consequently, negatively impacting people's quality of life (Rader and Haynes 2012). Examining the factors that may contribute to mitigate FOC and feelings of insecurity is crucial to better design community policing approaches and promote greater community resilience against perceived and real crime (Reid et al. 2020). Therefore, this study aims to understand how specific individual, socio/environmental and incivility variables could contribute to predict crime against people and property, either frequent or feared.

1.1. Predictors of Fear of Crime: Individual and Social/Environmental Variables

To explain the perception of crime that has either already frequent or is feared to occur, two categories of variables have been studied: individual characteristics and contextual features. Individual predictors are often associated with the notion of vulnerability, whether physical or social. In turn, physical vulnerability has been assessed through demographic variables (e.g., age, sex, race and self-defence capacity) (Jackson 2009; Killias 2000). Sex has been consistently identified as a strong individual predictor of FOC, with women fearing crime at much higher level than men (Ferraro 1995; Russo et al. 2013; Scarborough et al. 2010; Skogan 1995; Valera-Pertegas and Guàrdia-Olmos 2017). These sex differences seem to persist in different types of crime (Ferraro 1995; Schafer et al. 2006), which is surprising considering that women are less likely than men to be victims of crime, with the exception of sexual and family crimes (Rand 2008). Several explanatory hypotheses have been advanced for this perception of greater female insecurity with particular emphasis on gender-differentiated socialization, with socializing women thought to be more fearful than men (Rader 2008), as well as the documented disparity in the underlying sources of fear evidenced by men and women, with the latter showing a generalized fear of sexual aggression (Schafer et al. 2006). Age has also been frequently identified as an individual characteristic associated with greater physical vulnerability and higher levels of FOC, with the elderly population experiencing greater physical vulnerability to victimization (Kullberg et al. 2009; Scarborough et al. 2010). Another group of individual predictors involves victimization experiences, both direct and indirect, with people who are regularly exposed to crime demonstrating more FOC (Dowler 2003).

Although previous FOC research has focused on analysing individual variables or victimization experiences, the need to analyse FOC as a context-specific experience (Solymos et al. 2020) to an ecological level or under a multifactorial approach has been defended in several studies (Chadee et al. 2017; Valera-Pertegas and Guàrdia-Olmos 2017; Russo et al. 2013). In line with this, social/environmental variables (e.g., crime rate, police performance, neighbourhood disorder, collective efficacy, economic disadvantage, low spending on education and low social protection) constitute another category of predictors of the FOC (Wu and Wareham 2017), that should be analysed and that were addressed in this study.

Neighbourhood social and infrastructural problems have been consistently associated with FOC (Chadee et al. 2017). Undeniably, the performance of the police force as a formal institution of social control and crime prevention also plays a crucial role in the population's perception of risk, being generally associated with a reduced risk of victimization (Skogan 2009). However, this connection between satisfaction with police and FOC is complex, with some research suggesting that there is no association between both and a distinction between physical and social disorder has been established when neighbourhood disorder is considered (Scarborough et al. 2010). Physical disorder is associated with the deterioration of spaces, and social disorder with the occurrence of anti-social behaviour, both of which are strong predictors of a high level of FOC among residents of urban spaces (Skogan 1995). Physical-environmental variables have consistently been associated with FOC, more particularly with signs of neglect such as littering and graffiti (Lorenc et al. 2012). The broken windows and integration/social cohesion theories emerge as two important theoretical explanations assisting in understanding the relationship between physical and social disorder and FOC (Bolger and Bolger 2019). According to the broken windows theory, the existence of physical and social disorder suggests the presence of weaknesses

of social control in the community, in terms of police performance and crime prevention measures, generating FOC and reducing the probability of citizens becoming involved in actively contributing to solve FOC-related social problems. Additionally, social disorder is perceived by offenders as reduced direct police control or indirect community control, promoting the opportunity for crime (Scarborough et al. 2010). According to the social integration theory, informal social control, such as neighborhood communities, promotes trust in the environment and the community, thereby reducing FOC levels. This implies that there is a certain degree of connection and commitment of residents to each other and to the surrounding community, through mutual trust and social ties in terms of cooperating with neighbours, as well as to recognize common values and goals and solve problems (Xu et al. 2005).

Incivilities also emerge as an important factor used to explain FOC (Bolger and Bolger 2019). Incivilities are described in Lewis and Salem's (2017) study as involving a variety of circumstances that indicate to neighbourhood residents that something is not right in their communities. Incivilities may oscillate according to the interests, values and resources that characterize the various populations of the neighbourhood. Thus, incivilities may involve unacceptable behaviour, physical deterioration in homes, commercial areas or public spaces, the intrusion of other population groups into the area, or an increase in deviant and criminal behaviour, such as drug use and vandalism.

Considering that FOC has been equally associated with crime occurring in specific urban areas, it is essential to determine the crime identified by the population as frequently occurring or not and whether the area is perceived as involving a high concentration of local crime (Azevedo et al. 2021a). According to the Portuguese Annual Internal Security Report (Sistema de Segurança Interna [Internal Security System] (SSI) 2020), violent and serious crime in Portugal is more prevalent in the main cities, Lisbon, Porto and Setúbal, with particular emphasis on the crimes of robbery on public roads, resistance and employee coercion, representing about 72% of violent crime. However, it is also important to note that the relationship between FOC and community crime rates is complex and non-consensual, and some studies consider that real crime rates have little or no relationship with the FOC (Scarborough et al. 2010). Other studies (Hicks and Brown 2013; Reid et al. 2020) reported that areas with low perceived crime rates are associated with greater collective effectiveness, greater social cohesion and higher levels of interaction with neighbours.

1.2. Current Study

The present study focuses on the Historic Centre of Porto (HCP) (Azevedo et al. 2021b) and is based on the need to understand the FOC as a contextually specific problem, based in a place and captured by people's emotional and behavioural responses, which can lead to the resolution of social problems (Solymos et al. 2020). It is important to note that the HCP refers to an urban area included in the second largest city in the North of Portugal, Porto. After being classified by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1996 as a World Heritage Site as the Best European Destination, HCP is no longer just a residential area, being frequented by workers, students and many tourists all day long. There is also a higher percentage of the population aged above 65, and a significant part of them live alone, although the middle-aged population predominates. It should also be highlighted that despite the most recent efforts towards urban redevelopment, particularly related to tourism and tertiary activities, HCP still includes a considerable percentage of deteriorated buildings, constituting a potential vulnerability and risk factor for insecurity and criminality, alongside with the aforementioned sociodemographic indicators.

Thus, the present study intends to make an important contribution to the understanding of FOC, analysing several indicators of insecurity perception (Porter et al. 2012; Valente and Pertegas 2018), and focusing on two main categories of crime, i.e., crime against people and crime against property, which emerge as the most prevalent crimes (Sistema de Segurança Interna [Internal Security System] (SSI) 2020). The main objective of this study

is to analyse how individual and social/environmental variables, and incivilities, predict crime against people and property, either already taking place or feared to take place. Incivilities were separated from other social/environmental variables, considering them as a specific subgroup, integrating an important disorder model used to predict FOC (Bolger and Bolger 2019). Specifically, it was intended to: (i) describe the prevalence of the assessed crimes against people and property, identified as the most frequent and feared crimes, as well as the accompanying social/environmental variables and incivilities; (ii) identify the sociodemographic variables (i.e., age and sex) associated with the most feared and the most frequent crime against people and property; (iii) identify the social/environmental variables associated with crime against people and property which occur most and are more feared; (iv) identify the incivilities associated with crime against people and property; (v) predict the most frequent and the most feared crimes against people and property, based on individual and social/environmental variables, and incivilities. Some hypotheses are considered:

- **H1.** Age and sex emerge as individual variables that are associated with the most feared and frequent crimes against people and property.
- **H2.** Age and sex emerge as the main predictors of the most feared and frequent crimes against people and property.
- **H3.** Social/environmental variables emerge as important predictors of the most feared and frequent crimes against people and property.
- **H4.** *Incivilities emerge as important predictors of the most feared and frequent crimes against people and property.*

2. Materials and Methods

2.1. Participants

Five hundred and fifty-four residents, workers and students, over 18 years old and fluent Portuguese speakers, were recruited in the present research. The sample's age varied from 18 to 96 years (M=43.82; SD=18.38); 41.3% were male and over 90% were Portuguese. Participants were uniformly distributed regarding education. While 64% were actively working at the moment, 17.5% were students and 4.5% were unemployed. 51.7% of the participants reported been living and working/studying in the HCP for seven or more years.

2.2. Instruments

Including not only closed but also open-ended questions, the Diagnosis of Local Security (DLS) Questionnaire (Sani and Nunes 2013) comprises 61 items regarding different variables, organized into five different sections: (i) sociodemographic information (e.g., sex, age), (ii) perception of (in)security, (iii) victimisation, (iv) social control and (v) community participation. In addition to sociodemographic information, only the variables corresponding to the perception of (in)security were used in this study. Through that specific section of the questionnaire, from a list of fourteen crimes (i.e., fraud, theft, robbery, residential theft, theft in commercial establishment, sexual aggression, physical aggression, domestic violence: against/among minors, domestic violence: against/between spouses, domestic violence: against/among the elderly, damage to public spaces/equipment, road crimes, drug trafficking, arms trafficking), participants were asked to identify the most frequent crimes ("From the following list, choose the crimes that most often occur in HCP — choose one or more options") and crimes they most feared ("From the following list, choose the crimes you fear the most in HCP—choose one or more options"). Moreover, from a list of twelve social/environmental variables (i.e., drug use/alcohol consumption, poverty/unemployment, family problems, conflicts and juvenile delinquency, poor street lighting, bad areas/streets, absence of green/leisure spaces, reduced movement at night, deficient policing, inability of law enforcement officers to act, diminutive severity of offenders), participants were expected to select the ones they could identify in the HCP ("From the following list, choose the conditions that, in HCP, most seem to favour the occurrence of crime—choose one or more options"). Finally, from a list of seven common incivilities (i.e., urinating on the public road, producing noise on the public road, leaving pet animals' faeces on the public road, scattering garbage down the street, violate traffic rules, parking chaotically, illegal beggars), participants should choose the ones they believed to promote crime, by checking them of a list ("From the following list, choose the incivilities that most often occur at HCP—choose one or more options").

This instrument was both developed and validated among the Portuguese population (Sani and Nunes 2013) and is widely used in the Portuguese context (Nunes et al. 2018; Sani and Nunes 2016).

2.3. Procedure

After being approved by the University Ethics Committee in charge of this study and the HCP Parish Council, participants were recruited in several public and private spaces (e.g., streets, shops, offices, schools or parks), and then invited to contribute to a research study assessing the perception of (in)security and crime at HCP. After presenting the study's conditions, written informed consent was obtained from the participants and trained professionals conducted the face-to-face enquiries. Individuals who participated were not given any financial incentive, as the participation was voluntary.

2.4. Data Analysis

Data were analysed through the IBM Statistical Package for Social Sciences software (IBM SPSS for Windows, version 27.0, IBM Corp, Armonk, KY, USA). According to the main aims of this study, univariate descriptive and inferential statistics were carried out. The present sample was characterized regarding the variables assessed through absolute frequencies, a basic but valuable statistical analysis. Then, the crimes identified as the most frequent and most feared, as well as the environmental/social variables and the incivilities, were coded into dichotomic variables (i.e., present or absent). In order to understand the possible associations between sociodemographic variables, social/environmental variables or incivilities, and the type of frequent or feared crime (i.e., crime against property or against people), Spearman coefficient correlations were calculated. This test is a nonparametric measure of the strength and direction of the association that exists between two variables measured on at least an ordinal scale. Only those variables considered significant on the Spearman's tests were further analysed using binary logistic regressions, a common statistical regression technique to predict the group belonging of dichotomous dependent variables, with only two categorical outcomes, which is the case in the present study, with one or more independent variables, either continuous or categorical. Accordingly, binary logistic regression analyses were performed in order to understand if the presence of sociodemographic factors, environmental/social variables or incivilities (as independent variables) would predict a crime's membership to the crime against people group or the crime against property group (as dependent variable). The Wald test, a way to find out if explanatory variables in a model are important, was used. As is known, it is in fact a multivariate generalization allowing to test a set of parameters simultaneously to see if they are sufficiently unimportant (Wald 1943).

3. Results

3.1. Descriptive Statistics

The crimes identified in this study were divided in two different categories: (i) crime against people (sexual offense, domestic violence against minors, domestic violence against a spouse, domestic violence against the elderly), and (ii) crime against property (fraud, theft, robbery, assault on residence, assault on a commercial establishment, damage to public equipment). Additionally, it should be emphasized that this division was carried out for both frequent and feared crimes. Among the present sample of 207 frequent crimes,

72% represented crime against property and 28% crime against people. Moreover, among the 497 feared crimes, 61% related to crime against people and 39% crime against property.

Table 1 includes the results of the descriptive statistics, namely the number of cases and percentages, regarding the assessed social/environmental variables and incivilities of the studied territory. Among the different social/environmental variables, drug use/alcohol consumption was the most prevalent, followed by poverty/unemployment. Concerning incivilities, urinating and leaving pet animals' faeces on the public road were the most common.

Table 1. Frequencies and percentages of the social/environmental variables and incivilities assessed.

		Ab	sent	Pre	sent
	Variables	N	%	N	%
	Absence of green/leisure spaces	455	82.1	99	17.9
	Bad areas/streets	402	72.6	152	27.4
	Poor street lighting	373	67.3	181	32.7
	Presence of strange people	367	66.2	187	33.8
	Diminutive severity to offenders	340	61.4	214	38.6
Social/environmental	Reduced movement at night	331	59.7	223	40.3
variables	Inability of law enforcement officers to act	322	58.1	232	41.9
	Family problems	312	56.3	242	43.7
	Conflicts and juvenile delinquency	294	53.1	260	46.9
	Deficient policing	242	43.7	312	56.3
	Poverty/unemployment	153	27.6	401	72.4
	Drug use/alcohol consumption	115	20.8	439	79.2
	Illegal beggars	265	47.8	289	52.2
	Violation of traffic rules	250	45.1	304	54.9
	Producing noise on the public road	213	38.4	341	61.6
Incivilities	Parking chaotically	177	31.9	377	68.1
	Leaving pet animals' faeces on the public road	175	31.6	379	68.4
	Urinating on the public road	155	28.0	399	72.0

3.2. Associations between the Most Frequent or Feared Crimes and Individual and Social/Environmental Variables

In order to characterize possible associations between the crimes described as the most frequent or feared and the presence of individual and social/environmental variables, Spearman correlations were calculated concerning sociodemographic characteristics, the different social/environmental variables and incivilities assessed in this study. Sex was found to be only significantly correlated to the feared crimes (r = 0.150, p < 0.001), while age was significantly correlated to both frequent (r = -0.217, p = 0.002) and feared crimes (r = -0.279, p < 0.001). Moreover, as can be observed on Table 2, frequent crimes only presented a significant positive correlation concerning diminutive severity to offenders. Additionally, feared crimes were significantly and positively correlated with poverty/unemployment and family problems.

Table 3 presents the Spearman correlations between frequent and feared crimes, and incivilities, present in the studied territory. Frequent crimes were significantly and positively correlated with producing noise on the public road and violating traffic rules, while feared crimes were significantly positively correlated to urinating on the public road, violating traffic rules and illegal beggars.

Table 2. Spearman correlations between frequent and feared crimes, and the social/environmental variables of the studied territory.

	-	7	8	4	ıc	9	^	œ	6	10	11	12	13	14
1. Frequent Crimes	1	0.233 **	-0.011	0.051	0.079	-0.006	0.025	0.033	0.061	0.129	0.130	0.127	0.084	0.196 **
2. Feared Crimes		1	0.053	0.143 **	0.164 **	0.032	0.012	0.040	-0.022	0.068	0.059	0.004	0.046	0.041
3. Drug use/alcohol consumption			1	0.321 **	0.244 **	0.232 **	0.110 **	0.105 *	920.0	0.158 **	0.139 **	0.204 **	0.191 **	0.196 **
4. Unemployment				1	0.397 **	0.176 **	* 980.0	0.145 **	* 860.0	0.202 **	0.178 **	0.172 **	0.230 **	0.200 **
5. Family problems					1	0.236 **	0.108 *	0.1111 **	0.112 **	0.118 **	0.123 **	0.115 **	0.189 **	0.146 **
6. Juvenile delinquency						1	0.147 **	0.151 **	0.109 *	0.140 **	0.194 **	0.208 **	0.279 **	0.324 **
7. Poor street lighting							1	0.477 **	0.318 **	0.227 **	0.260 **	0.295 **	0.275 **	0.238 **
8. Bad areas						,		1	0.241 **	0.254 **	0.287 **	0.272 **	0.224 **	0.218 **
9. Absence of green/leisure spaces									1	0.205 **	0.117 **	0.183 **	0.168 **	0.220 **
10. Presence of strange people										1	0.231 **	0.228 **	0.176 **	0.202 **
11. Reduced movement at night											1	0.233 **	0.288 **	0.279 **
12. Deficient policing												1	0.504 **	0.392 **
13. Inability of law enforcement officers to act		,											1	0.521 **
14. Less severity to offenders												1		1

* p < 0.050; ** p < 0.001.

Table 3. Spearman correlations between frequent and feared crimes, and incivilities in the territory.

Variables	1	2	3	4	ro	9	7	80
1. Frequent crimes	1	0.233 **	0.145 *	0.161 *	0.064	0.144 *	-0.001	0.132
2. Feared crimes	,	1	0.124 **	0.075	-0.037	* 260.0	0.078	* 960.0
3. Urinating on the public road		1		0.210 **	0.182 **	0.162 **	0.185 **	0.208 **
4. Producing noise on the public road		1		1	0.181 **	0.223 **	0.238 **	0.075
5. Leaving pet animals' faeces on the public road		1			1	0.180 **	0.151 **	0.072
6. Violation of traffic rules	,	1		,	1	1	0.444 **	0.134 **
7. Parking chaotically	1	1	,	1	1	1	1	0.165 **
8. Illegal beggars		1			1			1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 004		1	1	1	1		

* p < 0.050; ** p < 0.001.

3.3. Predictors of Either Frequent or Feared Crimes

In order to verify if the individual or contextual characteristics would predict either frequent or feared crimes, logistic binary regressions were performed and Wald test was used to assess the least significant parameters. Nevertheless, it should be stated that only characteristics that presented a significant correlation with the frequent or feared crimes were included in the model. Therefore, a total of six models were tested (see Table 4).

Table 4. Logistic Binary Regression Models examining criminal occurrences (against people vs against property).

Dependent Variable	Predictive Variable	Model	β	SE	Wald	Odds Ratio	95% CI	p
	Sociodemographic variables Age	$\chi^2 (1) = 9.155,$ p = 0.002	-0.033	0.010	8.607	0.971	[0.952, 0.990]	0.003
Frequent crime	Social/environmental Variables Diminutive severity to offenders	$\chi^2 (1) = 7.838,$ p = 0.005	-0.882	0.316	7.778	0.414	[0.223, 0.769]	0.005
rrequent crime	Incivilities Urinating in the public road Producing noise on the public road Violating traffic rules	χ^2 (3) = 10.757, p = 0.013	-0.601 -0.604 -0.431	0.366 0.344 0.327	2.703 3.089 1.737	0.548 0.547 0.650	[0.268, 0.123] [0.279, 1.072] [0.342, 1.234]	0.100 0.079 0.187
	Sociodemographic variables Sex Age	χ^2 (2) = 49.140, p < 0.001	-0.606 -0.033	0.196 0.005	9.543 35.430	0.545 0.968	[0.371, 0.801] [0.958, 0.978]	0.002 <0.001
Feared crime	Social/Environmental Variables Poverty/unemployment Family Problems	χ^2 (2) = 17.066, $p < 0.001$	$-0.415 \\ -0.542$	0.221 0.205	3.517 6.958	0.660 0.582	[0.428, 1.019] [0.389, 0.870]	0.660 0.582
	Incivilities Urinating in the public road Violating traffic rules Illegal beggars	χ^2 (3) = 12.874, p = 0.005	-0.459 -0.315 -0.272	0.213 0.189 0.191	4.632 2.775 2.011	0.632 0.730 0.762	[0.416, 0.960] [0.504, 1.057] [0.524, 1.109]	0.031 0.096 0.156

Note: β —logistic regression coefficient; SE—standard error; CI—confidence interval; p—p-value; χ^2 —chi-squared statistic. Crimes against property = 1; Crimes against people = 2.

From the six logistic regression models, several results emerged. Regarding the crimes identified as most frequent, the first model correctly classified 72% of the cases. Thus, younger participants identified crimes against people as more prevalent. The second model also correctly classified 72% of the cases. Participants who perceived lower severity regarding offenders were the ones identifying crimes against people as more prevalent. Lastly, the third model it correctly classified 72% of the cases. Although none of the incivilities made a significant individual contribution, producing noise on the public road was indeed marginally significant.

When considering the crimes identified as most feared, the fourth model classified 64.3% of the cases correctly. Younger and female participants identified crimes against people as the most feared more frequently. Concerning the fifth model, 60.4% of the cases were correctly classified. Participants who identified the presence of poverty/unemployment and family problems are the ones who feared crimes against people the most. Finally, the sixth model classified 62.8% of the cases correctly.

4. Discussion

The present study was carried out in the HCP aimed to explore crime that has already frequent or is feared to occur in terms of people's experiences in their immediate surrounding environments. This study can be faced as an opportunity to develop a more comprehensive understanding of FOC and policies to reduce it, as well as to contribute to knowledge on the formulation of evidence-based policies and urban planning for safer places (Solymos et al. 2020).

Different social/environmental variables and incivilities were assessed in this study. Drug and alcohol consumption, followed by poverty/unemployment, were the most reported social/environmental variables. In the case of incivilities, urinating and leaving pet animals' faeces on the public road were the most frequently identified in the context of this study. Nevertheless, it is important to observe that the remaining social/environmental

variables and incivilities have considerable prevalence. Accordingly, these variables must necessarily be considered when designing social policies and conceiving preventive and intervention programs in the context of safer places, as they have a significant impact on crime occurrences and on the citizens' perception of (in)security, i.e., FOC.

In line with what was testified in the Annual Report on Internal Security (Sistema de Segurança Interna [Internal Security System] (SSI) 2020) participants reported crime against property as being more frequent. However, crime against people emerged as the most feared, which can be explained by people perceiving that the potential impact of a crime against a person could cause a significant serious impact on the victim's life (Jackson 2009).

Concerning sociodemographic characteristics, while age was significantly associated with frequent and feared crimes, sex was only significantly correlated with feared crimes, which only partially confirmed the first hypothesis, H1, i.e., age and sex associated with the most feared and frequent crimes against people and property. Additionally, age was a significant predictor of both frequent and feared crimes, with younger participants identifying crime against people more frequently. Therefore, the second hypothesis, H2, i.e., age and sex as the main predictors of the most feared and frequent crimes against people and property, was, once again, partially confirmed. This result is coherent with Jackson's (2009) study, who reported that younger participants were more concerned with the possibility of a criminal occurrence against people. The same author argues that the FOC is a product of the perception of oneself as a potential target and the feeling of a lack of control over whether the crime will occur or not. In contrast, sex was only a significant predictor of feared crimes, with females fearing crime against people more frequently. This result seems to be in line with previous research, as sex differences (Ferraro 1995; Schafer et al. 2006) and greater insecurity in females have been documented before (Rader 2008).

The third hypothesis, H3, stated that social/environmental variables are predictors of the most feared and frequent crimes against people and property. However, in this study, only the perception of lower severity towards offenders was found to be a significant predictor of crime identified as frequent. Thus, this hypothesis was only partially confirmed. In fact, participants with this perception were the ones who identified crimes against people as the most frequent ones. In the case of the most feared crimes, participants who perceived the presence of poverty/unemployment and family problems were the ones who feared crime against people the most. This is a similar result to the one found by Wu and Wareham (2017), concerning FOC in general. The broken windows theory may contribute to explain these findings, as it states that social disorders may translate to the existence of weaknesses in social control, promoting FOC and citizens' detachment concerning the social problems present in their community (Xu et al. 2005).

Lastly, the fourth hypothesis, H4, stated that incivilities are predictors of the most feared and frequent crimes against people and property. Indeed, some of the incivilities assessed had an important individual contribution to FOC as well, but only in the case of the most feared crimes. Therefore, this fourth hypothesis was partially confirmed. The participants who described the presence of people urinating or producing noise in the public road, as well as the presence of illegal beggars, feared crimes against people the most. This result may be in line with the social integration theory (Xu et al. 2005), since, by definition, incivilities involve unacceptable behaviours (Lewis and Salem 2017) and, consequently, do not translate to any degree of connection and commitment among the residents. Furthermore, it could be argued that, on the one hand, these incivilities may translate into a lack of formal and informal social control. On the other hand, the absence of effective social control is an important factor in the maintenance of these incivilities in the territory.

The present study presents some limitations that should be acknowledged. The fact that the study area is limited to a specific geographic area, i.e., the HCP, may hinder the generalization of the results. Similarly, the fact that the tourists' perception was not considered may result in the loss of important information regarding criminal occurrence, as the HCP is an extremely touristic area over the entire year. In fact, the present study

did not consider racial diversity either, which is an important variable to understand FOC, and that should be considered in future studies. Data analysis was carried out based on two criminal categories, i.e., crime against people and crime against property, making it possible for some patterns and specificities of crimes to remain hidden and unknown. It should be also pointed out that, in both the case of social/environmental variables and of incivilities, only their presence or absence were assessed. In addition, the statistical strategy only included bivariate correlations, followed by logistic regression and using the Wald test. This test procedure can be misleading in small samples when used empirically to search for unimportant parameters. In this sense, it is important that future studies include other analyses that allow for a greater range of knowledge about the predictors of FOC. Although the risk of victimization might be a variable playing an important role on FOC, it was not analysed.

Despite the above-mentioned limitations, the authors believe that this study represents an important contribution to the field of criminology in particular. In fact, and to the authors' knowledge, this is the first study that, in contrast to considering FOC in general, differentiates FOC in relation to crime against people and crime against property, thus providing greater enlightenment regarding both crime typologies. Future studies might consider the study of each specific type of crime separately, as the influence of social/environmental variables and incivilities may change accordingly. Additionally, the fact that the perceptions of residents, workers and students of HCP have been considered can transform this study into a great asset for the local authorities when designing new measures and policies to combat crime and promote a feeling of security between citizens.

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Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Ethics Committee of University of Fernando Pessoa in September 2, 2020 (UFP.2 September 2020).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Dataset and syntaxes are available upon request to the authors.

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References

Adams, Ericka Briana. 2012. We Are Like Prey. Race and Justice 2: 274–303. [CrossRef]

Azevedo, Vanessa, Rui Leandro Maia, Maria João Guerreiro, Gisela Oliveira, Ana Sani, Sónia Caridade, Maria Alzira Pimenta Dinis, Rui Estrada, Daniela Paulo, Mariana Magalhães, and et al. 2021a. Do you Feel Safe in the Urban Space? From Perceptions to Associated Variables. *Anuario de Psicología Jurídica* 31: 75–84. [CrossRef]

Azevedo, Vanessa, Rui Leandro Maia, Maria João Guerreiro, Gisela Oliveira, Ana Sani, Sónia Caridade, Maria Alzira Pimenta Dinis, Rui Estrada, Daniela Paulo, Mariana Magalhães, and et al. 2021b. Looking at Crime—Communities and Physical Spaces: A Curated Dataset. Data in Brief 39: 107560. [CrossRef] [PubMed]

Bolger, Michelle, and Collin Bolger. 2019. Predicting Fear of Crime: Results from a Community Survey of a Small City. *American Journal of Criminal Justice* 44: 334–51. [CrossRef]

Chadee, Derek, Stacia Ali, Ariel Burke, and Jason Young. 2017. Fear of crime and community concerns: Mediating effect of risk and pragmatic fear. Journal of Community & Applied Social Psychology 27: 450–62. [CrossRef]

Dowler, Ken. 2003. Media consumption and public attitudes toward crime and justice: The relationship between fear of crime, punitive attitudes, and perceived police effectiveness. *Journal of Criminal Justice and Popular Culture* 10: 109–26.

Ferraro, Kenneth. 1995. No Fear of Crime: Interpreting Victimization Risk. Oxford: SUNY Press.

- Hicks, Sarah, and Sarah Brown. 2013. Perceptions of risk. International Review of Victimology 19: 249-67. [CrossRef]
- Jackson, Jonathan. 2009. A psychological perspective on vulnerability in the fear of crime. Psychology, Crime & Law 15: 365–90.
 [CrossRef]
- Killias, Martin. 2000. Different Measures of Vulnerability in their Relation to Different Dimensions of Fear of Crime. British Journal of Criminology 40: 437–50. [CrossRef]
- Kullberg, Agneta, Nadine Karlsson, Toomas Timpka, and Kent Lindqvist. 2009. Community: A cross-sectional study. *BMC Public Health* 9: 1–11. [CrossRef]
- Lewis, Dan, and Greta Salem, eds. 2017. Fear of Crime: Incivility and the Production of a Social Problem. New York: Routledge.
- Lorenc, Theo, Stephen Clayton, David Neary, Margaret Whitehead, Mark Petticrew, Hilary Thomson, Steven Cummins, Amanda Sowden, and Adrian Renton. 2012. Crime, fear of crime, environment, and mental health and wellbeing: Mapping review of theories and causal pathways. *Health & Place* 18: 757–65. [CrossRef]
- Nunes, Laura, Ana Isabel Sani, Sónia Caridade, Helder Sousa, and Maria Alzira Pimenta Dinis. 2018. Segurança e vitimação entre estudantes universitários na cidade do Porto [Security and victimization among university students in the city of Porto.]. *Análise Psicológica* 36: 169–83. [CrossRef]
- Porter, Jeremy, Nicole Rader, and Jeralynn Cossman. 2012. Social Disorganization and Neighborhood Fear: Examining the Intersection of Individual, Community, and County Characteristics Social Disorganization and Neighborhood Fear: Examining the Intersection of Individual, Community, and County Characteristics. *American Journal of Criminal Justice* 37: 229–45. [CrossRef]
- Rader, Nicole. 2008. Gendered Fear Strategies: Intersections of Doing Gender and Fear Management Strategies in Married and Divorced Women's Lives. Sociological Focus 41: 34–52. [CrossRef]
- Rader, Nicole, and Stacy Haynes. 2012. Avoidance, protective, and weapons behaviors: An examination of constrained behaviors and their impact on concerns about crime. *Journal of Crime and Justice* 37: 197–213. [CrossRef]
- Rand, Michael. 2008. Criminal victimization, 2007. In *PsycEXTRA Dataset*. Washington, DC: American Psychological Association (APA). [CrossRef]
- Reid, Iain Douglas, Sandra Appleby-Arnold, Noellie Brockdorff, Sunčica Zdravković, and Ivana Jakovljev. 2020. Developing a model of perceptions of security and insecurity in the context of crime. Psychiatry, Psychology and Law 27: 620–36. [CrossRef] [PubMed]
- Russo, Silvia, Michele Roccato, and Alessio Vieno. 2013. Criminal Victimization and Crime Risk Perception: A Multilevel Longitudinal Study. Social Indicators Research 112: 535–48. [CrossRef]
- Sani, Ana Isabel, and Laura Nunes. 2013. Questionário de diagnóstico local de segurança: Estudo numa comunidade urbana [Local Safety Diagnosis Questionnaire: Study in an Urban Community]. *Análise Psicológica* 31: 185–95. [CrossRef]
- Sani, Ana Isabel, and Laura Nunes. 2016. Diagnóstico de seguridad/inseguridad. Un estudio exploratorio en una comunidad urbana [Diagnosis of security/insecurity. An exploratory study in an urban community]. *Anuario de Psicología Jurídica* 26: 102–6. [CrossRef]
- Scarborough, Brittney, Toya Like-Haislip, Kenneth Novak, Wayne Lucas, and Leanne Alarid. 2010. Assessing the relationship between individual characteristics, neighborhood context, and fear of crime. *Journal of Criminal Justice* 38: 819–26. [CrossRef]
- Schafer, Joseph, Beth Huebner, and Timothy Bynum. 2006. Fear of crime and criminal victimization: Gender-based contrasts. *Journal of Criminal Justice* 34: 285–301. [CrossRef]
- Sistema de Segurança Interna [Internal Security System] (SSI). 2020. Relatório Anual de Segurança Interna; Annual Internal Security Report. Lisboa: Ministério da Administração Interna.
- Skogan, Wesley. 1995. Crime and the Racial Fears of White Americans. The ANNALS of the American Academy of Political and Social Science 539: 59–71. [CrossRef]
- Skogan, Wesley. 2009. Concern about Crime and Confidence in the Police. Police Quarterly 12: 301–18. [CrossRef]
- Solymos, Reka, David Buil-Gil, Laura Vozmediano, and Inês Sousa Guedes. 2020. Towards a Place-based Measure of Fear of Crime: A Systematic Review of App-based and Crowdsourcing Approaches. *Environment and Behavior* 53: 1013–44. [CrossRef]
- Swatt, Marc, Sean Varano, Craig Uchida, and Shellie Solomon. 2013. Fear of crime, incivilities, and collective efficacy in four Miami neighborhoods. *Journal of Criminal Justice* 41: 1–11. [CrossRef]
- Valente, Riccardo, and Sergi Valera Pertegas. 2018. Ontological insecurity and subjective feelings of unsafety: Analysing socially constructed fears in Italy. Social Science Research 71: 160–70. [CrossRef] [PubMed]
- Valera-Pertegas, Sergi Valera, and Joan Guàrdia-Olmos. 2017. Vulnerability and perceived insecurity in the public spaces of Barcelona/Vulnerabilidad y percepción de inseguridad en el espacio público de la ciudad de Barcelona Vulnerability and perceived insecurity in the public spaces of Barcelona/Vulnerabilidad. *Journal of Environmental Psychology* 8: 177–204. [CrossRef]
- Wald, Abraham. 1943. Tests of Statistical Hypotheses Concerning Several Parameters When the Number of Observations is Large. Transactions of the American Mathematical Society 54: 426–82. [CrossRef]
- Wu, Yuning, and Jennifer Wareham. 2017. Perceived risk of crime: A tale of two immigrant groups in Metro Detroit. *Journal of Ethnicity in Criminal Justice* 15: 117–37. [CrossRef]
- Xu, Yili, Mora Fiedler, and Karl Flaming. 2005. Discovering the Impact of Community Policing: The Broken Windows Thesis, Collective Efficacy, and Citizens' Judgment. *Journal of Research in Crime and Delinquency* 42: 147–86. [CrossRef]





Article

Analysis of Location and Spatial Distribution of Elderly Women Victims of Gender Violence

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Abstract: Little is known about abuse and violence against elderly women, as well as prevention and intervention strategies. We present the results of an investigation that has as its objective the elaboration of the Location Map of elderly women victims of gender violence, analyzing their territorial distribution in the specific case of the Autonomous Community of Galicia, Spain, and its relationship with environmental, social, and territorial variables. The results of our research on the location and distribution of the rates of elderly women victims of gender violence show its direct relationship with low demographic density, aging, and dependency, which is associated with disabled people. The mapping resulting can facilitate the territorial planning of social and health services aimed at elderly women in rural areas. The interquartile classification makes it possible to delimit areas of intervention at a spatial level, differentiating those municipalities with the highest and lowest prevalence.

Keywords: older women; gender violence; mapping; territorial planning; social services

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1. Introduction

Elder abuse is a social problem usually considered an essentially private matter (Risco et al. 2005), and in this context, women can be victims of violence throughout their lives. Gender inequalities throughout life often make women more vulnerable to violence, abuse, and poverty in old age than men (Choi et al. 2017). They are women who suffer an intersectional stigma, which is a discrediting attribute that places them in a situation of inferiority and generates shame and dissatisfaction; it is a stigma that, in elderly women, refers to the combination of prejudices towards age, gender, and sexuality (Crockett et al. 2018).

Elderly women can live without being aware of the abuse and violence they receive from their current or past partners (Carmona-Torres et al. 2018; World Health Organization 2013). While some elderly women may not be aware that their experiences are considered violence or abuse, many may be. Still, social norms, socioeconomic status, and other factors may prevent them from publicly acknowledging or escaping their situation. Little is known about abuse and violence against these elderly women, as well as prevention and intervention strategies based on previous research (Brownell 2015; Bows 2018; Bows and Westmarland 2017). The development of effective and culturally appropriate prevention interventions for elderly women who experience sexual abuse requires a more nuanced understanding of the dynamics of culture (Bourey et al. 2015; Alvarez et al. 2021) and the socio-territorial values of the rural and urban types.

The gender violence suffered by elderly women is classified as invisible because it is hidden (Heidari 2016; Sleap 2017), and there are no specific social care services for them, despite having been victims during their lives (Heidari 2016; Sleap 2017; Meneses Falcón et al. 2018). In Spain, 40% of battered women of that age have suffered violence from their

partner or ex-partner for more than 40 years; 27% from 20 to 30 years (Ministerio de la Presidencia, Relaciones con las Cortes e Igualdad 2019). In Spain, there are significant differences in gender violence in relation to age (Ministerio De Igualdad 2020); it is stated that women aged 65 and over have resorted to formal support services to a lesser extent than younger women who less often speak with the people around them about the violence suffered than other women. Elderly women not only ask for less help but also have more difficulty recognizing violence, not knowing where to ask for help, or feeling that there is no way out of their situation (Ministerio De Igualdad 2020; Luoma et al. 2011; Meyer et al. 2020; Straka and Montminy 2006).

In this article, we present the results of a research that aims to prepare the Location Map of elderly women victims of gender violence, analyzing their territorial distribution in the specific case of the Autonomous Community of Galicia, Spain (Figure 1), and their relationship with environmental, social, and territorial variables. With this map, we want to provide empirical data and research results that help and/or facilitate the territorial planning of social services aimed at elderly women who are victims of gender violence. Galicia is characterized, unlike other Spanish regions, by the absence of a metropolis dominating the territory. Indeed, the urban network is made up of seven main cities (the four provincial capitals A Coruña, Pontevedra, Ourense, and Lugo, the political capital Santiago de Compostela, the industrial cities Vigo and Ferrol, and other small towns. The population is concentrated in two principal areas: from Ferrol to A Coruña on the northern coast, and in the Rías Baixas region in the southwest, including the cities of Vigo, Pontevedra, and the interior city of Santiago de Compostela. There are smaller populations around the interior cities of Lugo and Ourense. The political capital is Santiago de Compostela, in the province of A Coruña. Vigo, in the province of Pontevedra, is the largest municipality in Galicia and the most populated city.



Figure 1. Galicia in Spain.

2. Materials and Methods

The social and demographic data used come from the Municipal Register of Inhabitants for the year 2021, which is the continuous record of the Spanish population, available from official statistical bodies (Statistics National Institute, https://www.ine.es/, accessed on 4 September 2022), and the official statistics of the General Council of the Justice (https://

www.poderjudicial.es/cgpj/es/Poder-Judicial/Consejo-General-del-Poder-Judicial/, accessed on 4 September 2022) of the Ministry of Justice of the Government of Spain.

We start from the fact that there are no data in official records on elderly women who suffer gender violence or on their location and geographical distribution. We have consulted the records of complaints of gender violence collected in the statistics of the Ministry of Justice, the records of requests for help in the municipal social services from the consultation of the Unified Information System of Social Services (https://inclusio.gva.es/ es/web/s.sociales/siuss, accessed on 4 September 2022), and the help request records of the Women's Assistance Centers (CIM); in all of them, the data collected are very scarce and do not allow statistical analysis. We were able to verify that, in Spain, due to the lack of data, we are facing a type of hidden gender violence, fully coinciding with the statement in this regard by Bridget Sleap (2017) when considering gender violence against elderly women as a type of "invisible violence".

Consider index i = 1, ..., n for denoting a certain geographical region, for example, a council in a region, R. For the collection of regions $i = 1, \dots, n$ considered as a whole, totalPop denotes the total population size $(totalPop = \sum_{i=1}^{n} totalPop_i)$. These regions can be joined for administrative issues in other larger ones, giving rise, for example, to judicial districts, d, d < i. If d = 1, ..., m denotes the judicial districts of a certain geographical region $\bigcup_{l=1}^m d_l = R$ and $\bigcap_{l=1}^m d_l = \varnothing$. Each municipality, i, belongs to a single judicial district, d. To produce spatial data that would allow us to analyze the location and distribution

of these women, we followed a process of statistical inference:

- 1. We start from the general fact that in Spain in 2019, 23.4% of women over 65 years of age suffered or were suffering gender-based violence by their current or past partners. Said data are calculated from the results obtained in the macro-survey on gender violence that is conducted annually in Spain (Ministerio De Igualdad 2020). It is a direct survey of 10,000 Spanish women conducted by the Center of Sociological Research (CIS) (https: //www.cis.es/, accessed on 4 September 2022) and the Ministry of Equality of the Spanish Government. This survey follows sample selection criteria at a territorial level with a proportional stratification by age groups and demographic size of the municipalities at the level of the entire Spanish territory.
- 2. We obtained data on the total number of women over 64 years of age at the municipal level in 2021 from the records of the composition of the population by age, which was collected in the Municipal Register of Inhabitants, and we proceeded with the calculation of the percentage of women over 64 years of age that we estimate are or have been victims of gender-based violence; calculating 23.4% of the total number of elderly women residing in each municipality.
- For a municipality, i, the percentage of elderly women is obtained (perOW_i) which is defined as the ratio between the number of women 64+ years old (NWo64) and the total number of women ($totalPopW_i$):

$$perOW_i = \left(\frac{NWo64}{totalPopW_i}\right) \times 100, \text{ with } i = 1, \dots, n.$$
 (1)

4. For a municipality, y, the percentage of foreigners $(perFo_i)$ is obtained as the ratio between the number of foreign inhabitants (popFo) over the total population ($totalPop_i$):

$$perFo_i = \left(\frac{popFo}{totalPop_i}\right) \times 100, \text{ with } i = 1, \dots, n.$$
 (2)

5. Social protection actions are obtained per inhabitant (socProAcPI) as the ratio between social protection and social promotion actions by the municipality, i, (thousand euros) ($socProAcPC_i$) between the number of inhabitants of the municipality, i:

$$socProAcPI = \frac{socProAcPC_i}{totalPop_i}$$
, with $i = 1, ..., n$. (3)

6. Complaints of gender-based violence are calculated by the municipality, i ($NCGVC_{-}i$) as the ratio between the number of women ($totalPopW_{-}i$) and the number of complaints of gender-based violence by judicial district ($NDVGJ_{d}$) divided by the number of women by judicial party ($totalPopW_{d}$)

$$NCGVC_i = \frac{totalPopW_i \times NDVGJ_d}{totalPopW_d}$$
, with $i = 1, ..., n; d = 1, ..., m$. (4)

7. At the municipal level, we calculated the rate of elderly women who are victims of gender-based violence, *ROWVGV*, by their current or past partner throughout their lives: where *NWo64vgv* is the number of women over 64 who are victims of gender-based violence and *totalPop_i*, is the total population:

$$ROWVGV = \frac{NWo64vgv \times 1000}{totalPop_i}$$
, with $i = 1, ..., n$. (5)

- 8. Disaggregated data at the municipal level were mapped from a Geographic Information System with the statistical software R (R Core Team 2020). We proceeded with the spatial statistical treatment, with a statistical analysis of the interquartile intervals (intervals between one quartile and the next) and with their cartographic representation.
- 9. For each interquartile interval, we proceeded to calculate social and demographic indicators and indices: on the one hand, those referring to the volume of the total population, demographic density (Inhabitants/Km²), number of municipalities, the total number of women, number of women over 64 years of age, young population under 16 years of age, population over 64 years and the number of foreign inhabitants; on the other hand, indicators referring to the number of social protection actions and the number of complaints of gender violence.
- 10. We used the I Moran autocorrelation¹ and the p-value for the spatial distribution of the analyzed variables and the graphic representation on a logarithmic scale of the relationship between population density and ROWVGV at the municipal level (Equation (5)).
- 11. Moran's I can be used either globally, i.e., to determine the extent of Spatial autocorrelation throughout a complete geographic area (in this case, Galicia), or locally, i.e., to determine the degree of Spatial autocorrelation within councils of the entire geographic area.

Two localities, i and j, are connected if, and only if, the square of the distance between i and j is less than the sum of the squares of their distances to any other locality l. It is possible to use the global Moran index to estimate the autocorrelation coefficient, defined as:

$$\mathcal{I}_{ij} = \frac{n \sum_{i=1}^{n} \sum_{j=1}^{n} w_{ij} (ROWVGV_i - \overline{ROWVGV}) (ROWVGV_j - \overline{ROWVGV})}{W_n \sum_{i=1}^{n} (ROWVGV_i - \overline{ROWVGV})^2}, \text{ with } i, j = 1, \dots, n,$$
(6)

where $ROWVGV_i$ and $ROWVGV_j$ are ROWVGV at the i-th and j-th locality, \overline{ROWVGV} is the mean of $ROWVGV_i$ ($i=1,\ldots,n$), across the $i=1,\ldots,n$ localities, w_{ij} is equal to 1 for all the pairs of localities falling in the studied distance class and equal to 0 for all the other pairs, and W_n is the sum of all w_{ij} values in that distance class, which is actually the cardinal of regions neighbors.

In this particular measure, the distance used to create the matrix M is given by $\left(ROWVGV_i - \overline{ROWVGV}\right)\left(ROWVGV_j - \overline{ROWVGV}\right)$ where $ROWVGV_i$ and $ROWVGV_j$ are the values of the variable ROWVGV in the areas i and j, respectively, being \overline{ROWVGV} is the arithmetic mean of all the values of the areas to study.

Although it is one of the oldest measures, it remains one of the most widely used measures of Spatial autocorrelation by comparing the value of ROWVGV in the i area with the value of ROWVGV in all other $j(j \neq i)$ areas.

12. For the spatial and cartographic analysis, we proceeded with delimitation of 4 geographic areas of incidence from the quartiles of the *ROWVGV*.

In general, a quartile analysis is performed for the study variables.

Quantiles are cut points dividing the range of a probability distribution into continuous intervals with equal probabilities or dividing the observations in a sample in the same way. There is one fewer quantile than the number of groups created. Common quantiles have special names, such as quartiles (four groups), deciles (ten groups), and percentiles (one hundred groups); therefore, a quartile is a type of quantile that divides the number of data points into four parts, or quarters, of more-or-less equal size.

The interquartile range (IQR) is a measure of statistical dispersion, which is the spread of the data.

The IQR may also be called the midspread, middle 50%, fourth spread, or H-spread. It is defined as the difference between the 75th and 25th percentiles of the data.

The dataset is divided into quartiles o calculate the IQR, or four ranks—ordered even parts via linear interpolation.

These quartiles are denoted by Q1 (also called the lower quartile), Q2 (the median), and Q3 (also called the upper quartile).

The lower quartile corresponds with the 25th percentile, and the upper quartile corresponds with the 75th percentile, so IQR = Q3 - Q1.

3. Results

We have developed an interquartile analysis of the Rate of Women over 64 years of age who are victims of gender-based violence by the municipality (see Figure 2). Table 1 shows the distribution in Galicia and provinces (4) of the number of municipalities (313) and judicial districts (45). The average population per municipality is 8632 inhabitants, with the minimum at 215 and the maximum at 296,692. For the judicial districts, the average population is 10,529, the minimum is 969, and the maximum is 85,317.

Table 1. Distribution in Galicia and provinces of the number of municipalities and judicial districts.

	Number of Municipalities	Number of Judicial Districts
A Coruña	93	14
Lugo	67	9
Ourense	62	9
Pontevedra	61	13
Total Galicia	313	45

We have arranged the 313 municipalities of Galicia in quartiles based on the values of the Rate of Women over 64 victims of gender violence by their current or past partner (ROWVGV) (Equation (5)). The interquartile groups Q2, Q3, and Q4 have 78 municipalities each, and Q1 has 79 (see Table 2), sorted by population size; Q1 will be the municipalities with the smallest populations and Q4 with the largest populations.

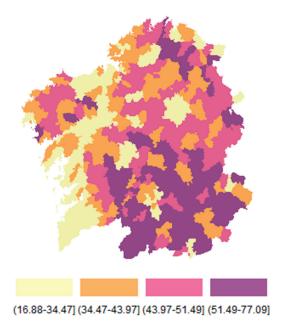


Figure 2. Rate of women over 64 years of age who are victims of gender-based violence by their current or past partner. Information by municipalities (2020) (Rate per 1000 inhabitants). Own elaboration based on data from the Ministry of Equality and the Center for Sociological Research CIS.

Table 2. Population (inhabitants). Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	20,088	36,238.25	12,756.50	215	6411.5	11,406	19,168	296,692	79
Q2	10,294	30,497.56	3872.75	524	2758.5	4457.5	6631.25	247,604	78
Q3	2467	1570.09	2176.00	384	1237.75	1879.5	3413.75	6963	78
Q4	1532	802.58	961.25	315	971.75	1357	1933	3899	78

The comparative cartography of Figure 2 allows us to observe the spatial distribution of the *ROWVGV* and the variables analyzed. We observe that the most urban, densely populated (above Q3 in density), and least aged² municipalities in western Galicia are those that present the lowest *ROWVGV*, with the highest being in rural municipalities with smaller, very aged, and larger populations. Dependent population³: precisely the municipalities in the interior of Galicia, especially in the provinces of Lugo and Ourense, which encompass large territorial areas with the highest *ROWVGV* values. The municipalities with intermediate values Q2 and Q3 are located and distributed as a spatial transition between the areas of higher and lower incidence of the *ROWVGV* (Equation (5)).

On the other hand, regarding the results of the descriptive statistical analysis, they confirm that the ROWVGV is lower in the municipalities with a larger demographic size than in the smaller ones. There is a progressive increase in the ROWVGV (Equation (5)) between the Q1 (quartile: mean: 29, 27, SD = 3.91 IQR = 4.77) and Q4: mean: 58.55 SD = 6.00 IQR = 7.41 (see Table 3). Municipalities Q1 are the most urbanized and have a higher average number of inhabitants (20,088, Table 2, similar results in Table 4), compared to municipalities Q4, which are the most rural and have fewer average inhabitants (1532). This trend of progressive decrease in the ROWVGV values from the most populated and urbanized municipalities to the least populated and rural ones is maintained in the population density variables (Q1:

mean: 335.49 SD = 351, 61 IQR = 336.70, Q4: mean: 20.08 SD = 11.52 IQR = 14.18, ordered from highest to lowest population density) (see Table 5).

Table 3. *ROWVGV*. Rate of Women over 64 years of age who are victims of Gender Violence by their current or previous partner throughout their lives (*ROWVGV*). Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, 2021, General Council of the Judicial Power CGPJ), Ministry of Equality, and Center for Sociological Research CIS.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	29.27	3.91	4.77	16.88	27.36	30.33	32.12	34.47	79
Q2	39.66	2.99	4.91	34.47	37.38	40.10	42.29	43.97	78
Q3	47.96	2.24	3.24	44.06	46.37	47.90	49.60	51.79	78
Q4	58.55	6.00	7.41	51.91	53.88	56.84	61.29	77.09	78

Table 4. Women (inhabitants). Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	10,406	19,178.16	6605.50	99	3247	5787	9852.5	156,528	79
Q2	5411	16,407.51	1958.25	220	1404.5	2296.5	3362.75	132,828	78
Q3	1243	821.86	1074.75	186	592.25	930	1667	3615	78
Q4	777	417.03	496.75	157	479.5	673.5	976.25	2055	78

Table 5. Density (Inhabitants/Km²). Sources: own elaboration based on data from the Galician Institute of Statistics IGE, Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	335.49	351.61	336.70	4.10	132.70	263.40	469.40	2643.30	79
Q2	189.76	739.38	66.70	3.50	35.23	58.80	101.93	6454.80	78
Q3	28.10	19.38	18.23	4.20	16.40	22.05	34.63	90.00	78
Q4	20.08	11.52	14.18	3.10	11.88	17.45	26.05	58.90	78

ROWVGV increases with dependency and aging. Most urban municipalities with the highest population density have a younger and less dependent population; that is, the municipalities with the largest population and the most urban have lower ROWVGV than the less populated and rural ones. Dependence: Q1: mean: 54.64~SD = 4.92~IQR = 6.91; Q4: mean: 97.58~SD~12.16~IQR: 15.13~and the same is observed regarding aging: Q1: mean: 134.14~SD = 35.35~IQR = 40.47; Q4: mean: 134.14~SD = 270.75, ordered from highest to lowest values of the indices dependency and aging (see Tables 6 and 7).

Table 6. Aging Index (people aged 65 or over for every 100 under 20). Sources: own elaboration based on data from the Galician Institute of Statistics IGE, Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	134.14	35.35	40.47	57.25	110.85	130.30	151.32	269.27	79
Q2	253.84	77.40	94.29	148.26	194.14	236.09	288.43	501.47	78
Q3	433.22	132.57	168.52	242.14	331.55	395.76	500.07	908.63	78
Q4	681.59	202.64	270.75	400.35	538.33	624.71	809.08	1392.33	78

Table 7. Dependency Index (ratio of the population under 15 years of age to the population over 64 years of age). Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	54.64	4.92	6.91	42.73	51.32	54.17	58.23	67.99	79
Q2	67.09	5.42	6.20	55.30	63.37	67.21	69.57	79.71	78
Q3	78.75	6.17	7.94	68.67	74.40	78.37	82.34	100.83	78
Q4	97.58	12.16	15.13	75.31	88.55	96.04	103.68	130.70	78

Regarding feminization in the demographic structure, we did not observe differences in the *ROWVGV* between urban and rural municipalities; women predominate both in municipalities Q1 and Q4, with values of 51.80 and 50.71%, respectively, of their total population. However, if we observe the *ROWVGV* data in relation to the percentage of women over 64 years of age, urban–rural differences are evident. The urban municipalities in Q1 have an average of 24.56%, and the municipalities in Q4 have an average of 49.63% of the female population over 64 years of age, which determines its highest *ROWVGV*.

Table 8 shows the descriptive statistics for the percentage of elderly women ($perOW_i$) (Equation (1)) distributed among the quartiles of the rate ROWVGV.

Table 8. Percentage elderly women. Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	24.56	3.32	4.30	13.90	23.00	25.25	27.30	29.69	79
Q2	33.45	3.04	4.79	27.82	31.05	33.56	35.84	40.45	78
Q3	41.29	2.64	3.81	36.24	39.48	41.15	43.29	47.91	78
Q4	49.63	4.89	6.16	43.40	45.93	48.22	52.09	64.71	78

On the other hand, we have also observed that the ROWVGV in relation to the number of foreigners is lower in the Q1 municipalities, more urban, and with a greater number of foreigners than in the more rural Q4 municipalities with fewer foreigners (Q1: mean: 3.83 SD = 2.15 IQR = 2.25, Q4: mean: 2.72 SD = 1.72 IQR = 1.79, ordered from highest to lowest values of the number of foreigners) (see Table 9).

Table 9. Percentage of foreign people. Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021.

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	3.83	2.15	2.25	0.87	2.48	3.48	4.73	11.54	79
Q2	2.92	2.34	2.35	0.30	1.28	2.32	3.62	14.88	78
Q3	2.68	2.24	1.61	0.55	1.60	2.25	3.20	14.88	78
Q4	2.72	1.72	1.79	0.50	1.63	2.38	3.42	11.99	78

Regarding social protection actions measured in the expenditure of public money per inhabitant (Equation (3)), urban Q1 municipalities have lower results than rural Q4 municipalities (Q1: 0.12~SD = 0.05~IQR = 0.05; Q4 0.15~SD = 0.08~IQR = 0.07, ordered from lowest to highest values of social protection actions) (see Table 10).

Regarding the number of complaints of gender violence (Equation (4)), we observe that the most urban Q1 municipalities stand out with the highest number of complaints per inhabitant and with a great difference with respect to the rural Q4 municipalities (Q1: mean: 553.43 SD = 1372.66 IQR = 382.50, Q4: mean: 26.35 SD = 17.15 IQR = 22.75 ordered from highest to lowest values of the number of complaints of gender violence) (see Table 11).

Table 10. Social protection actions per inhabitant. Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021, General Council of the Judiciary (CGPJ).

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	0.12	0.05	0.05	0.04	0.09	0.11	0.14	0.42	79
Q2	0.14	0.04	0.05	0.05	0.11	0.14	0.16	0.27	78
Q3	0.16	0.07	0.09	0.05	0.11	0.16	0.20	0.42	78
Q4	0.15	0.08	0.07	0.05	0.11	0.15	0.18	0.42	78

Table 11. Complaints of Gender Violence by a municipality. Sources: own elaboration based on data from the Galician Institute of Statistics (IGE), Municipal Register of Inhabitants, the year 2021, General Council of the Judiciary (CGPJ).

	Mean	SD	IQR	0%	25%	50%	75%	100%	n
Q1	553.43	1372.66	382.50	2.00	146.00	266.00	528.50	11,818.00	79
Q2	263.40	1022.73	84.75	6.00	46.25	86.00	131.00	8473.00	78
Q3	41.82	28.39	36.00	5.00	19.00	33.50	55.00	144.00	78
Q4	26.35	17.15	22.75	5.00	14.00	20.00	36.75	79.00	78

Therefore, the data show that gender violence against elderly women has a comparatively higher incidence in small rural municipalities than in urban ones, which is associated with greater aging, feminization at advanced ages, a greater presence of socially dependent people, and low population density. However, this incidence does not correspond to the data on the number of complaints and the data on the presence of foreign populations, which are higher in urban areas.

The inversely proportional relationship between ROWVGV and population density is confirmed (see Figure 3). Gender-based violence against women over 64 years of age increases as population density decreases. In Figure 4, the blue line is the regression line of the ROWVGV on density; that is, it allows us to explain the ROWVGV as a function of density. The red line is the regression line of the ROWVGV on the logarithm of the density. From a statistical point of view, the model explains 55% of the variability of the variable ROWVGV.

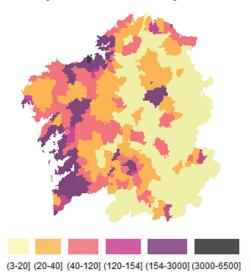


Figure 3. Population density. Information by municipalities (2020) (Inhabitants/Km²). Source: National Statistics Institute.

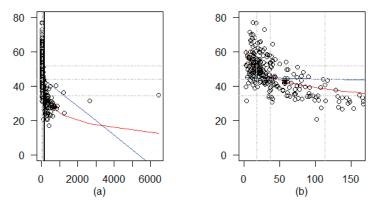


Figure 4. (a) Axis OX population density. Axis OY rates of elderly women as victims of gender violence. (b) Zoom of previous one.

Finally, it is important to point out that the Spatial autocorrelation of I Moran and the *p*-value show spatial distribution of the *ROWVGV* (I Moran 0.5404 p-value 0.0000) and between the *ROWVGV* with all the variables studied, being to a greater extent measured with the variables of the number of dependent persons and the percentage of women over 64 years of age and aging (see Figure 5, and Table 12).

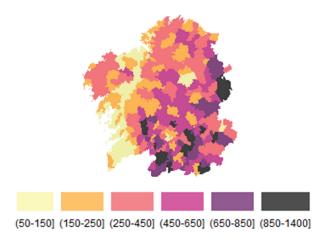


Figure 5. Aging index. Information by municipalities (2020). Source: National Institute of Statistics. Demographic indicators.

Table 12. Spatial autocorrelation of I and the *p*-value.

	I Moran	<i>p</i> -Value
Total population	0.0836	0.0015
Female population	0.0785	0.0027
Complaints of gender violence	0.0705	0.0032
Density	0.1055	0.0000
Aging Index	0.5308	0.0000

Table 12. Cont.

	I Moran	<i>p</i> -Value
Dependency Index	0.5169	0.0000
ROWVGV	0.5404	0.0000
Number of women 64+ years	0.5376	0.0000
Social protection social	0.0731	0.0053
Number of Women 64+ victims of gender-based violence on the part of current couple	0.0484	0.0387
Number of women 64+ victims of gender-based violence by their partner throughout their lives	0.0484	0.0386

4. Discussion

The results of our research on the location and distribution of the rates of elderly women victims of gender violence show their direct relationship with low demographic density, aging, and dependency, which is associated with disabled people. The resulting mapping can facilitate the territorial organization of social and health services aimed at elderly women in rural areas. The interquartile classification makes it possible to delimit areas of intervention at a spatial level, differentiating those municipalities with the highest and lowest prevalence.

Elderly women who suffer or have suffered gender-based violence in rural areas are determined by isolation, stigma, and the social and family environment (Camarero and Sampedro 2008). In such environments, disabled women are three times more likely to experience violence of any kind and have long-term mental health problems and self-destructive behavior (Muster 2021). In rural municipalities with low demographic density, elderly women who are victims of violence often have limited access to resources, isolation, difficulty in identifying this type of violence, suffer abuse by their partners, stigmatization, or physical barriers (Lorente and Castro 2009). These low-density rural municipalities correspond to quartile Q4 of the *ROWVGV* map of Galicia.

The Spanish government's studies on gender-based violence in rural areas state that it is necessary to map such violence in order to direct resources to those areas where they are most needed (Ministerio de Medio Ambiente y Medio Rural y Marino 2011; Ministerio de Igualdad 2021; Luoma et al. 2011), and the methodology developed in our research that allows mapping areas of higher or lower prevalence of *ROWVGV* could facilitate this task.

A growing demographic masculinization is taking place in rural areas due to the abandonment and emigration of women (Martínez García and Camarero 2015) and the so-called "invisible violence" (Sleap 2017) suffered by elderly rural women who do not emigrate (Martínez García 2011) contributes to this. It is violence that, above all, needs to be made visible (Flueckiger 2008), and therefore, anticipatory prevention programs designed from a territorial perspective are necessary in order to direct them, to a greater extent, toward those places where they are most necessary. It is evident that in order to make this type of violence visible, it is necessary to generate data and know its location and distribution, that is, to know where, when, and why in that place and not in another.

We recommend the implementation of services that are specifically tailored to the needs of older rural women (Pathak et al. 2019). Professionals working in front-line social services where elderly women are commonly seen should be trained to identify and respond to gender-based violence in a manner appropriate to their social and cultural environment (Celdrán 2013; Meyer et al. 2020), for which the territorial approach and mapping of gender violence are configured as valuable tools. We can conclude it is especially important to know the location and distribution of gender-based violence to intervene and prevent such violence; only in this way can the resources and services to deal with it be efficiently planned.

However, more research is needed on why violence against elderly women is not reported (Crockett et al. 2015), as well as research with qualitative and quantitative data on the social and environmental determinants present in this type of violence (Straka and Montminy 2006; Crockett et al. 2015).

5. Conclusions

The location of the greater or lesser ROWVGV is determined by aging and dependency as dominant features in the demographic analysis at the municipal level. This means that we have observed that the greater the aging and dependency, the greater the ROWVGV, which are characteristics of rural municipalities that are farthest from cities.

We must also highlight the inverse linear correlation between population density and ROWVGV (-0.31, which, if we take the logarithm, is -0.74). We found that the lower the demographic density, the higher the ROWVGV. If we establish the direct relationship between rural space and low density, the arguments are reinforced to proceed with the association between gender violence, rural spaces, dependency, and aging.

In short, gender-based violence against elderly women is hidden in the statistics and is more prevalent in rural and low-density areas. Prevention and case identification interventions are needed in these areas. There is a lack of spatial data in the official statistics on gender violence, which does not allow the definition of policies for intervention and prevention of gender violence at the territorial level.

The correct territorial planning of social services for the care of elderly women who are victims of gender-based violence is necessary, which allows technical and human resources to be efficiently directed towards those places with the highest prevalence and social care needs for these elderly women. It is necessary to address the mapping of gender violence to plan prevention and social intervention actions. We believe that the territorial approach and cartography must be present in the organization of social services.

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Notes

- Moran's \mathcal{I} test statistic measures the correlation between attributes, in this case, ROWVGV, at each location i in a study area and some summary (usually the statistical mean) of the values from neighboring locations v.
- ² Aging index: ratio of the population over 64 years old to the population under 20 years old expressed as a percentage, i.e., the number of people aged 65 and over for every 100 people under 20 years old.
- Overall dependency ratio: ratio between the potentially dependent population groups (population under 15 and over 64) and the potential working-age population group (population between 15 and 64).

References

- Alvarez, Carmen, Maria Lameiras-Fernandez, Charvonne N. Holliday, Bushra Sabri, and Johns Campbell. 2021. Latina and Caribbean Immigrant Women's Experiences with Intimate Partner Violence: A Story of Ambivalent Sexism. *Journal of Interpersonal Violence* 36: 3831–54. [CrossRef] [PubMed]
- Bourey, Christine, Whitney Williams, Erin Elizabeth Bernstein, and Rob Stephenson. 2015. Systematic review of structural interventions for intimate partner violence in low- and middle-income countries: Organizing evidence for prevention. *BMC Public Health* 15: 1165. [CrossRef]
- Bows, Hannah. 2018. Sexual violence against older people: A review of the empirical literature. *Trauma, Violence, and Abuse* 19: 567–83. [CrossRef]
- Bows, Hannah, and Nicole Westmarland. 2017. Rape of older people in the United Kingdom: Challenging the 'real rape' stereotype. British Journal of Criminology 57: 1–17. [CrossRef]
- Brownell, Patricia. 2015. Negligencia, abuso y violencia contra las mujeres mayores: Definiciones y marcos de investigación. Revista de Salud Pública de Europa Sudoriental (SEEJPH) 1. [CrossRef]
- Camarero, Luis, and Rosario Sampedro. 2008. ¿Por qué se van las mujeres? El continuum de movilidad como hipótesis explicativa de la masculinización rural. *Revista Española de Investigaciones Sociológicas (Reis)* 124: 73–105. [CrossRef]
- Carmona-Torres, Juan Manuel, Pablo Jesús López-Soto, Ana Isabel Coimbra-Roca, Ruth Mary Gálvez-Rioja, Thomas Goergen, and Ma Aurora Rodríguez-Borrego. 2018. Elder Abuse in a Developing Area in Bolivia. *Journal of Interpersonal Violence* 33: 339–56. [CrossRef] [PubMed]
- Celdrán, Montserrat. 2013. La violencia hacia la mujer mayor: Revisión bibliográfica. Papeles del Psicólogo 34: 57-64.
- Choi, Moon, Patricia Brownell, and Stefana I. Moldovan. 2017. International movement to promote human rights of older women with a focus on violence and abuse against older women. *International Social Work* 60: 170–81. [CrossRef]
- Crockett, Cailin, Bergen Cooper, and Bonnie Brandl. 2018. Intersectional Stigma and Late-Life Intimate-Partner and Sexual Violence: How Social Workers Can Bolster Safety and Healing for Older Survivors. *The British Journal of Social Work* 48: 1000–13. [CrossRef]
- Crockett, Cailin, Bonnie Brandl, and Firoza Chic Dabby. 2015. Survivors in the margins: The invisibility of violence against older women. *Journal of Elder Abuse & Neglect* 27: 291–302.
- Flueckiger, Jennifer. 2008. Older Women and Domestic Violence in Scotland. Edinburgh: Edinburgh University Centre for Research into Families and Relationships.
- Heidari, Shirin. 2016. Sexuality and older people: A neglected issue. Reproductive Health Matters 24: 1–5. [CrossRef] [PubMed]
- Lorente, Miguel, and Pedro Castro. 2009. Violencia de Género en los pequeños municipios del Estado Español; Madrid: Ministerio de Sanidad, Política Social e Igualdad.
- Luoma, Minna-Liisa, Mira Koivusilta, Gert Lang, Edith Enzenhofer, Liesbeth Donder, Dominique Verté, Jolanta Reingarde, Ilona Tamutiene, José Ferreira Alves, Ana João Santos, and et al. 2011. *Prevalence Study of Abuse and Violence against Older Women. Results of a Multi-Cultural Survey in Austria, Belgium, Finland, Lithuania, and Portugal*. European Report of the AVOW Project. Helsinki: National Institute for Health and Welfare (THL).
- Martínez García, María Ángeles. 2011. ¿Adónde puedo ir yo?: Violencia de Género en las áreas rurales de Asturias. Ph.D. thesis, UNED Universidad de Estudios a Distancia, Asturias, Spain.
- Martínez García, María Ángeles, and Luis Alfonso Camarero. 2015. La reproducción de la Violencia de Género: Una lectura desde las áreas rurales. Ager. Revista de Estudios sobre Despoblación y Desarrollo Rural 19: 117–46. [CrossRef]
- Meneses Falcón, María del Carmen, Antonio Rúa Vieites, María Belén Charro Baena, and Jorge Uroz Olivares. 2018. *La violencia de género en la pareja o en la expareja de mujeres mayores de 60 años*. Madrid: Universidad Pontificia Comillas ICAI-ICADE, Fundación Luz Casanova.
- Meyer, Sarah R., Molly E. Lasater, and Claudia García-Moreno. 2020. Violence against older women: A systematic review of qualitative literature. *PLoS ONE* 15: e0239560. [CrossRef] [PubMed]
- Ministerio De Igualdad. 2020. Macroencuesta de violencia contra la mujer 2019. Subdirección General de Sensibilización, Prevención y Estudios de la Violencia de Género (Delegación del Gobierno contra la Violencia de Género). Madrid. Available online: https://violenciagenero.igualdad.gob.es/violenciaEnCifras/macroencuesta2015/pdf/Macroencuesta_2019_estudio_investigacion.pdf (accessed on 4 September 2022).
- Ministerio de Igualdad. 2021. Mujeres Víctimas de Violencia de Género en el Mundo Rural. Madrid: Delegación del Gobierno Contra la Violencia de Género, 240p.
- Ministerio de la Presidencia, Relaciones con las Cortes e Igualdad. 2019. Estudio sobre las mujeres mayores de 65 años víctimas de violencia de género. Available online: https://violenciagenero.igualdad.gob.es/violenciaEnCifras/estudios/investigaciones/20 19/pdfs/Estudio_VG_Mayores_65.pdf (accessed on 4 September 2022).
- Ministerio de Medio Ambiente y Medio Rural y Marino. 2011. *Diagnóstico de la Igualdad de Género en el Medio Rural*. Madrid: Ministerio de Medio Ambiente y Medio Rural y Marino, 338p.
- Muster, Caroline L. 2021. The Silenced Voices of Hidden Survivors: Addressing Intimate Partner Violence Among Women With Disabilities Through a Combined Theoretical Approach. *Affilia* 36: 156–66. [CrossRef]
- Pathak, Neha, Rageshri Dhairyawan, and Shema Tariq. 2019. The experience of intimate partner violence among older women: A narrative review. *Maturitas* 121: 63–75. [CrossRef] [PubMed]

- R Core Team. 2020. R: A Language and Environment for Statistical Computing. Vienna: R Foundation for Statistical Computing. Available online: https://www.R-project.org/ (accessed on 4 September 2022).
- Risco, Carmen Risco, María del Carmen Paniagua Vicioso, Gloria Jiménez Mendoza, María Dolores Poblador Curtó, Luis Molina Martínez, and Francisco Buitrago. 2005. Prevalence and risk factors of suspected abuse in the elderly population. *Medicina Clínica* 125: 51–55. [CrossRef]
- Sleap, Bridget. 2017. Tenemos los mismos derechos. ¿Qué dicen las mujeres adultas mayores sobre su derecho a la no discriminación, a la igualdad, a vivir libres de violencia, abuso y negligencia en la vejez? HelpAge International. Available online: https://www.helpage.org/silo/files/tenemos-los-mismos-derechos.pdf (accessed on 4 September 2022).
- Straka, Silvia M., and Lyse Montminy. 2006. Responding to the needs of older women experiencing domestic violence. *Violence against Women* 12: 251–67. [CrossRef] [PubMed]
- World Health Organization. 2013. Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-Partner Sexual Violence. Available online: http://www.who.int/reproductivehealth/publications/violence/9789241564625/en/ (accessed on 4 September 2022).

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Article

"You Don't Want to Be Perceived as Wild and Unruly": How Ethnic Minority Women Experience and Negotiate Their Autonomy within Honor-Related Contexts

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Abstract: Within honor-related contexts, women's appearances, actions, and life choices are closely tied to the honor of the entire family. As a result, women who opt to deviate from prevailing feminine honor codes are subject to violence as a means of restoring the family's good name. Based on the life stories of fourteen Dutch ethnic minority women who deviated from feminine honor codes, this study investigates how women experience their autonomy as a process within their social context. Rather than analyzing this process through a binary conception of autonomy (i.e., agency/coercion), this study highlights women's experiences through a relational approach to autonomy. In doing so, this study uncovers three overarching themes: (1) honor codes are enforced implicitly through expectations surrounding the role of "the honorable daughter/wife", and explicitly through a shared religious and/or ethnic identity, (2) women detach themselves from honor codes either by strategically renegotiating honor codes or after experiencing a turning point that triggers an immediate process towards detachment from honor codes, and (3) women's decision-making processes are accompanied with health concerns caused by lingering guilt, social shame, and isolation.

Keywords: honor-based violence; autonomy; honor codes; ethnic minorities; migration

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1. Introduction

Farah (age 21) was 13 years old when she decided to start wearing a headscarf. "Even as a child, I felt pressure," she explains. "And I knew this pressure would only get worse once I would go to high school. So I thought, 'let's just get it over with.' My parents were of course thrilled with the fact that I wore it of my own accord." After two years, she regretted her decision. "But I can't simply back out of the choice I made as a child ... So now I run the risk of being ostracized by my family" (Ezzeroili 2022).

The above excerpt from an anonymous interview report in the Dutch newspaper *de Volkskrant*, illustrates how honor-related settings violate women's personal autonomy regarding their life choices. While violence against women knows no social, economic, or national boundaries, the type of violence in honor settings is fundamentally different from other forms of violence against women (Gregory et al. 2020). In communities in which the concept of honor governs daily life, women are perceived as symbolic and physical markers of a family's good name (Christianson et al. 2021; Cihangir 2012; King 2008). That is why women's appearances, actions, and life choices are closely tied to the honor of the entire family (Christianson et al. 2021; Cooney 2014).

Consequently, girls and women are instilled with feminine honor codes, namely: sexual purity, modest behavior and dress, discretion in social relationships with men, obedience to male authority, limited movement outside of the private sphere, and limited choice in selecting a marriage partner (Christianson et al. 2021; Cihangir 2012; King 2008). To preserve the family's honor, men are instilled with honor codes regarding the ability to uphold family authority, as well as the responsibility to protect the family's good name (Christianson et al. 2021; Cihangir 2012; Cooney 2014; King 2008). This means that when a

woman deviates from feminine honor codes, this negatively reflects on her family's honor as well as the honor of the men in her family.

As a result, women who opt to deviate from prevailing feminine honor codes are subject to violence as a means of restoring the family's good name (Awwad 2001; Gregory et al. 2020). Such violence is generally referred to as honor-based violence, and can be defined as any form of mental or physical violence committed from a collective mindset in response to a (threat of) violation of a family's honor of which the outside world is aware or threatens to become aware (Ferwerda and Leiden 2005). To forestall this occurrence, girls and women constantly negotiate their autonomy within feminine honor codes—as illustrated through Farah's quote. This means that the type of violence that is inherent to feminine honor codes may be subtle and not literally imposed since girls and women constantly adjust their behavior according to the honor codes they were taught from a young age. That is why, in this paper, I would like to broaden the above definition to include all gender-specific honor codes that violate an individual's autonomy regarding their life choices.

While in Farah's case such codes are mediated through Islamic feminine chastity norms (i.e., wearing a headscarf and chaste clothes), gender-specific honor codes are common within many migrant communities living in the West (Cooney 2014; Pope 2012), irrespective of whether they are comprised of Muslims or Christians (Lutz 1991; Merz et al. 2009). That is, migrating to a new country results in a permanent shift in the social fabric of one's life. To cope with the impact of becoming an ethnic minority within a white-majority society, group-oriented behavior towards the family and the (ethnic and/or religious) community is often stimulated through shared honor codes within families and communities (Buitelaar 2007; Merz et al. 2009; van Tubergen 2007). For instance, the virginity norm (i.e., women's sexual purity and abstinence from sex outside of marriage) can act as a symbolic frontier between the ethnic minority community and the surrounding white-majority society (Ketner et al. 2004).

There is a growing body of empirical literature on the gendered violence that is inherent to such honor codes (e.g., van Bergen and Saharso 2015; Christianson et al. 2021; Cihangir 2012). However, there remains a scarcity of research investigating the complex ways in which ethnic minority women experience their autonomy within honor codes when they opt to deviate from them. Previous studies largely took the virginity norm as a focus (Buitelaar 2002; Cense 2014; Cinthio 2015; Griffiths 2015; Hawkey et al. 2018; Saharso et al. 2023). However, it is important to recognize that gender-specific honor codes encompass a broad range of behaviors and attitudes that include, but are not limited to, the virginity norm.

Moreover, a review of the literature on honor-based violence (Mayeda and Vijaykumar 2016) highlights that honor killings receive a disproportionate amount of attention compared to other forms of honor-based violence that are far more prevalent. As a result, the more subtle forms of honor-based violence that are not literarily imposed are underexamined in the empirical literature.

Accordingly, rather than placing a focus on the virginity norm or exclusively focusing on direct forms of honor-based violence, in this paper, I aim to explore how ethnic minority women experience their autonomy within the context of honor codes in general. Specifically, I aim to investigate women's decision-making processes when they opt to deviate from honor codes.

2. Theoretical Perspective

According to Cooney (2014, p. 94–95), within honor settings, women's decision-making processes are affected by three forms of stratification: male rule (women's lower place in the domestic and social hierarchy), group rule (collective interests of the group take precedence over personal wishes), and elderly rule (obedience to the authority of older family members). In this paper, I analyze how these three forms of stratification play a role

in the decision-making processes of ethnic minority women who deviate from honor codes. Here, a relational approach to autonomy will be used as an analytical lens.

Relational autonomy is an umbrella term with multiple interpretations and definitions. Nevertheless, the idea shared within this concept is that human beings are deeply intertwined within their social context, and as a result, must be understood through their relationships with others (Delgado 2019, p. 57). Since norms and practices (including honor codes) are always mediated through social relationships, a relational approach to autonomy understands decision-making abilities as fluid and responsive to the meanings, structures, and dynamics within individuals' relationships and their broader social context (Deveaux 2018).

The emergence of a relational approach stemmed from critiques directed towards a binary conception of autonomy (i.e., agency/coercion) (Deveaux 2018; Veltman and Piper 2014). By adopting an agency/coercion binary, women are positioned as either entirely autonomous or completely constrained—or either "choosers" or "losers" (Hutchings 2013). Specifically, through this binary conception, Muslim women and women of color are often portrayed as victims. Such a view of autonomy is often part of white-centric feminism. As argued by Rafia Zakaria (2021, p. 11), "in the value system of white feminism, it is rebellion, rather than resilience, that is seen as the ultimate feminist virtue . . . The truth that resilience [within coercive conditions] may be just as much a feminist quality is lost in the story of feminism written and populated entirely by white women". In doing so, this view mistakenly links personal autonomy with the rejection of religious or cultural practices, while it "fails to capture the more complex realities of human agency as well as of the way that social practices evolve and are sustained" (Deveaux 2018, p. 88).

So, rather than depending on a binary conception of autonomy, relational autonomy pays attention to the different ways in which women are socially embedded (see, Deveaux 2018; Mackenzie and Stoljar 2000). Such an approach asks about "the degree to which, in any given circumstance or context, women are able to reflect upon, and possibly renegotiate and redefine—or indeed refuse—particular expectations, roles, and activities" (Deveaux 2018, p. 91). This means that women's responses to gender-specific honor codes involve constraints on choices, but also choice within constraints (Narayan 2001, p. 425).

Thus, following the above conception of relational autonomy, this paper investigates (a) how ethnic minority women reflect on honor codes within their specific social context, and (b) how this context shapes their decision-making process when they opt to deviate from feminine honor codes.

3. Methodology

3.1. Method of Data Collection

Data were collected through life-story story interviews. The life-story interview can be defined as "the story a person chooses to tell about the life he or she has lived, told as completely and honestly as possible, what is remembered of it, and what the teller wants others to know of it, usually as a result of a guided interview by another" (Atkinson 1998, p. 8).

I opted for this method because it allows for insights into women's experiences and choices within the roles and expectations that are associated with gender-specific honor codes. To help elicit their life-stories, participants were posed a series of openended, reflective questions that encouraged them to share their narratives based on their subjective identities and perspectives (Atkinson 1998). This was accomplished with the help of an interview guide that included the following themes: parents' birthplace and (former) occupation; migration history; childhood and teenage years; education/career; partner/marriage; and current life choices. These themes were used to guide the interview chronologically. That is, the narrative flow of the interview was guided by starting with inquiries about the participant's childhood and progressively transitioning to the present. In doing so, the life story interviews allowed for insights into women's experiences with, and reflections on, honor settings.

Ethical approval was obtained from the Medical Research Ethics Committee (MREC) of the VU Medical Center Amsterdam, the Netherlands (decision date: 29 September 2022). The MREC also assessed that the conducted research is not subject to the Medical Research Involving Human Subjects Act (WMO). For more information on this matter, see the Central Committee on Research Involving Human Subjects (CCMO 2023). Written informed consent was obtained from all participants.

3.2. Participant Recruitment and Characteristics

In accordance with the research aim and question of this paper, the research sample consists of Dutch ethnic minority women who deviated from feminine honor codes. They were recruited through a call, which was accompanied with an informative letter, and a phone call, in which potential participants were informed about the research. Women were asked to participate in an interview if they were raised in a family in which gendered honor codes were prevalent and if they deviated from these codes at a certain point in their lives. Here, it is important to note that although all participants confirmed their deviation from honor codes, this does not necessarily imply a rejection of all honor codes prevalent in their families and communities. As highlighted before, women's deviation from and compliance with honor codes is a complex experience that cannot be understood through a binary conception of autonomy. This paper sheds light on the complexities of these experiences.

I recruited and interviewed 14 participants in the Netherlands between October 2022 and May 2023. Five participants were recruited through my personal and professional network, two participants were recruited through social workers, five participants were recruited through private women's support groups on Facebook, and the remaining two participants were recruited through snowball sampling. All interviews were audio recorded with the interviewees' permission and lasted between 90 min and three hours. The interviews were conducted in Dutch, except for one interview, which was conducted in a combination of Dutch and Persian.

All participants are Dutch citizens residing in towns or cities. The majority of the participants study or completed vocational or higher education, with the exception of one participant, whose highest educational attainment is a high school diploma. Out of the total participants, seven are married, the rest are either single or in a relationship. Eight participants are currently employed in various occupations, including roles such as social worker, teacher, pharmacy technician, and administrative positions. One participant is unemployed and does voluntary work at a community center. The remaining five participants are university students. Of the fourteen participants, one participant was raised in a Christian household and thirteen participants were raised in a Sunni-Muslim household. Nine participants were born in the Netherlands, four participants migrated to the Netherlands during childhood (together with their parents or through family reunification), and one participant migrated to the Netherlands with her (then) husband. An overview of the research sample is given in Table 1.

Table 1. Overview of the research sample.

Name * and Age	Brief Migration History
Ceyda (32)	Born in the Netherlands to parents who migrated from Turkey
Fazilet (56)	Born in the Netherlands to a parent who migrated from Turkey and a parent who was born in the Netherlands
Fereshta (44)	Afghanistan–Pakistan–Netherlands
Hanan (47)	Born in the Netherlands to parents who migrated from Morocco
Hayat (24)	Born in the Netherlands to parents who migrated from Turkey
Maryam (23)	Born in the Netherlands to parents who migrated from Egypt

Table 1. Cont.

Name * and Age	Brief Migration History
Nadia (36)	Iraq–Netherlands
Özge (59)	Turkey–Netherlands
Rozhin (23)	Born in the Netherlands to parents who migrated from Kurdistan (Iraq)
Saloua (44)	Morocco-Netherlands
Samar (21)	Born in the Netherlands to parents who migrated from Morocco
Sihame (52)	Morocco-Netherlands
Sumaya (20)	Born in the Netherlands to parents who migrated from Morocco
Zahra (38)	Born in the Netherlands to parents who migrated from Morocco
* Pagudanum	

^{*} Pseudonym.

3.3. Analysis

All data were transcribed verbatim and anonymized. Within the analysis, I employed a directed approach to qualitative content analysis (Hsieh and Shannon 2005). Such an approach implies that existing theory or prior research is used to guide the analysis. This means that the analysis was guided by a relational approach to autonomy. First, I read all transcripts and inductively coded them. Here, repetitive patterns and initial codes were identified. Thereafter, all transcripts were transferred to ATLAS.ti, where they were further analyzed and coded. While continuously comparing the transcripts, I explored the similarities and differences in how women reflect on honor codes and their encounters within an honor setting. Around 90 codes were identified. These were clustered into nine categories (migration history, childhood, emotional/physical violence, virginity/sexuality, making choices, family and community, health, help and counseling–informal, and help and counseling–formal), which were organized in a coding scheme. Saturation led to the identification of three overarching themes, namely: (1) enforcement of gender-specific honor codes, (2) transitions within an honor setting, and (3) navigating the effects of honor violations.

4. Findings

4.1. Theme 1: Enforcement of Gender-Specific Honor Codes

All participants were expected to comply with feminine honor codes through socialization processes within the family and ethnic and/or religious community. While honor codes were often implicitly enforced from a young age, (suspected) deviation from these norms meant that women also experienced explicit enforcement of honor codes. When honor codes were enforced implicitly, this was accomplished through expectations surrounding the role of the honorable daughter/wife. Explicitly, a shared religious and/or ethnic identity was expressed as a means to enforce honor codes. The former was taught through a gendered upbringing that is associated with honor codes, and the latter was enforced when women violated honor codes or when their actions were suspected to lead to honor violations. In the following two sections, I will illustrate the ways in which both gendered mechanisms work and how women reflect upon them within their social context.

4.1.1. The Honorable Daughter/Wife

Participants were brought up with gendered behavior that is in line with the idea of an honorable daughter/wife. Their life stories reveal that an honorable daughter/wife is someone who obeys all three stratified relationships that are inherent to an honor-related context (i.e., male rule, group rule, and elderly rule). During childhood and teenage years, this was promoted through feminine honor codes, such as modest behavior and dress, limited movement outside of the private sphere, and obedience to male and elder authority, while deviations from honor codes were stigmatized. Consequently, participants internalized the behaviors that are associated with the idea of an honorable daughter/wife.

A commonly used term concerning the concept of an honorable daughter/wife is *ayb*, an Arabic word that roughly translates to "shameful" or "disgraceful." Several Turkish-speaking participants expressed this as *ayip*, and a participant with a Moroccan–Arabic background expressed this as *hshouma*. By itself, this term is gender-neutral. However, it is often addressed to girls and women in order to internalize "honorable" gendered behavior and to stigmatize behavior that is considered to be dishonorable. Özge reflects on the use of this term during her childhood years:

You are groomed to become a housewife. An ideal woman. During that time it feels very normal ... As a girl you so often hear [that something is considered to be] *ayip* ... For example [regarding] a girl's sexual honor; even by looking at a man you can violate that honor. I never did such things because I [learned] that very well from my mother ... You get that kind of message on a regular basis. So, then you simply know how to behave as a girl.

Thus, during childhood and teenage years, feminine honor codes are mediated through the use of *ayb* or similar expressions that teach girls to be an honorable daughter/wife, and thus safeguard the family's good name. All participants expressed that the reasons for such expected behaviors were never explained through dialogue. Rather, through expressions such as *ayb*, participants came to understand from a young age what is deemed to be (dis)honorable behavior. Sumaya gives an example of how such behavior was taught during her childhood:

When I was 7 or 8 years old, we always had to hold each other's hands while standing in line outside of school. One day [my mom saw me] standing next to a boy. Then she got mad at me when we got home, [she said], "That's not allowed." Even at such an early age she said, "Don't stand next to a boy. Next time you may hold a girl's hand, but not a boy's."

Indeed, ideas about an honorable daughter/wife are not limited to interactions with the opposite sex, but they extend to upholding the family's good name in general. Samar explains this as follows:

Family reputation was always the number one thing [for my parents]. It was always about how I dressed. The way I put on my headscarf. The way I talked. I'm very blunt, very direct [and] very loud for a girl ... Not being allowed to travel far without a mahram [male relative] ... Being home early was important, so I couldn't go to sleepovers ... Because if a woman's alone somewhere late, people will have a certain image of her and [my parents] didn't want people to think that of me.

During their teenage and adolescent years, participants became aware of the expectations surrounding the image of an honorable daughter/wife, as more restrictions were imposed to keep this image intact. Such restrictions were imposed on daughters and not on sons, because the idea of an honorable daughter/wife reflects on the honor of the entire family, as Hayat illustrates in the following:

The things my sister [and I] would do, would directly affect our family and the shame and how people would perceive us, but when my brother would go out or have a girlfriend of non-Turkish origins, it was very much normalized. But when my father found out that my sister was seen in town with a boy, he beat her up very badly. So therein I constantly saw a double standard.

Family and community norms regarding an honorable daughter/wife led to a fear of gossip among participants. Rozhin explains how gossip within her community regarding women who deviate from honor codes results in social stigma, branding them as "wild and unruly". This compelled her to internalize honor codes and modify her behavior to evade potential gossip about her honor and, consequently, her family's honor:

You don't want to be perceived as "that wild, unruly woman" ... In Kurdish there's a saying [about] a wild, unruly woman who has to be sort of tamed because

she does whatever she wants ... As a child, I was subconsciously brought up with stories [i.e., gossip] of women who were perceived as wild and unruly, for example, [because they're] divorced ... So, I understood very well what it entails to be a good woman, I knew that very well.

In addition to a fear of gossip, many participants expressed a fear of repercussions of honor violations because they witnessed such repercussions among female family and/or community members. For instance, when Fazilet was fourteen years old, her older sister was exiled to Turkey because she failed to be an honorable daughter and wife:

[My sister] had just been married for a year, it was an arranged marriage to our cousin ... [When] she wanted to divorce, that was not accepted. She violated the family honor with that. And then under the guise of going on vacation [to Turkey], she was taken there with her husband and then [my father] took away her passport and, yes, she never actually got to come back.

Thus, when a women violates honor codes, or when she is suspected of honor violations, she fails to meet the image of an honorable daughter/wife. Repercussions such as the above set an example for other women in the family and community. Through such examples, participants came to internalize expectations about the honorable daughter/wife. Participants also experienced the enforcement of honor codes in a more explicit manner, as will be argued in the next section.

4.1.2. Shared Religious and/or Ethnic Identity

When participants violated honor codes, or when their actions were suspected to lead to honor violations, the consequences varied depending on the type of honor violation. No matter the type of honor violation, an expressed shared religious and/or ethnic identity was frequently used as a tool to enforce compliance to honor codes. This was used by family members and sometimes by community members.

The findings highlight that, within an honor setting, expressions about religious and ethnic identity should not be understood as separate, but as interrelated. That is, religion frequently served as a tool to safeguard the family's reputation when women's actions posed a risk to its honor within the ethnic community. Nadia explains how her parents used norms within Christianity (relating to the stratified relationship of elderly rule) as a means to enforce honor codes and thus safeguard their family's good name within their Iraqi-Christian community:

They'd cite the Bible, and say: "You're sinning because you're not listening [to your parents]." ... That was often used [to impose restrictions]. You know, the 10 commandments, you must obey your father and mother ... But [in reality] they're more concerned with what others might say and think. Actually, that has been the main factor in whether or not to allow things: how the rest of the world views their [daughter's] behavior. Then it's like, "You're the mother and you can't even tame her well."

Participants who were raised in a Muslim household expressed the above in a similar manner; in particular, regarding the importance of the stratified relationship of elderly rule within an honor setting.

In addition, when honor codes were enforced, the family's religious and ethnic identity was often used to define a line between "us" (people from the identified religious and ethnic group) and "them" (white Dutch people). Rozhin explains how this was used by her parents:

They would always say, "Rozhin, we're Muslim, you're different from Dutch people, and that's why we want you to do it this way. You aren't Dutch, you're Kurdish and Muslim." I was constantly reminded of that. They'd also say, "You'll never be Dutch, they'll always treat you like a foreigner." ... And [when my father found out about my boyfriend] he kept saying, "You're Muslim, you're

Kurdish... The way the Dutch do it—you're 18; go do whatever you want—that doesn't apply to us. You'll always be our daughter."

The emphasis on being an other within a white-majority society may relate to the fact that, as with most ethnic minorities in the Netherlands, all participants came from families who migrated in search of better economic opportunities and/or because of displacement. Within that context, becoming an ethnic minority creates a vulnerable position. Thus, the stratified relationship of group rule was mediated through the use of a shared religious and/or ethnic identity as a way to cope with experienced vulnerabilities and inequalities, as Fazilet explains:

I think that [the way my father raised me] was a defense mechanism. [In the 1960s] he was one of the first immigrants here, and people looked down on him very much . . . He was seen as a nobody. And I think that gave him a kind of defensiveness to stand his ground.

Honor codes through a shared religious and/or ethnic identity were not only enforced by family members, they were also explicitly enforced by community members. This is accomplished, for instance, by keeping watch of whether or not women's behavior outside of the domestic sphere is in line with prevailing honor codes, as Hayat explains:

I was constantly being watched when I was outside . . . To the point where I'm walking in town and a random guy comes up to me and says, "What are you doing here?" I look at him going: "Who are you?" Then he said, "I'm going to notify your brother that I saw you here, just so you know." So I was always just really very aware [that I'm being watched].

Additionally, participants expressed that when their deviations from honor codes became known, this not only damaged their family's reputation, but it often extended to the reputation of their entire ethnic minority community. For instance, after Fereshta divorced her husband, people within her community disdained this choice and ostracized her for it:

Everyone stopped contacting me ... Many men tell their wives, "Don't hang out with her, she's a bad person, she's divorced" ... A friend I used to do things together with, go to dinner with, called me and said, "You should be ashamed of yourself; you have put shame on all women. All women, Afghan women, are now ashamed that you got divorced." I said, "This is my life, then I'm no longer Afghan."

This type of emotional violence from family and community members led Fereshta to no longer identify as part of the Afghan community in the Netherlands (hence, "Then I'm no longer Afghan"). Here, it is important to note that such decisions (a divorce, and detachment from the community) do not happen overnight, but take a long process of reflection and negotiation within honor settings, in which violence is constantly present. The following sections illuminate the processes that take place within these transitions.

4.2. Theme 2: Transitions within an Honor Setting

Participants reached the decision to detach themselves from honor codes through continuous reflection on these codes and engagement with their social environment. Through this process, they transitioned from an honor setting in which their actions and life choices were experienced as violent and restrictive to a new context where they experience a form of autonomy that is no longer solely dictated by familial and communal norms. To carry out these transitions, participants either continuously applied strategies to renegotiate honor codes within their social context, or they experienced a turning point that triggered an immediate process towards detachment from honor codes. In the following two sections, I elaborate on both types of transitions.

4.2.1. Strategies to Renegotiate Honor Codes

Four participants (Ceyda, Rozhin, Sumaya, and Samar) found ways to effectively renegotiate some of the honor codes they encountered throughout their lives. This was mediated in different ways. First, these participants could discuss honor codes with either one or both of their parents because, even though their parents were not open to dialogue about the imposed restrictions, these discussions would not lead to severe repercussions. Such deliberation began during their teenage years, when they observed disparities between the restrictions placed on them and the freedom afforded to their brothers and peers. The discussions were, therefore, a direct effect of participants' increasing awareness of the stratified relationship of male rule within their families and communities. Despite facing resistance when renegotiating honor codes, these participants would constantly voice their concerns with their parents, as Ceyda explains:

My parents never really talked [about the imposed restrictions], but I initiated a conversation myself each time, by letting them know that I disagree with something. I would do this as a teenager and I still do this now. Because of that, they were forced to have a conversation with me. And that has never been easy, but I still do it.

Second, while doing so, participants made sure to earn their parents' trust by taking small steps within their decision-making processes. This allowed them to slowly push the boundaries of the imposed restrictions. Rozhin explains this as follows:

I took small steps toward what I wanted ... And I just knew when to accelerate and when to slow down, in terms of what's allowed and what's not. It's kind of like pushing boundaries and then pulling back in time ... This really eased things for me because I wasn't going all rebellious at once.

Similarly, Sumaya explains one of the strategies she used to obtain more autonomy outside of the domestic sphere, after experiencing loneliness and isolation from her peers:

I was pushing the limit . . . It's not like all of a sudden I came home at 12:00 a.m., but at the age of 17, for example, I started leaving the house a bit later in the afternoon . . . And whenever I went outside, I'd send my mother a photo, [so she'd know] where I'm at, that we're not doing anything bad. [For example,] I'd send her proof that we're just having some cake.

Thus, constant deliberation and strategies such as the one in the above facilitated the development of a trusting relationship between these participants and their parents. In doing so, they found ways to renegotiate honor codes.

In some cases, these strategies were accompanied with compliance with certain honor codes, which can be understood through the stratified relationships of group rule and elderly rule. For instance, when Ceyda conveyed to her parents her desire to live on her own, she effectively negotiated this demand through a series of compromises that she used as a strategy to earn her parents' trust. However, her success in negotiating her demands also stems from her respect for some of the honor codes cherished by her family and community. This mutual understanding allowed her parents to trust that she would remain an honorable daughter, safeguarding the family's reputation and ensuring that no shame would be brought upon them:

They certainly trusted me because they knew I would never do anything they would disapprove of. [For example,] I was never into boys and stuff [because] I don't think it's good to have boyfriends . . . And I don't wear a headscarf, for example, but I do wear modest clothes. I would never wear a top or a short skirt . . . So then I said to my father, "You know who I am, nobody [in the community] has ever spoken bad words about me."

Through constant deliberation, combined with her compliance with some honor codes and her respect for the stratified relationships of group and elderly rule, Ceyda managed to

maintain her family and community ties while renegotiating the honor code that restricts unmarried women from living independently.

Contrary to Ceyda, compliance with honor codes was sometimes also used as a gateway to more autonomy—even when participants did not agree with these codes. For example, Samar managed to renegotiate the honor code that restricts unmarried women from living independently because her parents trusted her to be an honorable daughter. Prior to this decision, she was never allowed to stay elsewhere or even travel to another city without a male relative, but this changed when she decided to live and study in another city. For Samar, this renegotiation was used as a means to obtain more autonomy to deviate from other honor codes:

I thought, "If I live on my own, then I'll have more freedom, then I can decide where I want to go and what I'm going to do." ... [My parents] gave me permission for this [because] I never got into trouble. I may have had arguments with my mother, but I never went out late ... I didn't go to parties, so my [my parents] trusted me ... [Because of that], I can make more choices now. [For example,] that you cannot travel far without a mahram [male relative]; I really don't take that into account anymore. I'm also in a relationship ... [and] I stopped wearing the headscarf.

While Samar's renegotiation of the honor code that restricts unmarried women from living independently allowed her more freedoms, the abovementioned choices that followed this renegotiation are kept a secret from her family, as these choices go against all other honor codes she was raised with and thus also the stratified relationships of group and elderly rule.

4.2.2. A Turning Point within an Honor Setting

As illustrated in the previous section, four participants used several strategies to renegotiate honor codes. However, this was unattainable for the remaining ten participants as there was no space for discussions within their families. This intensified the stakes involved in renegotiating honor codes, making it an immensely high-risk endeavor. As a result, these women detached themselves from an honor setting only after a long period of honor-based violence; after the occurrence of a turning point.

Before a turning point took place, participants did not break with honor codes. The weight of familial and communal pressures to adhere to honor codes resulted in the internalization of these beliefs, which made it difficult to question or challenge them, even though participants experienced these codes as violent. This stemmed directly from participants' internalization of all three stratified relationships. For instance, Fazilet was married off to her cousin at the age of 18, despite her personal desires to the contrary. Nonetheless, she acquiesced to her family's wishes. Her fear of repercussions and the lack of space for discussions within her family led her to internalize her family's honor-related expectations:

I was really never aware that there was a choice. That you could [say] 'Yes' or 'No' ... That consideration was never there, because I really thought that [I could only] say 'Yes' to what was asked of me ... This was because of [my father's] aggressiveness, but also because ... you need to realize that what's happening isn't right. And I didn't realize that.

Participants' internalized beliefs about honor codes also relate to their social isolation from individuals outside their immediate family and community. Since these participants were isolated from their peers, they lacked exposure to different ideas and experiences that challenge and question honor codes. Consequently, they had limited possibilities to evaluate honor codes and their impact on their lives, which made it difficult to envision a different life than the one that was experienced as violent and restrictive.

Hence, despite their discontent with enforced honor codes, for these participants finding a way out was experienced as seemingly impossible at the time. However, all this

changed when a turning point occurred in their lives. This transition was triggered by participants' interactions with their social environment, and manifested in either one of the following three ways.

First, following a prolonged period of honor-based violence, a more intense episode of emotional and/or physical violence arose, which was perceived as the last straw. As this situation unfolded, participants came to the realization of the need to prioritize their own health and life choices. This will be illustrated through Zahra's story. When Zahra's parents found out that she had a boyfriend at age 17, they decided to protect the family's honor by isolating her at home. This meant that she was not allowed to finish her studies at a vocational school, and that her passport, phone, public transportation card, and house key were taken away from her. After a year, she was allowed to continue her studies. However, when her parents found out she was still in contact with her (then) boyfriend, they deliberately ignored Zahra's presence as a way of punishing her for her honor violation. Feeling increasingly isolated, Zahra made the decision to leave her parental home at age 20, seeking the freedom to make her own life choices:

I previously expressed no resistance and complied to their measures ... [But] at some point they just stopped talking to me, while we were living in the same house ... I said to them, "I can't take it anymore, I'm being silenced and ignored as if I don't exist ... If I stay here any longer, I don't know what I'm going to do to myself because I just feel so alone ... I'm really going to lose it mentally." ... [My father] said: "If you walk out of that door, you're not my daughter anymore." I felt like I had no other choice, so I walked out of the door.

Second, a turning point emerged when participants met a peer who already detached herself from honor-related constraints. This not only offered understanding and acknowledgment of participants' experienced constraints, but more importantly, it also sparked the realization that the desire to make life choices is both normal and attainable. Maryam explains this as follows:

I never understood why I felt so terrible. ... I had no real awareness of the difficulties I was facing either. Until I met [a friend with similar experiences]. I always thought I was abnormal and that I was the only one struggling with this ... but she's going through the same thing and that opened my eyes to think: "It's actually very normal to feel this way." ... [Since] she had the courage to make certain choices, I thought: "Okay, if she can do it, then it's actually quite normal for me to feel this way about making choices too." And because of her, I was also able to take that step.

Finally, a turning point may arise after the experience of unfamiliar emotions, leading to introspection and heightened awareness of the violence prevalent within the honor-related context. This was the case for Fazilet. After being in an unhappy arranged marriage with her cousin for 17 years, she had romantic feelings for a co-worker. Although Fazilet did not continue with that relationship, it prompted her to reflect on her circumstances. This ultimately set into motion a divorce and a complete detachment from all the honor codes she was raised with:

The thing that turned everything upside down was that I fell in love with someone for the first time in my life. And that caused something about me to change very much. [I realized] that those 17 years of marriage were hell. ... When I left [my ex-husband], I suddenly realized, "My father doesn't make choices for me anymore, I make my own choices ... so, I can also have the will to make different choices." ... From that moment, I wasn't the same person anymore, I was really someone else. ... You know, it's like you've been asleep and then you're awake.

In conclusion, a turning point emerged through participants' interactions with their specific social context. After this occurrence, participants' perspectives about making life choices changed entirely. Consequently, these 10 participants detached themselves from most or all of the honor codes they were raised with.

4.3. Theme 3: Navigating the Effects of Honor Violations

Although participants transitioned to a context in which their autonomy is no longer solely dictated by familial and communal norms, this does not mean that they could simply move on with their lives. Indeed, the processes before and after such a transition were accompanied with health concerns caused by lingering guilt, social shame, and anxiety. Rozhin explains how her detachment from honor codes led to feelings of guilt and anxiety, and how the stratified relationships of group and elderly rule still impact her life:

I was drowning in guilt because I felt like I was doing everything wrong, I was going against all the things [my family] had raised me with \dots It's also still very hard to let go of the fear of what people might think of me \dots I feel like you'd damage your [family's] reputation. So I'm still struggling with who I say what to, who I share things with.

Thus, for many participants, keeping some or all of their life choices a secret is the only way to protect their family's reputation and thus avoid being ostracized, as Samar explains:

[Sometimes] I'm thinking, "What if I just throw everything on the table?" ... But I just don't have the nerve to do that, because I'm so very afraid of being ostracized and of losing so many people ... I'd rather keep [my life] a secret than lose my family.

The above two examples illustrate why participants generally did not share their life choices, including the accompanying difficulties of these choices, with family and community members. Furthermore, participants often chose not to share their experiences due to feelings of shame and a sense of being misunderstood by people who never faced similar situations. While some participants chose to keep certain aspects of their lives a secret, others found it impossible to do so (e.g., because of a divorce or after family members found out about a romantic relationship). Because of this, some participants were indeed ostracized by family and community members. Living a life in secrecy or being ostracized led participants to experience heightened feelings of isolation, loneliness, and at times, depression. As a consequence, several participants grappled with suicidal thoughts, and two participants attempted suicide.

Moreover, many participants who consciously made an effort to maintain their family ties experienced this as difficult due to their differing views on honor codes, as Fazilet explains:

[Maintaining] contact with my sister is very difficult because she's very much part of that culture where things have to be done in a certain way and I don't conform to that anymore ... And she's judged when I do something that goes against [family and community] norms. When I do something wrong, for example by having a boyfriend, they tell her, "You have to call your sister to order." So, yes, our contact is very uncomfortable.

Thus, some participants deliberately chose to break off all contact with their family and community members as a way to protect their psychological wellbeing. Hanan highlights this as follows:

[When my brother] called me, I said, "You know, I'm really done with this ... Let [our mother] get the birth certificate and cross me out. I have no mother, no father, no one." ... I hung up the phone, and I really felt a silence and a void.

5. Discussion

In this paper, I investigated the different ways in which Dutch ethnic minority women reflect on feminine honor codes within their social context, and how this context shapes their decision-making process when they opt to deviate from these codes. Rather than analyzing this through a binary conception of autonomy, I followed a relational approach to autonomy in which participants' decision-making processes were understood through

three stratified relationships, namely: male rule, group rule, and elderly rule. Below, I reflect on these findings.

Feminine honor codes were instilled implicitly and explicitly through socialization within participants' families and ethnic/religious communities. Implicit enforcement was achieved through expectations of "an honorable daughter/wife"—a finding that resonates with a study conducted by Christianson et al. (2021). Such expectations were never discussed, but were implicitly taught through a gendered upbringing. The term *ayb* or similar expressions were used to instill ideas about an honorable daughter/wife and discourage dishonorable conduct. Participants adjusted their actions to avoid being labeled as "wild and unruly" and to safeguard their family's honor. Witnessing repercussions for honor violations among female family and community members further internalized the expectations of an honorable daughter/wife.

Explicit enforcement relied on a shared religious and/or ethnic identity to enforce honor codes when violated or suspected of being violated. Here, religious and cultural norms were used as a tool to enforce compliance with honor codes. This was mostly enforced by parents, due to the idea of elderly rule, but also by community members. The findings indicate that enforcing honor codes also involves drawing a line between "us" (people from the identified religious and ethnic minority group) and "them" (white Dutch people). This essentially steers religious and ethnic community members to take on the collective interest of the group over their personal wishes (i.e., group rule). This differentiation may stem from the vulnerabilities and inequalities faced by ethnic minorities in a white-majority society. To cope with these challenges, families and communities frequently foster a sense of unity through group-oriented behavior and the preservation of honor codes that are deeply rooted in their shared religion and/or ethnicity (Buitelaar 2002; Cadge and Ecklund 2007; Merz et al. 2009; van Osch 2017; van Tubergen 2007). Thus, when women deviate from honor codes, they are often stigmatized and socially excluded because their deviant behavior may threaten the survival of the group (van Osch 2017). Moreover, the findings demonstrate that community members may also distance themselves from the honor violator as a means to avoid stigma by association.

All participants risked stigmatization and social exclusion when they detached themselves from some or all honor codes prevalent in their families and communities. The findings illustrate that participants came to such a decision through ongoing self-reflection and interaction with their social environment. Some participants renegotiated honor codes by using strategies to navigate the complex terrain of honor-related settings. This was accomplished through constant dialogue, strategic compliance with some honor codes, and building trusting relationships with their parents. As a result, these participants experienced greater autonomy and the ability to successfully renegotiate some of the honor-related constraints in their lives.

However, for most participants, such renegotiations were not possible. That is why most participants detached themselves from the honor setting after enduring prolonged periods of violence and after experiencing a turning point in their lives. As identified through participants' stories, a turning point occurred in several ways: (1) through the occurrence of a more intense episode of emotional and/or physical violence as the last straw, (2) after encountering peers who already detached themselves from honor-related constraints, or (3) after experiencing unfamiliar emotions that led to introspection and heightened awareness of the violence within the honor-related context. Following these turning points, participants' perspectives on life choices underwent a significant transformation, leading them to detach themselves from most or all of the honor codes they were raised with.

The difference between participants who managed to renegotiate honor codes and participants who detached themselves from honor codes after a turning point, is that the former group had some leeway to voice their concerns with family members while the latter group did not (as this would lead to severe repercussions). These findings reveal that the capacity for autonomy becomes more impaired when there is no room for discussion

because of severely violent circumstances, a point that is supported by other scholars as well (see, van Bergen and Saharso 2015; Mackenzie 2007). That is why four participants were able to envision the necessary steps to detach themselves from honor codes, while the remaining ten participants could envision this only after experiencing a significant turning point.

Both types of transitions led to a shift in perception among all participants. However, this was accompanied with feelings of guilt and social shame. The harmful effects that ethnic minority women experience due to personal shame over being a disappointment to oneself combined with the social shame of losing family honor were also highlighted by Heredia Montesinos et al. (2013).

To safeguard their family's reputation and avoid ostracization, many kept their life choices a secret. Others faced isolation and rejection from family and community members when their deviation from honor codes became known. Even when participants tried to maintain family ties, this was experienced as challenging due to differing views on honor codes and continuous social pressure. This led some participants to cut off all ties with family and community members. These findings illuminate that, when ethnic minority women deviate from honor codes, they are caught in an "oppressive double bind" (Hirji 2021). This double bind creates a situation in which each decision that is made (conforming to honor codes or deviating from some or all honor codes) comes at a benefit and a cost. For some participants, the benefits of making personal life choices carried the painful cost of estrangement from their family and community. In other words, women who choose to deviate from honor codes have a choice, but "their choice has a 'damned if you do, damned if you don't' character: whatever an agent does, they seem doomed to bring about a negative outcome for themselves" (Hirji 2021, p. 649). Here, I do not mean to imply that women's constrained choices within an honor-related context are meaningless, but that we should understand the complexity of such choices and how these choices often have a distressing outcome.

While participants expressed feeling more autonomous and emotionally stronger after their detachment from honor codes, all participants reported adverse effects on their mental health (such as anxiety, stress, and depression), stemming from emotions such as shame, guilt, and loneliness. Several participants contemplated suicide, and two participants attempted suicide. Indeed, violation of personal autonomy regarding life choices is associated with suicidality among ethnic minority women in Europe (van Bergen et al. 2012; van Bergen and Saharso 2015; Heredia Montesinos et al. 2013, 2019). Therefore, the findings further highlight the need for attention to women's psychological wellbeing when they experience violence because of imposed feminine honor codes and their detachment from these codes.

6. Conclusions

This study suggests the need to understand women's autonomy within honor-related contexts as stratified and relational. To gain insight into women's decision-making processes within these contexts, it is crucial to shift away from a binary conception of autonomy (agency/coercion or resistance/acceptance) and instead recognize women's autonomy as dynamic, influenced by the intricate web of relationships within their specific context. This implies that we should consider women's positions in their domestic and social domains, as well as their connections to their families and communities.

Simultaneously, this study underscores the necessity for a reevaluation of the prevailing understanding of honor-based violence. Discussions and definitions of honor-based violence tend to focus primarily on direct forms of violence. However, less attention is given to the complex use of violence that is often more subtle and indirect (such as silencing and threats to enforce conformity to honor codes). Thus, in addressing violence against women in honor-related contexts, it is crucial to also include and acknowledge the adverse health consequences resulting from the more intangible aspects of coercive control over women's autonomy. In this paper, I made an attempt to shed light on these pressing concerns.

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References

Atkinson, Robert. 1998. The life story interview. In Qualitative Research Methods Series, No. 44. Newcastle upon Tyne: Sage.

Awwad, Amani M. 2001. Gossip, scandal, shame, and honor killing: A case for social constructionism and hegemonic discourse. *Social Thought and Research* 24: 39–52. [CrossRef]

Buitelaar, Marjo W. 2002. Negotiating the rules of chaste behaviour. Re-interpretations of the symbolic complex of virginity by young women of Moroccan descent in The Netherlands. *Ethnic and Racial Studies* 25: 462–89. [CrossRef]

Buitelaar, Marjo W. 2007. Staying close by moving out. The contextual meanings of personal autonomy in the life stories of women of Moroccan descent in The Netherlands. *Contemporary Islam* 1: 3–22. [CrossRef]

Cadge, Wendy, and Elaine Howard Ecklund. 2007. Immigration and religion. Annual Review of Sociology 33: 359-79. [CrossRef]

Cense, Marianne. 2014. Sexual discourses and strategies among minority ethnic youth in the Netherlands. *Culture, Health & Sexuality* 16: 835–49. [CrossRef]

Central Committee on Research Involving Human Subjects. 2023. Your Research: Is It Subject to the WMO or Not? Available online: https://english.ccmo.nl/investigators/legal-framework-for-medical-scientific-research/your-research-is-it-subject-to-the-wmo-or-not (accessed on 10 October 2023).

Christianson, Monica, Åsa Teiler, and Carola Eriksson. 2021. "A woman's honor tumbles down on all of us in the family, but a man's honor is only his": Young women's experiences of patriarchal chastity norms. *International Journal of Qualitative Studies on Health and Well-Being* 16: 1–14. [CrossRef] [PubMed]

Cihangir, Sezgin. 2012. Gender specific honor codes and cultural change. *Group Processes & Intergroup Relations* 16: 319–33. [CrossRef] Cinthio, Hanna. 2015. "You go home and tell that to my dad!" Conflicting claims and understandings on hymen and virginity. *Sexuality & Culture* 19: 172–89. [CrossRef]

Cooney, Mark. 2014. Family honour and social time. The Sociological Review 62: 87-106. [CrossRef]

Delgado, Janet. 2019. Re-thinking relational autonomy: Challenging the triumph of autonomy through vulnerability. *Bioethics Update* 5: 50–65. [CrossRef]

Deveaux, Monique. 2018. Appeals to choice and sexual equality: Debates over religious attire. In *Personal Autonomy in Plural Societies:* A *Principle and Its Paradoxes*. Edited by Marie-Claire Foblets, Michele Graziadei and Alison Dundes Renteln. London: Routledge.

Ezzeroili, Nadia. 2022. Nog steeds worden jonge vrouwen in Nederland gedwongen een hoofddoek te dragen: 'Ik keek in de spiegel en ik herkende mezelf niet'. de Volkskrant, September 27. Available online: https://www.volkskrant.nl/nieuws-achtergrond/nog-steeds-worden-jonge-vrouwen-in-nederland-gedwongen-een-hoofddoek-te-dragen-ik-keek-in-de-spiegel-en-ik-herkende-mezelf-niet~b752e587/ (accessed on 10 October 2023).

Ferwerda, Henk, and Ilse V. Leiden. 2005. Eerwraak of Eergerelateerd Geweld? Naar een Werkdefinitie. Arnhem: Advies- en onderzoeksgroep Beke.

Gregory, Geraldine A., Jayne Fox, and Bal Kaur Howard. 2020. Honour-based violence: Awareness and recognition. *Pediatrics and Child Health* 30: 365–70. [CrossRef]

Griffiths, Catherine. 2015. The Sexual Health of Young British Pakistanis in London: Social and Cultural Influences. London: UCL (University College London).

Hawkey, Alexandra J., Jane M. Ussher, and Janette Perz. 2018. Regulation and Resistance: Negotiation of Premarital Sexuality in the Context of Migrant and Refugee Women. *The Journal of Sex Research* 55: 1116–33. [CrossRef]

Heredia Montesinos, Amanda, Andreas Heinz, Meryam Schouler-Ocak, and Marion Christina Aichberger. 2013. Precipitating and risk factors for suicidal behaviour among immigrant and ethnic minority women in Europe: A systematic review. Suicidology Online 4: 60–80.

Heredia Montesinos, Amanda, Marion C. Aichberger, Selver Temur-Erman, Zohra Bromand, Andreas Heinz, and Meryam Schouler-Ocak. 2019. Explanatory models of suicidality among women of Turkish descent in Germany: A focus group study. *Transcultural Psychiatry* 56: 48–75. [CrossRef]

Hirji, Sukaina. 2021. Oppressive Double Binds. Ethics 131: 643–69. [CrossRef]

Hsieh, Hsiu-Fang, and Sarah E. Shannon. 2005. Three approaches to qualitative content analysis. *Qualitative Health Research* 15: 1277–88. [CrossRef] [PubMed]

- Hutchings, Kimberly. 2013. Choosers or Losers? Feminist Ethical and Political Agency in a Plural and Unequal World. In *Gender, Agency, and Coercion. Thinking Gender in Transnational Times*. Edited by Kalpana Wilson, Sumi Madhok and Anne Philips. London: Palgrave Macmillan.
- Ketner, Susan L., Marjo W. Buitelaar, and Harke A. Bosma. 2004. Identity strategies among adolescent girls of Moroccan descent in the Netherlands. *Identity: An International Journal of Theory and Research* 4: 145–69. [CrossRef]
- King, Diane E. 2008. The personal is patrilineal: Namus as sovereignty. *Identities: Global Studies in Culture and Power* 15: 317–42. [CrossRef]
- Lutz, Helma. 1991. Migrant Women of 'Islamic Background'. Images and Self-Images. MERA Occasional Papers 11. Amsterdam: MERA.
- Mackenzie, Catriona. 2007. Relational autonomy, sexual justice and cultural pluralism. In Sexual Justice/Cultural Justice. Edited by Barbara Arneil, Monique Deveaux, Rita Dhamoon and Avigail Eisenberg. London: Routledge.
- Mackenzie, Catriona, and Natalie Stoljar. 2000. Relational Autonomy: Feminist Perspectives on Autonomy, Agency, and the Social Self. Oxford: Oxford University Press.
- Mayeda, David Tokiharu, and Raagini Vijaykumar. 2016. A Review of the Literature on Honor-based Violence. *Sociology Compass* 10: 353–63. [CrossRef]
- Merz, Eva-Maria, Ezgi Özeke-Kocabas, Frans J. Oort, and Carlo Schuengel. 2009. Intergenerational family solidarity: Value differences between immigrant groups and generations. *Journal of Family Psychology* 23: 291–300. [CrossRef]
- Narayan, Uma. 2001. Minds of their own: Choices, autonomy, cultural practices, and Other Women. In *A Mind of One's Own: Feminist Essays on Reason and Objectivity*. Boulder: Westview Press.
- Pope, Nicole. 2012. Honor and Shame. In Honor Killings in the Twenty-First Century. London: Palgrave Macmillan, pp. 17–29.
- Saharso, Sawitri, Jort van Hoogstraaten, Romy Claassen, and Milica Jokic. 2023. No sex before marriage? Migrant youth navigating restrictive norms regarding premarital relationships. *Ethnic and Racial Studies* 46: 3145–65. [CrossRef]
- van Bergen, Diana D., and Sawitri Saharso. 2015. Suicidality of young ethnic minority women with an immigrant background: The role of autonomy. *European Journal of Women's Studies* 23: 297–311. [CrossRef]
- van Bergen, Diana D., Anton J. L. M. van Balkom, Johannes H. Smit, and Sawitri Saharso. 2012. "I felt so hurt and lonely": Suicidal behavior in South Asian-Surinamese, Turkish, and Moroccan women in the Netherlands. *Transcultural Psychiatry* 49: 69–86. [CrossRef] [PubMed]
- van Osch, Yvette. 2017. Culture of Honor and Retaliation. In *Encyclopedia of Evolutionary Psychological Science*. Edited by Todd K. Shackelford and Viviana A. Weekes-Shackelford. Berlin: Springer.
- van Tubergen, Frank. 2007. Religious affiliation and participation among immigrants in a secular society: A study of immigrants in the Netherlands. *Journal of Ethnic and Migration Studies* 33: 747–65. [CrossRef]
- Veltman, Andrea, and Mark Piper, eds. 2014. Autonomy, Oppression, and Gender. Oxford: Oxford University Press.
- Zakaria, Rafia. 2021. Against White Feminism: Notes on Disruption. New York: W. W. Norton & Company.

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Article

Reconstruction of Historical Memory: A Methodological Approach to Uncover the Reasons of the Armed Uprising in the Montes de María, Colombia

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Abstract: This work aims to reconstruct the historical memory of the armed conflict in the Montes de María coastline, province of Sucre, Colombia, in a moment of military confrontations and responses of defenseless civilians to the repertoire of violence caused by armed groups—specifically against the Unión Camilista—Ejército de Liberación Nacional (ELN), the Fuerzas Armadas Revolucionarias de Colombia-Ejército del Pueblo (FARC-EP), and the paramilitary groups present in the Gulf of Morrosquillo. The objective of this study was to determine the reasons that led the community of Libertad to rise in arms and repel the abuses of armed groups by testing two hypotheses: (1) the frequency of victimizing acts consisting of sexual violence against the women of the Libertad village provoked the community to take up arms; (2) the presence of social agents, here called provocateurs of the community response, motivated the community's social cohesion and armed uprising. The research is developed using a qualitative methodology with a narrative approach that involved a sample of 49 informants, including two focus groups. We provide empirical findings which are pivotal to understanding the reasons why defenseless civilians made the decision to defend themselves with arms against illegal armed groups that invaded their territory and harassed their communities, especially when dealing with an ethnic minority such as Afro-descendants.

Keywords: armed conflict; resistance mechanisms; armed uprising; historical memory

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1. Introduction

This article reconstructs the historical memory of the armed conflict in the Afrodescendant settlement of Libertad, located in the Montes de María coastline, north of Sucre, Colombia. This population experienced a repertoire of violence and victimizing acts—(HV), defined in Law 1448 of 2001 as crimes associated with the internal armed conflict in Colombia. These were initially caused by the insurgency of the FARC-EP and the ELN Unión Camilista (1985–1993), and by the paramilitary structures of the Morrosquillo Gulf front, attached to the Héroes Montes de María Block (1993–2005) (Andrade et al. 2019; Colón and López 2020; Centro Nacional de Memoria Histórica 2016; García et al. 2018).

The forms of armed civil resistance found among the study population are unusual in Colombia, only comparable to the indigenous insurgent group Quintín Lame, the first indigenous guerrilla group in Latin America, which rebelled against the excesses of the state, landowners, and other guerrillas (Peñaranda-Supelano 2015; González-Piñeres 2004). Without becoming an Afro-descendant insurgent group, the community of Libertad used the armed uprising as an effective way to prevent and counter the violence caused by the

armed paramilitary structures from Golfo del Morrosquillo attached to the Héroes Montes de María Block.

To demonstrate that defenseless civilians can legitimize the use of armed violence to defend themselves from violent hostiles, Kaplan (2020) reviewed experiences of populations that, within the framework of civil autonomy, resorted to this. Table 1 lists just a few:

Table 1. Compendium of experiences of armed responses of civilians.

Country	Year	Source Cited in Kaplan	Event Description
Afghanistan	2009	Gall 2009	Damages caused by foreign troops' bombing attacks triggered the armed uprising of civilians in the towns of the Helmand district.
Afghanistan	2009	Gopal and Rosenberg 2009	As a result of the armed violence and the tax demand of the Taliban, the people of Nangahar took up arms against them.
Congo–Uganda	2009	Gettleman and Schmit 2009; Bavier 2009; Gettleman 2009a	Entire populations terrorized by the then Rebel Army of Resistance of the Lord (ERS), were organized in self-defense groups armed rudimentarily with shotguns, rustic weapons, and hunting weapons.
Iraq	2006	Al-Ansary and Adeeb 2006	A group of civilians organized themselves with the support of the government in self-defense against Sunni insurgents.
Mozambique	1989–1993	Wilson 1992	Groups of Jehovah's Witnesses rose against Renamo political rebels.
Sierra Leona	The 1990s	Gettleman 2009b; Gettleman 2009c; Raghavan 2010	Communities of the Dusa Marreb, especially the Sufis, rose against the Islamic extremist movement.
Sudán	The 1970s	Snapp 2010; Heaton and Fick 2010	Local militias armed themselves against the insurgent group ERS.

Source: Kaplan (2020).

This study aims to determine the reasons why a defenseless civilian population, an Afro-descendant ethnic minority, took up arms against the excesses and abuses of an illegal armed group. The study reconstructs the historical memory of the armed conflict and proposes two working hypotheses to be contrasted with the stories constructed in the narrative exercise: (Hypothesis 1) The frequency of victimizing acts consisting of sexual violence against the women of the Libertad village provoked the community to take up arms; (Hypothesis 2) The presence of social agents, here called provocateurs of the community response, motivated the community's social cohesion and armed uprising.

In its structure, the manuscript will be organized as follows: First, a historical-sociological journey is presented to understand the historical trace that made possible the black settlement in this geographical location and how they were immersed in the armed conflict; then a description of the affected community and the violent groups that were part of its territory is made. It continues with the methodology. Then, results are presented and contrasted to the hypotheses to find the reasons for the rebellious response of the natives. A final section concludes.

The study is expected to contribute to the empirical debate and theoretical approaches on the new forms of resistance that arise in the context of armed conflicts. It attempts to present the reasons that led a vulnerable Afro-descendant community to take up arms against an armed group, and to identify the role of third parties in the maintenance of oppression.

1.1. Sociological and Historical Tour of the Black Communities in the Montes de María Subregion, Colombia

We begin the tour between the 16th and 18th centuries, a period recorded in history as one of the bloodiest and most violent against humanity of beings born free and then enslaved, marketed as animals, and stripped of their soul, and cultural, ancestral, and religious identity. The colony was the most shameful time for Western civilization, particularly the Spanish, Portuguese, Dutch, and British. The stories and historical records establish the arrival of enslaved Africans to Nueva Granda (initial name of the Republic of Colombia) with the first conquerors in the 16th century, legally disembarking from slave ships on the shores of Cartagena de Indias, known as the first free port in America. They also arrived illegally or smuggled through the Pacific coast: Buenaventura (Valle del Cauca), Chirambirá (Chocó), Gorgona (Island), and Barbacoas (Nariño). About 25% of the slaves either never arrived, or died or committed suicide on the transatlantic route. Regarding the Atlantic coast, the destinations were: Riohacha (Guajira), Santa Marta (Magdalena), and Tolú (Sucre) (Friedemann 1993).

This is how the Ashantí, Gelofes, Yolofos, Fantís, and other tribes arrived (Aguirre-Beltrán 1972; Escalante 2002; Herskovits 1938; Malvido 2010). These tribes, or at least a large part of them, populated and reconfigured Colombian Caribbean society in settlements of libertarian slaves called Maroons, who were strategically located in the mountains, such as the Montes de la María (formerly Sierra María) and which grouped at least a dozen palenques or rebel slaves who escaped from the colonial yoke such as El Limón, Polín, Sanaguaré, Duanga, Joyanca, Zaragocilla, Torobé, La Matuna, María Angola, Arroyo Piñuela, and Sanagual.

Others made their settlements in strategic geographies of the Colombian Caribbean such as Usiacurí (province of the Atlantic); Sierra del Luruaco with the palenques of Matudere and Betancur (between the provinces of Bolívar and Atlántico); Ciénega de la Matuna, palenque de la Matuna (near the towns of Santiago de Tolú and San Onofre) (Arrazola 1970; Navarrete 2008). Some of these towns are highlighted in Figure 1. Places affected by extreme violence caused by illegal armed groups.



Figure 1. Municipality of San Onofre and nearby towns inhabited by Afro-descendant communities who are victims of armed violence. In the circles are highlighted: Libertad, Rincón del Mar, Pajonal Plan Parejo, San Onofre others. The figure was taken from the Agustín Codazzi Geographical Institute of Colombina.

Maroons can be understood from two perspectives: the first, as a response to oppression and the set of facts imposed by the institution of slavery, and as the first forms of violence committed by free and enslaved Africans in the context of the transatlantic slave trade recorded by history. From other perspectives, the literature perceives the maroons and all these liberation actions as a vestige of resistance and rebellion that still prevails. The following data corroborate the above statement.

In 1530 black fugitives set fire to Santa Marta; around 1533, a good number of slaves brought by the founder of Cartagena fled to the mountains of the province; in 1556, there was a significant slave rebellion in Popayan; in 1598, there was a slave uprising in the mines of Zaragoza, killing owners and fortifying themselves in palenques.

For centuries, especially in large cities, this population did not find a space to exercise their identity, territory, and autonomy. It was not until 1991 that the recently acclaimed constitution of Colombia made them visible as persons subject to rights and recognized their ethnicity, in addition to ceding territories with collective titles initially located in the Colombian Pacific basin that made their organization and territorial management possible under a legal figure called Councils. The descendants of slaves reconstructed their blackness from a heterogeneous cultural and symbolic identity process that initially occurred in the councils.

However, the ideological and political differences in Colombian society since the 1960s saw confrontation between a dominant political and economic establishment—with a capitalist—authoritarian trend—and an insurgency with a Marxist–Leninist ideology, which plunged Colombia's territories into an internal armed conflict that once again made black communities direct and indirect victims of a foreign war that evoked the times of slavery:

"The pain of family fragmentation, the impossibility of possessing and preserving some property, the pain and mistreatment suffered by women, the linking of men to a foreign war, the ignorance of their authorities come to the collective memory, and the impossibility of autonomy over the territory". (Rosero 2004)

Thus, we arrive at the village of Libertad, located in the northern part of the department of Sucre, which has a population of approximately 5300 people who recognize themselves as Afro-descendants with an economic dedication focused on the artisanal planting of traditional crops. They have a territorial and communitarian administration, the consejo comunitario Nuevo Horizonte. After resisting oppression and repertoire of violence for years, this community decided to take up arms against the armed actors. According to the local Office for Attention to Victims located in the municipality of San Onofre, this community registered the following HV caused by the FARC-EP insurgency between 1985 and 1993 and from that date until 2006 by the paramilitaries of the Gulf of Morrosquillo: 30 cases of torture, 136 of crimes against sexual and reproductive freedom, and 2038 forced displacements (Centro Nacional de Memoria Histórica 2011, 2013; Defensoría del Pueblo-Colombia, 2018; Navas 2017; Pardo 2020).

1.2. The Expansion of the Insurgency towards the Montes de María

El Carmen de Bolívar was initially the FARC-EP's center of operations in the Colombian Caribbean Coast. The town of Salado was the strategic area used by the guerrillas for mobilization towards the mountains of the Montes de María, the foothills called Pie de Monte, and the coastline area (Alvis 2017; Trejos 2016). The FARC-EP made this subregion a center of military operations from which they expanded their territorial domain (Andrade et al. 2019). Some trace the active presence of this guerrilla group in the Montes de María subregion to 1985, with the persecution of the EPL and peasant leaders whom they accused of negotiating their principles with the government (Verdad Abierta 2010; Andrade et al. 2019; Trejos 2016). The most memorable actions date back to 1995 and occurred in the municipality of Ovejas, where, in an ambush, 50 guerrillas attacked an infantry patrol, and one man of the guerrillas and a marine were killed. The other happened in the El Salado village, where the FARC-EP assassinated 30 soldiers (Andrade et al. 2019). One of the most fierce and hostile fronts for the civilian population was the 37 Front, also called Benkos

Biohó, which operated in the area of influence with four armed structures: Pedro Góngora Chamorro, Che Guevara, Benkos Biohó, and Palenque, the latter with direct operations in Carmen de Bolívar and the town of Salado (Observatorio del Programa Presidencial de Derechos Humanos y DIH 2003; Trejos 2013; Quiroga and Ospina-Posse 2014).

Figure 2 shows some facets of the town of Libertad, such as its people, homes and ways of life.



Figure 2. (A) Cultural expression of the natives of Libertad in the central park of the town, where they have their own version of the statue of Liberty; (B) natives of the town of Libertad in daily jobs; (C) ancestral dwellings of the village of Libertad. All photographs were supplied for the manuscript by the Press Office of the mayor's office of the municipality of San Onofre.

Table 2 lists the most remembered incursions and victimizing events of the FARC-EP in the Montes de María.

Table 2. Registry of some of the victimizing acts or armed actions of the FARC-EP in the Montes de María.

Date	Region	Guerrilla Structure	Actions
1986	Montes de María, in the municipalities of Ovejas and Carmen de Bolívar	Armed command 35, Antonio José de Sucre, attached to the Caribe Block	Persecutions of EPL strongholds and peasant leaders, whom they accused of negotiating their principles with the government. Indeterminate casualties.
1995	Municipality of Ovejas	Armed command 37, Benkos Biojó, attached to the Caribe Block	Ambush, 50 guerrillas attacked an infantry patrol. A guerrilla and a marine killed.
May 1995	Municipality of Salado	Armed command 37, Benkos Biojó, attached to the Caribe Block	Assassination in an ambush of 30 soldiers.
July 1995	Municipality of Salado	Armed command Frente 37, Benkos Biojó, attached to the Caribe Block	The murder of rancher Santander Cohen.
1996	Municipality of Chalán	Armed command 35 and 37	Attack with a "donkey bomb" against the police station.
1997	Municipality of Salado	Armed command 37, Benkos Biojó, attached to Caribe Block	Unleashed an all-out war against the Méndez clan, sponsor and shaper of paramilitary groups, and involved in the 1997 Salado massacre.
1997	Municipalities of Ovejas and Los Palmitos	Armed command 35 and 37	The assassination of several mayoral candidates.

Note: own construction based on contributions found in Andrade et al. (2019).

1.3. About the Héroes Montes de María Block (AUC)

The Tangueros, a paramilitary group under the command of Fidel Castaño and later transformed into the Autodefensas Campesinas de Córdoba y Urabá (ACCU), began their

military operations in the department of Córdoba under the principle of privatization of violence (Zelik 2015). They attacked the insurgency and its social bases, labeling peasants, leaders, trade unionists, and left-wing politicians as friends of the guerrillas. Faced with the advance of the FARC-EP, these groups expanded their military operations and settled in the Montes de María with the Rito Antonio Ochoa front commanded by Edward Cobo Téllez, alias Diego Vecino. Over time, strategically, the front was called the Héroes Montes de María Block, with military operations in Sucre and Bolívar (González 2014; Quiroga and Ospina-Posse 2014; Centro Nacional de Memoria Histórica 2013, 2016, 2018).

One of the paramilitary incursions most remembered for the brutality and planning of the operation occurred in the heart of Montes de María. It happened at Chengue, El Salado, and Macayepo (Prada-Sanmiguel 2016; Centro Nacional de Memoria Histórica 2018). Table 3 summarizes the raids mentioned.

Table 3. Description of some of the massacres perpetrated by the paramilitaries in the Montes de María.

Date	Region	Paramilitary Structure	Number of Victims
Between 16 and 21 February 2000	Montes de María, in the townships of Salado, Loma de las Vacas and Balguero (Carmen de Bolívar); Canutal, Canutalito and Bajo Grande (Ovejas)	Gulf of Morrosquillo and Canal del Dique fronts led by alías Cadena and Juancho Dique respectively. Commanders from other fronts also participated: alías Gallo, el Tigre, and el Negro Mosquera (the last two were deserters from the FARC), Cinco Siete, Amaury, and Pantera	60 victims (52 men and 8 women), including 3 minors under 18 years old
14 October 2000	Township of Macayepo, department of Bolívar (Montes de María)	Héroes Montes de María block, specifically the Gulf of Morrosquillo front led by alías Cadena	16 peasants
17 January 2001	Chengue department of Bolívar (Montes de María)	Héroes Montes de María block, specifically the Gulf of Morrosquillo front led by alías Cadena	27 peasants
11 March 2000	Las Brisas department of Bolívar (Montes de María)	Héroes Montes de María block, specifically the Canal del Dique front, led by alías Juancho Dique	12 peasants

Source: Own construction from the data compiled in the works of Centro Nacional de Memoria Histórica (2009, 2013), Verdad Abierta (2014), reports from the Washington Post (2001) and the investigation of Romero-Acosta et al. (2017).

In the case of violence against freedom and sexual integrity, we find ourselves before one of the most aberrant punishable acts committed against the person's physical, moral, social, and psychological integrity, becoming a destructive act individually and communally. Although there are cases of sexual violence against men, the bodies of women especially have become trophies, objects to satisfy sexual desires, spoils of war, and instruments to inflict fear on the population by illegal armed groups and agents of the state (Unidad de Víctimas 2021). Along the same lines, a pronouncement of (Corte Constitucional de Colombia, Sala Segunda de Revisión 2008), women, youth, and girls who suffered sexual violence during the conflict were victimized in the following ways: rape, forced reproductive planning, forced prostitution, sexual abuse, sexual slavery by commanders and chiefs, forced pregnancy and abortion, and contagion of sexually transmitted infections.

The data is chilling. According to the unique registry of the Victims Unit of the armed conflict with a cut-off date of 31 December 2021, 34,488 crimes against sexual and reproductive freedom and integrity are registered in Colombia. On the same date and according to the same entity, in the Montes de María alone, a Colombian subregion made up of 15 municipalities that are part of the departments of Bolívar and Sucre, 1857 women were victims of sexual violence. The reality of other regions with a predominantly Afrodescendant population is just as complex. In the department of Bolívar (continuous to the department of Sucre), 2657 victims of sexual violence were registered, while in Chocó, the

figure stands at 2157, Antioquia 5044, and there are 1756 registered cases in Valle de Cauca (Unidad de Víctimas 2021).

2. Results

This section presents discontinuous narratives with multiple voices. These are shared without composing a single and sequential text, but instead allow the participation of different protagonists who contribute to the narrative based on their voices without losing the autonomy they have due to their knowledge of the fact or situation (Barbara and Bonet-Martí 2009). The narratives corresponding to the experiences presented are a reflection of what Escamilla and Novoa (2017) would call the complexity of social manifestations, which are assembled from their meaning, fragmented and lonely, to perceive them as a complex whole that constitutes the history of conflict in the Montes de María Coast.

The sequentiality of the narrative is presented as follows: arrival of the armed conflict in the territory, repertoire of violence and social changes resulting from the conflict, prior to the armed uprising, and consequences of the armed uprising.

2.1. The Arrival of the Armed Conflict in the Territory

In some areas of the influence zone of the black communities belonging to the study, and especially those located in the mountainous area of the Montes de María, people assumed the arrival of the armed conflict with conflicting and confusing visions given the presence in their territory of strangers carrying uniform and long arms, carbines or shotguns (around 1986). Far from understanding that these people belonged to the V front of the FARC-EP and came to make their territory a strategic rearguard bastion, for the natives were only people from the interior and Chinese.

- (...) these FARC people sometimes went down from the village of La Palmira..., but sometimes they also went down through the village of Buenos Aires. They went out from the villages of Macayepo to Palmira and then went to Buenos Aires and from there to the El Floral hill. Then, to the village of Mesa and Carmen de Bolívar. We did not know who they were, just armed people, Chinese and cachacos, who patrolled and patrolled from one place to another...but they did not mess with the peasant. (3.12.2020.CZM1.SO)
- (...) concerning the treatment from the guerrilla before the facts of violence...It was always typical for us, even cordial. They asked for permission to go through the farm and asked for animals and milk. Sometimes, they bought them, but they acted by force? No! That is why we affirm that our relative was not kidnapped by the guerrillas but by the paramilitaries. (3.12.2020.FHJ1.SO)
- (...) among other things, people found the imprint of the boots, and then they already knew that the guerrilla was in the area...Around '97 or '96, as the grand-parents said, my dad too...he had a cousin who was in those groups, and he says that he saw them all the time because they never stopped patrolling the area but never mistreated the civilian population. (5.12.2020.CZN1.SO)

Another case was lived by the natives who settled on the plains, away from the hills or coastal territory. Excesses and repertoires of violence accompanied the paramilitary groups from the Gulf of Morrosquillo front belonging to the Héroes Montes de María block from 1992 to 2006.

(...) regarding the first demonstrations or appearances of the armed paramilitary structures in the village of Berrugas, I heard that there was an armed confrontation when they arrived. They arrived in cars to Berrugas, people arrived...and we sensed that something was happening. That happened in the year 99. The threatening meetings began and started the social control and collective fear. (12.2.2021.LC.BE)

The FARC-EP and ELN guerrillas and the paramilitary structures of the Gulf of Morrosquillo front inflicted on the civilian population a whole repertoire of violence that resulted in innumerable crimes called victimizing acts according to Colombian Law 1448, also called the Victims and Land Restitution Law. The armed actions of these groups were oriented towards harassment, kidnapping, cattle theft, and other no-less-essential crimes against landowners and politicians, especially from the province of San Onofre.

- (...) I was on a farm called "El delirio" when a guerrilla group arrived. It was one of my first scares... I took care of that farm as a day laborer. The first thing that the leader said was that they were hungry and ordered to kill a turkey. I was alone on the farm with the administrator's wife, and she arrived frightened with two tears in her eyes, but I was more frightened than she was! She told me to kill the turkey, and we made the food for them. (4.12.2020.EXG1.SO)
- (...) in reality, the guerrillas only attacked the landowners and ranchers in the area ... Sometimes we found them on the farms and, when not, on the ranch. (5.12.2020CZN1.SO)

The actions of the paramilitary groups were directed to the people perceived as helping the guerrilla groups and have been widely registered.

- (...) people could not work freely; we could not keep animals on the street because they were stolen...He entered any house without asking permission, and if he saw any little animal, a hen, or a chicken in the house, he said, "I'll take it" and took it away. Another way of exercising violence was at the village fairs, arbitrarily charging tariffs per person and family. We had to find the money, or they would kill us. (11.2.2021.Ci.Li)
- (...) one of the paramilitaries threatened the women from Rincón del Mar. Once, he severely mistreated a woman, cutting her head with a machete...she was sexually abused by a group of paramilitaries on several occasions. (10.2.2021.LC.RM)
- (...) that day they moved...There were about 32 houses in the town, which were 32 families. There was no one left in the village...everyone was displaced! One part of the population arrived in San Onofre, the other in Sincelejo and Cartagena. All the people left immediately. (3.12.2020.CZM1.SO)

2.2. Before the Armed Uprising

In the case that concerns us, some situations contribute to the proof of the hypotheses raised. The case of the uprising occurred in the village of Libertad, a unique case in Colombia as far as we know, although as described above, Kaplan (2020) condenses in his study on civil autonomy how vulnerable communities resist war. These other experiences occurred in Iraq, Mozambique, Sierra Leone, Congo, and others. Confluences of excesses and fatigue added to acts of bravery, among other things, motivated the uprising in the community of Libertad, a fact that did not happen in other nearby towns.

- (...) when he arrives in the village of Libertad, he begins to implement a repertoire of violence, begins to impose his norms. Given the number of his armed men, he arbitrarily imposes his social norms. (11.2.2021.Ci.Li)
- (...) regarding the sexual abuse of women from Libertad, the first time we learned that he sexually abused women was from a beauty contest that he invented to choose the most beautiful girls from the villages of San Onofre. He took them to a personal camp he had, and there he raped them one by one...many denounced them, but not all of them. (5.12.2020.CZN1.SO)
- (...) what finally happened to him was that the community ended up lynching and murdering him ...it was going to happen to him initially. We, natives, get tired of the atrocities of these paramilitary groups. (5.12.2020.CZN1.SO)

- (...) Since the week before the uprising, the Libertad community wanted to rebel. We were tired of all the abuses...so the community said that the paramilitaries were tired and defeated by the confrontations and actions of the marines. (10.2.2021.LC.RM)
- (...) There was the end of oppression...it was the end of being a submissive town. We organized ourselves, we told other nearby towns that they would support us in what we wanted to do, but they were scared! We free ourselves! We liberate ourselves. (5.12.2020.CZN1.SO)

2.3. Consequences of the Armed Uprising

The uprising had direct consequences on the black collective. There were 5 days of anguish for the residents due to the decision made. However, the community cohesion and the courage of a leader who motivated the uprising allowed him to recover from fear and organize the strategy to follow. The residents took a census to determine the weapons knowledge of some of them and thus a large group gathered at the entrances and exits of the town to stand guard. The role of women was to protect the integrity of families by mounting guards armed with machetes, hoes, and rustic tools at the entrances of homes. Others were in charge of food, and a group made contact with a marine infantry battalion stationed in the province continuing to Sucre, who provided security. Some natives who participated in the rebellion wanted to impose a new social order led by themselves but were quickly rejected by the village.

- (...) after that, there was a space of great fear. The paramilitaries threatened to take over the town. However, we were determined to repel the attack and posted guards at the entrance to the village. (11.2.2021.LC.Li)
- (...) On the sixth day after killing a paramilitary, a marine commander arrived. He arrived at Libertad with 100 men in three trucks. They found a small group of paramilitaries, between 10 and 15 people, and a confrontation occurred. (5.12.2020.CZN1.SO)
- (...) There was an exchange of fire between the marines and the paramilitaries...God! They were going to massacre us. However, precisely, and thank God, they encountered the marines at that moment, and there was a confrontation. The people said they were going to destroy the town, but the marine infantry killed 12 paramilitaries in the confrontation. (5.12.2020.CZN4.SO)

2.4. Situational Elements That Made the Difference

There were many atypical situations in the experience of Libertad village. The description of these will be used to contrast the hypotheses of the study, and they will be interpreted from theoretical approaches to determine the reasons or situations on which a community, in this case, Afro-descendant, could respond in arms against an oppressive armed group.

Hypothesis 1. The frequency of victimizing acts consisting of sexual violence against women in the community of Libertad provoked the armed uprising in this community.

According to the local office of the Unidad de Atención a Víctimas del Conflicto Armado, from the Municipality of San Onofre, there are 136 registered cases of sexual violence against Afro-descendant women in the village of Libertad. This data was contrasted in the focus groups with the representatives of the 13 communitarian councils, and they agree that the numbers could be tripled since many victims decided not to report for fear of retaliation from the armed groups or for fear of social rejection.

Table 4 shows the cases of crimes against freedom and sexual integrity registered in the most populated villages of this municipality.

Table 4. Registered cases of crimes against freedom and sexual integrity in the villages of the municipality of San Onofre.

Village	Registered Cases of Crimes against Freedom and Sexual Integrity
Libertad	136
Rincón del Mar	18
Berrugas	12
Pajonal	7
Palo Alto	5
Plan Parejo	3

Source: Office of Assistance to Victims of the Armed Conflict of the Municipality of San Onofre.

Neither the individual interviews nor the focus groups were direct and conclusive in determining whether the frequency of crimes against freedom and sexual integrity was decisive in the collective decision to take up arms. However, the frequency of this crime in this population compared to other neighboring towns is undeniable. On the other hand, the sexual violation against minors that occurred in social events and was only recorded in Libertad was an act that the community despised and that cannot go unnoticed.

Hypothesis 2. The presence of social agents, here called provocateurs of the community response, motivated social cohesion and the armed uprising in the community of Libertad.

This action was preceded by a triggering social event independent of the accumulation of frustrations, excesses of the armed groups, and collective fear that ended in a collective explosion. It was decisive in the uprising as an event that did not occur in other towns. A determined social agent who provoked the uprising and its support in the following days guaranteed the success of the community response.

Trigger action

(...) people reacted aggressively because a paramilitary assaulted a young man. I'm sure the community does not react that way, but he was wrong, which was the moment to unleash the community's fury. (5.12.2020.CZN1.SO)

The collective euphoria

(...) They were going to catch him. He escaped, and the people chased him for several hours until they captured him at around 5 in the morning. They attacked him with sticks and stones on the bridge located at the entrance to the town. While he was still alive, they threw a big stone at him that crushed his head...there he dies. (5.12.2020.CZN6.SO)

The agent provocateur of the community response

(...) after that event, people were terrified...I remember a woman that arrived, a great leader, someone with the power to organize people. She said that after we tried, we couldn't back down. That is not possible. She began to write a letter where we asked for support from the government and directly from the armed forces. The letter said that if something happened to the community, the responsibility lay with the State. She also organized us and gave us courage. We believe that the village would not have taken the step of rebellion without her. Without her guiding us, we would not have freed ourselves. (11.2.2021.Ci.Li)

In the village of Rincón del Mar, an action was presented that fits as a triggering action, but that did not end in rebellion.

(...) one of the paramilitaries threatened the women of Rincón del Mar. Once, he physically abused a young woman, giving her some cuts on the head. The woman, in a struggle, takes the gun from him and tries to shoot him, but not knowing how to use it, he takes it from her. Then he shaves her head with an old machete. All this happened in front of the community. It was a public act. We all saw it. He abuses her repeatedly for several days and together with several

paramilitaries. I believe that if the woman murdered him, the people would have rebelled. I think that was the trigger that Rincón del Mar needed to rebel. (10.2.2021.LC.RM)

There was no collective euphoria response, and no agent provocateur was present in this case.

- (...) in this village, there was no rebellion! There was never a rebellion against the paramilitaries...! It was not like in the case of Libertad that rebelled. In Libertad, they decided to rebel, but not here, not here in Rincón del Mar. (10.2.2021.LC.RM1)
- (...) About why Libertad revealed, and Rincón del Mar did not, here we lived different situations. The pressure from illegal groups was so hard, and some people were forced to join the armed structures. (15.2.2021.LC.RM5)
- (...) Suddenly some people wanted to know how it feels to have the power of the armed structure. Suddenly that made people not rebel themselves as much. There were people from here who influenced the rebellion not to take place. Before the arrival of the paramilitaries, there were people who had illicit businesses, and it was convenient for them to work with the paramilitaries. They worked to avoid the rebellion taking place. (15.2.2021.LC.RM4)

The analysis of the narratives makes it possible to specify the existence of the triad Trigger Action, Collective Euphoria, Provocative Agent of the community response, only in the case of Libertad.

If we review the cases of violence exerted by the armed groups in other nearby villages and the absence of rebellion, we will notice the presence of some elements but not the confluence of the three. It is essential to distinguish between the social leader with community recognition, determined to work collectively aimed at defending the rights of their communities, and with expertise in applying the laws that protect the constitutional rights of the communities. This leader is present in all the villages, and his work is linked to community councils or organizations with a lower organizational level. That leader was never influential in provoking a rebellious response in his community; fear stopped him like the rest of the population. He did not propose a plan of rebellion to follow; he never trusted that a plan of collective action would succeed.

Otherwise, the agent provocateur of the community response that we mention here has different behavioral characteristics. We refer to an agent outside the community but with social work within it, which gives her a community status of acceptance and credibility. Someone with a certain level of academic training with another vision and understanding of the armed conflict, capable of identifying social dynamics, patterns, nonconformity feelings, as well as the right moment to rise with the community.

Table 5 shows the presence and consequences of the social agent that provokes the social response. There it is observed that the absence of him in other villages did not provoke the community response.

Table 5. Analysis of the presence of agents provocateurs of the social responsibility in the different villages of the municipality of San Onofre.

Village	Civil Rebellion
Libertad	Yes
Rincón del Mar	No
Berrugas	No
Plan Parejo	No
Pajonal	No
Palo Alto	No
Pajonal [°]	1

Source: own authorship made from the analysis of the collected narratives and the data provided by the office of assistance to victims of the municipality of San Onofre.

3. Materials and Methods

3.1. Design

The narrative approach was used, a perspective that in qualitative research arises from the need to understand the stories toldand that ultimately reveal the human behavior assumed at a historical point in the life of the informants; in this case, the natives of the villages of Rincón del Mar, Libertad, the urban center of the municipality of San Onofre and other nearby towns affected by armed violence. This perspective collects subjectivities and builds meanings (García-Huidobro 2016; Packer 2013). In research, the narrative is understood as the way to co-construct, and question lived reality, as well as an epistemological and ontological input, focused on experience, curiosity about the lived event, and the factors that intervene in the experience of the person (Ugarriza and Pabón 2017; Sparkes and Devís 2018).

3.2. Shows

The sample was selected considering its relevance in terms of convenience rather than the numerical representativeness of the universe. In this regard, 16 informants who were direct victims of the armed conflict in different affectations were selected; this was a homogeneous sample combined with a typical case. Those selected have similar features representing the study's focus (Mertens 2010). Two additional focus groups were formed, the first composed of all the representatives of the community councils of the northern territory of the department of Sucre (13 in total) and the second with the community representatives with a lower level of organization (10 informants). Interviews were also conducted with two ex-guerrilla commanders, four ex-policemen, and four exparamilitaries, whose stories were used to structure the work. In total, the sample consisted of 49 individuals with whom the entire narrative approach was worked on for 6 months.

3.3. Inclusion Criteria

The participants are inhabitants of the districts of the municipality of San Onofre and the towns of Libertad, Rincón del Mar, Plan Parejo, Berrugas, San Antonio, and Palo Alto. All adults, as well as leaders responsible for the organizational process of other community councils and foundations with a lower administrative level.

The participants were selected according to the profiles considered essential in reconstructing the historical memory of the armed conflict. The informants are victims of the internal armed conflict or its associated violent acts, with similar sociocultural and economic characteristics: small businessmen, politicians, social leaders, former members of the public force, former members of the guerrilla groups, teachers, and peasants.

3.4. Technique

The study uses the phenomenological or in-depth interview as a technique, which allowed discovering, interpreting, and giving meaning to the blacks' customs, ideologies, and worldviews of Montes de María. All the interviews were recorded, transcribed in Word version 2016, and analyzed with Atlas.ti version 8.0.

3.5. Process

- (a) It began with collecting data on the experiences of various participants. In a first exploratory phase, representative and recognized social leaders were contacted in several meetings to socialize the object and scope of the study. This exercise allowed the identification of the first informants (Afro-descendant peasants with experiences of interaction with the insurgency, predominantly from the FARC-EP, ELN, and the AUC). The reconstruction of their historical memory of the conflict was worked from affectations, interactions, moments, places, and situations.
- (b) Regarding the analysis of behaviors and personal narratives to have a general overview of the experiences, this step is related to and was used as a complement to the exploratory phase to corroborate the previous knowledge that was acquired about the

- participants, their experiences and lives, in short, about their social realities and ways of constructing and interpreting them. Thus, in the first step, an inventory of the collection and existing documents was made; next, the documents were classified according to the demographic characteristics and content of the narratives; then a detailed review of the narratives made it possible to exclude information considering their relevance and contribution to the study (Sandoval-Casalimas 1996).
- (c) Identification of the units of meaning and generating categories, themes, and patterns, detecting citations or key units: At first, a qualitative data analysis matrix was built from a priori and conceptual categories based on the theory that supported the study. Subsequently, after an in-depth reading of the interviews or narratives compiled and their comparative analysis, new emerging categories emerged. Some categories already established are renamed, which allows extracting elements of analysis that reconstruct and represent the totality of the reality studied (Sandoval-Casalimas 1996).
- (d) The elaboration of a generic description of the experiences and their structure (conditions in which they occurred, the situations that surround them, and the context): Here, relationships are generated between the categories with which it is possible to carry out a systemic sweep of the data that ultimately manages to create the expected significance in the investigative exercise, although segmented according to the findings and partial interpretations (Sandoval-Casalimas 1996). This point is addressed regarding the definition of categories and subcategories and their relation.
- (e) Finally, the development of a narrative that combines descriptions and structure to convey the essence of the experience in terms of the phenomenon studied: The narrative designs are intended to understand the succession of events or situations told by those who lived or experienced it at different moments of the event. The research finally assembles the narrative data segments into a general story that includes chronologies, experiences, social constructs, perceptions, longings, and relevant facts.

Table 6 shows the structure of the script that was used in the narrative exercise with the affected populations:

Repertoire of Violence Causes of the Armed Arrival of the Armed and Social Changes Consequences of the Situational Elements that Uprising of Defenseless Conflict in the Territory Resulting from the Armed Uprising Made the Difference Civilians Conflict Differences between the Generalized fear of the Presence in the Frequency and types of Community decision to guerrillas and the community of armed consequences of victimizing acts. rebel and overcome fear. strangers. paramilitaries. the uprising. Places of concentration Leaders or social agents Excesses of paramilitary Strengthening of social and suspicious The first victimizing acts. that motivated the groups. cohesion. movements. uprising. Little presence of armed First contacts with the Perpetuity of the Threats to family cohesion Attempted armed troops belonging to illegal civilian population. victimizing acts. and security. reprisals by armed groups. armed groups. Frequency of sexual State protection. violations.

Table 6. Shows the structure of the script that structured the narrative work.

4. Conclusions

The narratives compiled here demonstrate the sequentiality of the armed conflict in the territory of an Afro-descendant population. It was the Colombian insurgency around 1985, and especially the faction of the Camilista Union of the ELN and the FARC-EP (although a front of the Popular Liberation Army, EPL, was also present), who in the first instance made an active presence in the Litoral Montes de Maria. The Afro-descendant peasants did not know how to distinguish the armed actor except by his clothing, weapons, and accent.

Contrary to the generalized imaginary, the narratives separate peaceful coexistence, strategic control, territorial control, and indoctrination. The landowners and local politicians, already in search of flat land, suffered social depredation and the excesses of the insurgency—kidnappings, extortion, homicides, cattle theft, and land dispossession—becoming, according to the collective imagination of the peasants in the area, promoters of the emergence of paramilitary structures.

Libertad, a village of Afro-descendants, decided to take up arms against armed actors after years of oppression and violence. In this regard, two hypotheses were tested in this research: (Hypothesis 1) The frequency of victimizing acts consisting of sexual violence against the women of the Libertad village provoked the community to take up arms; (Hypothesis 2) The presence of social agents, here called provocateurs of the community response, motivated the community's social cohesion and armed uprising.

Although the number of sexual crimes in Libertad are alarming and cannot go unnoticed, even when compared to nearby villages, findings are not determinant to affirm that the frequency of crimes against freedom and sexual integrity were decisive to rebel. Otherwise, the results demonstrated that the presence of an agent provocateur was key for the community response. This agent has specific characteristics, i.e., she had academic training and was an accepted and reliable outsider due to her work within the community. This was pivotal for bringing other visions and an understanding of the armed conflict to the village.

The most consistent contribution of the study falls on the confluence of situations of the triad Trigger Action, Collective Euphoria, Provocative Agent of the community response as determinants or predictors of the rebellion against armed groups by a community of defenseless civilians.

The case of Libertad is, as far as we know, a unique case in Colombia of an Afrodescendant population's uprise against armed actors. Since what happened in Libertad was not a general constant throughout Colombia's armed conflict, further comparative studies with similar situations shall be conducted for a greater understanding of this particular phenomenon.

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References

Aguirre-Beltrán, Gonzalo. 1972. La población negra de México: Estudio etnohistórico. Ann Arbor: Universidad de Michigan.

Alvis, Jorge. 2017. Desarrollo Local En Zonas de Posconflicto Armado: El Caso de El Carmen de Bolívar–Colombia. Doctoral thesis, Universidad de León, Ciuadad de León, Spain. Available online: https://buleria.unileon.es/bitstream/handle/1061 2/6775/Tesis%20Jorge%20Luis%20Alvis.pdf;jsessionid=280366139F205D22CF9A65ACD177DAA6?sequence=1 (accessed on 19 November 2021).

- Andrade, Óscar, Alen Castaño, Lina Díaz, Carlos Duarte, Isabel Giraldo, Bárbara Lacoste, and Daniella Trujillo. 2019. Entre paramilitares y guerrillas: La desposesión territorial en los Montes de María. Dinámicas históricas y territoriales del conflicto político, social y armado 1958–2016. Bogotá: Vicerrectoría académica Instituto de estudios Interculturales Universidad Pontificia Javeriana de Cali. Recuperado el 3 de Agosto de 2020. Available online: https://www2.javerianacali.edu.co/sites/ujc/files/node/field-documents/field_document_file/montes_de_maria_1.pdf (accessed on 19 November 2021).
- Arrazola, Roberto. 1970. Palenque, primer pueblo libre de América. Merida: Edicaciones Hernández.
- Barbara, Biglia, and Jordi Bonet-Martí. 2009. La construcción de narrativas como método de investigación psico-social. Forum Qualitative Socialforschung/Forum: Qualitative Social Research 10: 8. [CrossRef]
- Centro Nacional de Memoria Histórica. 2009. *La masacre de El Salado: Esa guerra no era nuestra*; Bogotá: Taurus. Available online: http://centrodememoriahistorica.gov.co/wp-content/uploads/2020/02/3.-La-masacre-de-El-Salado.pdf (accessed on 19 November 2021).
- Centro Nacional de Memoria Histórica. 2011. Mujeres y guerra Víctimas y resistentes en el Caribe colombiano. Bogotá: Editora Aguilar, Altea, Taurus, Alfaguara, S. A. Recuperado el Octubre de 2020. Available online: https://www.centrodememoriahistorica.gov.co/descargas/informes2011/Informe_mujeresyguerra.pdf (accessed on 19 November 2021).
- Centro Nacional de Memoria Histórica. 2013. ¡BASTA YA! Colombia: Memorias de guerra y dignidad. Bogotá: Centro Nacional de Memoria Histórica. Recuperado el 01 de Noviembre de 2020. Available online: http://www.centrodememoriahistorica.gov. co/descargas/informes2013/bastaYa/basta-ya-colombia-memorias-de-guerra-y-dignidad-2016.pdf (accessed on 19 November 2021).
- Centro Nacional de Memoria Histórica. 2016. Recorridos por los Paisajes de la Vio-lencia en Colombia. Recuperado el 15 de Agosto de 2020, de Zona de Litoral Montes de María. Available online: http://www.centrodememoriahistorica.gov.co/micrositios/recorridos-por-paisajes-de-la-violencia/montes-maria-litoral.html (accessed on 19 November 2021).
- Centro Nacional de Memoria Histórica. 2018. El Salado, Montes de María: Tierra de luchas y contrastes. Bogotá: Centro Nacional de Memoria Histórica. Available online: http://www.centrodememoriahistorica.gov.co/micrositios/un-viaje-por-la-memoriahistorica/pdf/el-salado.pdf (accessed on 19 November 2021).
- Colón, Carlos, and Luzmaría López. 2020. El fenómeno del paramilitarismo en Montes de María: Radiografía de la violencia. Baranquilla: Centro de Pensamiento UNCaribe, Universidad del Norte.
- Corte Constitucional de Colombia, Sala Segunda de Revisión. 2008. AUTO N° 251 de 2008. Available online: https://www.corteconstitucional.gov.co/T-025-04/AUTOS%202008/101.%20Auto%20del%2006-10- (accessed on 19 November 2021).
- Defensoría del Pueblo-Colombia. 2018. Informe ALERTA TEMPRANA N° 061-18. Recuperado el 01 de Junio de 2021. Available online: http://www.indepaz.org.co/wp-content/uploads/2020/02/AT-N%C2%B0-061-18-SUC-San-Onofre.pdf (accessed on 19 November 2021).
- Escalante, Aquiles. 2002. El Negro en Colombia. Caracas: Universidad Simón Bolívar.
- Escamilla, Diego, and Lahdy Novoa. 2017. Conflicto y memoria: Trayectorias de vida como metodología para comprender el conflicto armado colombiano. Revista Colombiana de Ciencias Sociales 8: 66–88. [CrossRef]
- Friedemann, Nina. 1993. La saga del negro. Presencia africana en Colombia. Bogotá: Pontificia Universidad Javeriana.
- García, Marcela, Julian Barajas, and Laura Henao. 2018. Aprendizajes de construcción de paz en Montes de María. Bogotá: Centro de Investigación y Educación Popular-CINEP. Recuperado el 20 de Enero de 2021. Available online: http://biblioteca.clacso.org/Colombia/cinep/20200420084226/20180801_MontesdeMaria.pdf (accessed on 19 November 2021).
- García-Huidobro, Munita. 2016. La narrativa como método desencadenante y producción teórica en la inves-tigación cualitativa. EMPIRIA. Revista de Metodología de las Ciencias Sociales 34: 155–77. [CrossRef]
- González, Fernán. 2014. Territorio y conflicto en la costa Caribe. Bogotá: Ediciones Atropos ltda, pp. 7-40.
- González-Piñeres, N. 2004. El movimiento indígena y sus paradigmas de interpretación. *Revista Científica Guillermo de Ockham* 2: 139–61. Available online: https://www.redalyc.org/articulo.oa?id=105317711008 (accessed on 19 November 2021).
- Herskovits, Melville. 1938. Acculturation: The Study of Culture Contact. New York: J. J. Augustin.
- Kaplan, Olver. 2020. Resistir a la guerra. O cómo se protegen a si mísmas las comunidades. Bogotá: Ediciones Fondo de Cultura Económica SAS.
- Malvido, Eduardo. 2010. El suicidio entre los esclavos negros en el Caribe en general y en el francés en particular. Una manera de evasión considerada enfermedad, siglos XVII y XVIII. *Trace* 58: 113–24. Available online: http://journals.openedition.org/trace/1577 (accessed on 19 November 2021).
- Mertens, Donna. 2010. Philosophy in mixed methods teaching: The transformative paradigm as illustration. *International Journal of Multiple Research Approaches* 4: 9–18. [CrossRef]
- Navarrete, Marí;a Cristina. 2008. San Basilio de Palenque: Memoria y Tradición. Cali: Universidad del Valle.
- Navas, Niltzen Martí;n. 2017. Plan Integral de Reparación Colectiva de Libertad (Sucre), Expectativas y Realidades de las Víctimas. Master's thesis, Pontificia Universidad Javeriana, Bogotá, Colombia.
- Observatorio del Programa Presidencial de Derechos Humanos y DIH. 2003. Panorama actual de la región de montes de maría y su entorno y su entorno. Series Geográfica No. 19; Bogotá: Vicepresidencia de la República de Colombia.
- Packer, Martin. 2013. *La ciencia de la investigación cualitativa*. Bogotá: Universidad de los Andes, Facultad de Ciencias Sociales, Departamento de Psicología.

- Pardo, Marcela. 2020. La Muñeca de la Libertad. Ejercicios de contramemoria de las mujeres del corregimiento de Libertad, en San Onofre, Sucre. Master's thesis, Universidad Nacional de Colombia, Bogotá, Colombia.
- Peñaranda-Supelano, Daniel. 2015. Guerra propia, guerra ajena. Conflictos armados y reconstrucción identitaria en los Andes colombianos. El Movimiento Armado Quintín Lame; Bogotá: Instituto de Estudios Políticos y Rela-ciones Internacionales (IEPRI). Centro Nacional de Memoria Histórica. Available online: https://www.centrodememoriahistorica.gov.co/descargas/informes2015/quintinLame/quintin-lame-conflictos-armados-y-recontruccion-identitaria-en-los-andes-colombianos.pdf (accessed on 19 November 2021).
- Prada-Sanmiguel, Alberto. 2016. Comprensión de la responsabilidad política de los actores armados en el conflicto interno colombiano: La masacre de El Salado 2000. Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud 14: 537–1548.
- Quiroga, Diego, and Támara Ospina-Posse. 2014. Conflicto armado en la región Caribe: Un paneo por sus etapas y sus dinámicas nen cinco etapas de violencia. Edited by Fernan González, Diego Quiroga, Fernán Ospina-Posse, Andrés Aponte, Víctor Barrera and Eduardo Porras. Bogotá: Ediciones Atropos Ltd.
- Romero-Acosta, Kelly, Andrés Ramirez-Giraldo, Olga Hernandez-Bustamante, and Eduardo y Porras-Mendoza. 2017. Trastornos de ansiedad y del estado de ánimo en personas víctimas del conflicto armado en Colombia: El caso de Chengue y de Libertad. *Psicología desde el Caribe* 2017: 30–41.
- Rosero, Carlos. 2004. Desplazamientos, desarrollo y modernidad en el Pacífico colombiano. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000130692_spa (accessed on 19 November 2021).
- Sandoval-Casalimas, C. 1996. *Investigación cualitativa*. Bogotá: Instituto colombiano para el fomento de la educación superior, ICFES. Sparkes, Andrew, and José Devís. 2018. Investigación narrativa y sus formas de análisis: Una visión desde la Educación física y el deporte. *Expomotricidad* 43–68.
- Trejos, Luis. 2013. Revisión teórica de su conflicto armado. *Revista Enfoques: Ciencia Política y Admi-nistración Pública* XI: 55–75. Available online: https://www.redalyc.org/articulo.oa?id=96028142003 (accessed on 19 November 2021).
- Trejos, Luis. 2016. Hipótesis explicativas de la derrota estratégica de la insurgencia armada en el Caribe colombiano: Los casos de las FARC-EP y el ELN. *Revista de Derecho* 45: 346–77. [CrossRef]
- Ugarriza, Juan Esteban, and Nathalie Pabón. 2017. Militares y Guerrilla. La memoria histórica del conflicto armado en Colombia desde los archivos militares 1958–2016. Bogotá: Editorial Universidad del Rosario.
- Unidad de Víctimas. 2021. Registro Único de Unidad de Víctimas. Available online: https://cifras.unidadvictimas.gov.co/Cifras/#!/enfoqueDiferencial (accessed on 19 November 2021).
- Verdad Abierta. 2010. ¿Cómo se fraguó la tragedia de los Montes de María? Recuperado el 2 de Agosto de 2020. Available online: https://verdadabierta.com/icomo-se-fraguo-la-tragedia-de-los-montes-de-maria/ (accessed on 19 November 2021).
- Verdad Åbierta. 2014. Capítulo I: La masacre de un pueblo el 17 de enero de 2001. Recuperado el 27 de Agosto de 2020, de. Available online: https://verdadabierta.com/capitulo-i-la-masacre-de-un-pueblo-el-17-de-enero-de-2001/ (accessed on 19 November 2021).
- Washington Post. 2001. Chronicle of a Massacre Foretold. Recuperado el 28 de Agosto de 2020. Available online: https://www.washingtonpost.com/wp-dyn/content/article/2008/01/24/AR2008012402532.html (accessed on 19 November 2021).
- Zelik, Raul. 2015. Paramilitarismo. Violencia y transformación social, política y económica en Colombia. Bogotá: Editores Siglos del Hombre.





Article

Paramilitary Conflict in Colombia: A Case Study of Economic Causes of Conflict Recidivism

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Abstract: Following the peace accord on 26 September 2016 between the Colombian government and the Colombian Revolutionary Armed Forces (FARC), significant structural issues persisted in Colombia, such as state fragility, land distribution challenges, and rural impoverishment, all of which jeopardized sustainable peace. Previous disarmament events indicated potential shifts in violence and recidivism rates among ex-combatants. This paper aims to determine the likelihood that, in the post-conflict era with FARC, these ex-combatants would rearm themselves into new criminal factions. Employing a methodology by Paul Collier, the study utilized logit, probit, and panel data models with both fixed and random effects to evaluate the recidivism risk at the municipal level. A 1% increase in per capita municipal income decreased conflict probability due to the increased opportunity cost of disrupting economic endeavors. Conversely, 1% increases in potential conflict benefits from tax revenue and natural resource proceeds raised the probability of conflict by 40% and 17%, respectively. Key results indicate that economic advancement, as measured by per capita income, reduced the duration of paramilitary presence, whereas revenue from taxes and natural resources extended it at the municipal level in Colombia.

Keywords: post-conflict; criminal gangs; peace negotiations; urban and rural economy

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1. Introduction

From 1960 to 1980, there were at least sixteen civil conflicts around the world that achieved peace accords. In Latin America, the civil conflicts in El Salvador, Guatemala, Haiti, Peru, and Colombia reached peaceful agreements in 1992, 1996, 2004, 2000, and 2013, respectively. In Africa, specifically in Liberia, Mozambique, Rwanda, Sierra Leone, and South Africa, they made possible nonviolent conflict settlements in 2003, 1992, 1994, 2002, and 1991. Moreover, Afghanistan, Armenia, Cambodia, and Timor-Leste in Asia achieved a full stop of violence in 2001, 1994, 1990, and 2002. Furthermore, the Bosnia and Herzegovina and Kosovo wars in Europe achieved peace accords in 1995 and 1999, respectively (Prieto-Bustos and Manrique 2018).

Previous experiences have shown that there are political, economic, cultural, and social factors that could increase the likelihood of conflict recidivism when there is not enough time and insufficient resources to provide a stable environment in which there is the consolidation of a system of violence, disputed economic resources among illegal armed groups, lack of trust and participation in the post-conflict institutional settlement, and absence of a community wounds-oriented justice system.

In this regard, post-conflict research is relevant as it provides systematic evidence regarding environmental conditions related to reducing violence resurgence as a mechanism to resolve social conflicts. Moreover, post-conflict research provides the opportunity to build a theoretical paradigm of conflicts that overcomes the singularities and the comparative conflict analysis, revealing a theoretical hypothesis that could be useful in researching

conflicts worldwide. Although each conflict has different causes related to the historical and contextual aspects of power relations that frame its social, economic, cultural, and political development, going from the particular aspects to general aspects is a relevant theoretical effort as long as violence as a resource for resolving social conflicts remains a human experience.

The Colombian post-conflict is relevant in such an endeavor for at least five reasons. First, the Colombian conflict is among the oldest conflicts on the planet, beginning in 1964 and ending with a peace accord in 2013. In this regard, almost 12.2 million people lived in rural areas, and more than 9 million were displaced, from which almost 5 million were women and 2.1 million were young people. At the beginning of the decade of the 1960s in Colombia, the armed confrontation of political dissidence between the 1940s and 1950s enabled the emergence of the Revolutionary Armed Forces of Colombia (FARC). After more than 50 years of violence, the Colombian government has reached a deal with that organization to end the conflict. Nevertheless, the end of the violence goes beyond the peace accord, as Colombia has deep structural problems of economic, social, and geopolitical order, which can lead the violence not to cease but to transform into another kind. That was the case in the negotiated agreement with leaders of the United Auto-defenses of Colombia (AUC), an organization of a paramilitary kind, which made its first appearance during the decade of the 1980s and reached its pinnacle in the 1990s. Fears about the problem of recidivism of paramilitaries problem shades the results of what would happen in the case of the peace process with the FARC guerrillas.

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Second, until recently, due to the revelations of the Truth Commission and the transitional justice system, the Colombian civil conflict was accepted by Colombian society as a civil conflict. Although, in 2011, the Supreme Court of Justice and the Colombian government issued sentences and laws to protect and reinstall the victims' human rights against violations, in 2016, a political plebiscite among citizens implemented to approve or disapprove of the peace accord showed a negative response against the 2013 peaceful agreement based on the argument that guerrillas were terrorist groups. Hence, the human rights conflict approach was only partially accepted.

Third, right-wing extremist groups' response to left-wing guerrillas was to create paramilitary armies that, in some cases, work hand in hand with the national army, leaving the government's monopoly power of violence as a resource for ring-wing extremist groups. Fourth, there has been a historical dispute over territories that have natural resources with high international prices, such as cocaine plants, gold, and emeralds, among others, and geographical advantages in producing and exporting such natural resources. Fifth, there are social and economic gaps between citizens who live in metropolitan cities and citizens who live in rural areas due to a lack of strategic physical and social infrastructure investment, absence of a development strategy for rural areas and regions within rural areas, corruption and coaptation within local governmental institutions, and lack of an optimal taxing strategy to create economic incentives for better use of natural resources in rural areas, among others.

Furthermore, poverty reductions are not associated with better income distribution in Colombia. Although economic growth has been increasing on average by 3%, there have yet to be relevant improvements in institutional quality that provide better opportunities for income distribution. The relevant changes created by the 1991 new constitution regarding citizens' participation mechanisms through local democratic elections, social manifestation rights, and access to justice have not yet guaranteed inclusion in an economic model that focuses on economic development in rural areas. For example, in rural areas, there needs to be more cooperation between labor markets and educational access in local and regional environments without proper strategic investment in physical, social, and technological infrastructure. Therefore, social participation has created a demand for education, but there is a strategic development plan that connects access to education with employment

or self-employment opportunities. Thus, social participation has reduced poverty without significant changes in income distribution, creating a potential for conflict recidivism.

At the macro and meso-institutional levels, there has been progress toward independence and power allocation to the judicial, legislative, and executive government branches. However, there have still been few advances in achieving optimal use of natural resource royalties managed by the National System of Royalties (NSR) and the social investment distribution system of the central government, frequently used to pay political favors. Moreover, land property rights and suboptimal economic incentives have delayed the development of the land market due to transactional costs and the need for an optimal tax policy. Therefore, there are few possibilities for income generation for citizens in rural areas who were displaced, including access to goods and services relevant to avoid participation in criminal markets. In addition, the lack of government presence in rural areas has created opportunities for the consolidation of a violent system created by illegal organizations that coopt and corrupt local institutions, use violence to control territories, influence democratic elections, and destroy social cohesion by taking away young people into criminal activities (Giraldo et al. 2015). Also, the displacement caused by the violent system in rural areas has added pressure on environmental resources and social practices, leading to discrimination and exclusion in urban areas (Prieto-Bustos et al. 2021) and deforestation and predation of natural resources. In this regard, the post-conflict requires a significant rural development policy (Ocampo 2015) to reduce the likelihood of recidivism.

This paper aims to build a probabilistic model to identify regional risk factors associated with a higher likelihood of recidivism of violence in Colombia following the signing of the peace agreement in 2016. To achieve this, a macroeconomic model employing spatial econometrics refines microeconomic data to ascertain the probability of a resurgence in violence at the regional level in Cundinamarca, Colombia.

According to previous studies, to reduce the probability of relapse of a conflict, it is mandatory to strengthen institutions, promote socio-economic development, and invest in social capital. Boosting local productive capacity increases the chance of former conflict actors entering the formal labor market to guarantee their income stability and reduce the possibility of them returning to crime. Nevertheless, credible political commitments are crucial to aiming for lasting peace.

This research illuminates the issue by modeling the effects on the likelihood of violence at a regional level. It augments previous studies in terms of theoretical and empirical contributions by conceptualizing informal markets as violence markets and introducing a new graphical index map of regional risk. This map is employed to estimate the spatial interrelation of factors linked with a higher likelihood of experiencing violence in Colombia, using a risk index. The paper is divided into four main sections in addition to the introduction. The second section surveys the state of the art in conflict studies, discussing both the international and national scientific literature on conflict recidivism. The third section delves into the geography of Colombia's paramilitary conflict. The fourth section outlines the estimation strategy, research hypothesis, methods, data, and the results obtained. The concluding section offers the research's key findings.

2. Literature Review

2.1. International Literature

The institutional development literature emphasizes the mechanisms through which international donors became involved in reconstructing post-conflict societies. While first-generation studies of international cooperation aid generally showed persistent interventions aimed at economic growth, inclusion, and human development, recent evidence has revealed a heightened sensitivity to institutional contexts in which specific governance models might have been more suitable. In this vein, the second generation highlighted endogenous aspects of building trust, consensus, and social policy for those most affected by conflict, rather than focusing solely on tax-based reconstruction reforms. Conversely, mechanisms related to disarmament, demobilization, reintegration, and addressing the

psychosocial trauma of conflict were crucial prerequisites for minimizing the chances of armed conflict resurgence.

Tobias and Boudreaux (2011), Englebert and Tull (2008), Collier (2009), Rugumamu and Gbla (2003, 2004), and Kreimer (2000b) provided examples of institutional developments in post-conflict African societies. These were primarily marked by efforts to achieve (1) economic growth, (2) capital accumulation, and (3) security (namely, conditions of disarmament and reintegration). Key among the economic development strategies was the promotion of cooperative economic models for coffee cultivation. This was bolstered by the strengthening of small enterprises, fostering innovation in urban agriculture, and formulating economic policies that drove growth but also emphasized redistribution to populations most impacted by the armed conflict. For instance, Tobias and Boudreaux (2011) explored the pivotal role of entrepreneurship in poverty alleviation, economic development, conflict mitigation, and broader social progress.

Furthermore, Lemmon (2012) underscores the positive economic impacts of facilitating credit access under conditions that promote corporate sustainability. Key requirements include support for the development of viable investment plans, market access, connectivity to corporate networks, and training in essential business skills like record-keeping, product marketing, and sales techniques. Without these fundamental elements, an employment and income-generating strategy based on microenterprises might falter, even with access to credit, due to intense market competition and more sophisticated business environments. However, with these foundational elements in place, such a strategy can succeed, especially when bolstered by credit access in competitive and well-prepared settings.

On the other hand, Lynch et al. (2013) conducted research in Sierra Leone that described the conditions of the displacement of agricultural labor to the cities as a consequence of armed conflict, highlighting it as an opportunity for developing urban agriculture. The study confirmed the importance of urban agriculture for food security, employment generation, and the reconstruction of displaced communities in urban enclaves of agricultural production.

Meanwhile, in an economic reform approach, Ansoms (2005) highlighted the priority redistribution approach to conflict victims as part of reforms seeking to stimulate economic growth. In this regard, that study proposed a strategy that combined growth and wealth distribution to effectively reduce poverty in post-conflict conditions.

Moreover, issues related to human development emphasized the importance of fairness and equality in the labor market's functioning in post-conflict societies. Leadership as a strategy for social reconstruction, the relevance of the human rights approach, the gender perspective in post-conflict social policy, and the violent consequences for children exposed to conflict were relevant factors in achieving sustainable peace. In particular, Smet (2009) described the case of Sierra Leone concerning sustainability and the promotion of gender equality by identifying the impact of the armed conflict on gender roles. The study provided evidence of the need for legislative changes aimed at abolishing discriminatory practices and internalizing within the community the importance of education and women's participation in the labor force, for both the economic and social reconstruction of communities.

Furthermore, Akresh et al. (2011) explored the correlation between the destruction of crops during conflict and its harmful effects on the health and education of children who experienced armed conflict. This correlation resulted in unfavorable social and economic outcomes in terms of the biological and cognitive development of infants. Exposure to war reduced the height and weight of infants at the time, affecting the human development of future generations to the extent that it decreased the potential for accumulating relevant capacities for exploiting opportunities in post-conflict Rwanda. In addition to the relevance of reforms designed to eliminate discriminatory behavior and the harmful effects on the human development of a generation of infants exposed to conflict, UNDP (2010) emphasized the priority of leadership as a strategy to boost confidence, legitimacy, and social transformation in post-conflict societies.

Leadership plays a pivotal role during transitional periods, especially in aligning and motivating change. It fosters social cohesion and reconnects society with the economic and social reconstruction that defines post-conflict environments. Massaquoi (2007) delves into the human rights approach in relation to the female population in Libya, viewing it as a strategic method for rebuilding and strengthening state institutions post-conflict. For example, leadership rooted in a women's rights perspective is vital for the rejuvenation of institutions and restoring public influence over social policies. Patel (2005) highlights successful instances in Asia where community empowerment anchored in gender equality yields greater social benefits, particularly in terms of job creation in Afghanistan. Similarly, Iyer and Santos (2012) document increased job opportunities within post-conflict Asian societies, especially through public investment initiatives that reintegrate unskilled workers into the labor market.

Kreimer (2000a) describes how institutional structures streamline the management of resources provided by international donors. Particularly, the coordination of activities during the design, financing, and implementation stages of Bosnia–Herzegovina's reconstruction was crucial when paired with resources from international donors, as emphasized by Ohanyan (2002). Furthermore, Ding and Wallich (1996) note that community involvement in project design, rooted in institutional structures for financial management, is pivotal for maximizing social benefits during the rebuilding of local governments. This approach enhances planning, decision-making, and mobilization in the post-conflict era. Haynes (2010) stresses the importance of leadership in project implementation. Participatory dimensions prove most effective when a human rights approach is used, especially when targeting the development of the female population. Such an approach ensures adherence to integrity and dignity principles vital for successful social reconstruction projects. Huerou (2010) further underscores citizen participation as essential for the long-term sustainability of peace processes, leading to increased returns on investments aimed at bolstering local governments' capabilities.

Garstka (2010) elaborates on the participatory principle in project design, highlighting a project related to the formalization of illegal neighborhoods in Kosovo. This project combined resources from international donors, the United Nations' methodological expertise, and local public participation, presenting a viable solution for job creation and social reconstruction. McMahon (2004) identifies three key pillars of international support in Bosnia–Herzegovina: (1) fostering sustainable agreements between parties, (2) enhancing governmental structures, and (3) rejuvenating and sustaining the financial system. Klapper and Panos (2009) emphasize the importance of financial systems as vital institutional setups for rebuilding and transitioning to sustainable entrepreneurship.

In the context of Latin American post-conflict experiences in El Salvador, Guatemala, and Colombia, it is worth noting that these conflicts were rooted more in economic grievances than ideological divides. This has resulted in a greater emphasis on income and job generation in Latin American post-conflict scenarios, as opposed to participatory strategies. Eriksson et al. (2000) highlight the institutional arrangements that fostered macroeconomic stability, which was instrumental in El Salvador's post-conflict economic boom. Such institutional reforms are vital as they enhance the credibility of international donors. Tabak (2011) observes that flaws in the judicial system, especially concerning gender rights in transitional justice measures, can hinder reconstruction efforts. Thus, while macroeconomic reforms spur economic growth, robust transitional justice systems strengthen institutional foundations for lasting peace. The predominant challenges in Latin American post-conflict scenarios largely revolve around the micro-level operations of justice systems.

Lastly, the ILO (2010) underscores the importance of local economic recovery (LER) in post-conflict settings. The LER strategy hinges on job creation, prioritizing economic progression over local institutional reforms. Adhering to the guidelines for decent work, the ILO proposes five methodologies, encompassing (1) employment and labor market

assessment, (2) value chain analysis, (3) consumer surveys, (4) vulnerability assessments, and (5) training needs analysis.

Despite the significance of employment, it is crucial to acknowledge the prevalent high concentration of land ownership in Latin American countries. This concentration often serves as a structural catalyst for economic grievances that spark violence, notably in Colombia. For example, Thomson (2011) underscores land ownership as a factor that destabilizes the Colombian peace process. Rooted in the evolution of capitalism, agrarian disputes epitomize the structural basis for violence in Colombia. Stemming from this, the dominant role of capital in the prevailing economic model obstructs the adoption of community property schemes better suited for local post-conflict economic development. Consequently, as Thorsell (2013) also suggests, promoting entrepreneurship within a neoliberal framework may be ineffective in generating income and ensuring economic stability in economies with pronounced wealth disparities.

Several studies examine the implications of violence and poverty on gender dynamics. The migration induced by economic motives and the forced displacement due to conflict result in profound shifts in the societal contexts where culturally defined gender roles play out. Menjivar and Agadjanian (2007) delve into how changes in gender dynamics, precipitated by such displacements, lead to marked economic and cultural shifts. By juxtaposing Guatemala and Armenia, their research illuminates the societal changes where women assume roles as primary income earners, replacing men.

Additionally, from a methodological standpoint, contrasting diverse post-conflict experiences is invaluable. For instance, Nasi and Rettberg (2005) note the unique facets of the Colombian conflict, which historically justified its omission from comparative post-conflict studies in Latin America. Nevertheless, more recent research that incorporates Colombia has enriched the realm of theoretical and empirical inquiry, shedding light on the nation's violent history. Randall (2005) advocates for a shift from studying conflict demographics to exploring the demography of conflicts, unveiling intricate relationships rooted in economic and ethnic disparities. Such an approach makes the structural triggers of armed conflicts more discernible across varied post-conflict societies.

Emphasizing the inherent nature of conflict further accentuates the endogenous character of post-conflict recovery. This perspective elevates the importance of participatory approaches. Lawrence (2007) posits that, given the internal essence of post-conflict recovery, indigenous factors should be prioritized over external ones as violence catalysts. Consequently, participatory initiatives centered on nurturing social capital and trust become paramount for achieving lasting peace. Absence of community involvement in post-conflict strategies might let radical political stances erode initial positive gains. Braithwaite and D'Costa (2015) illustrate how such extremist political positions in post-conflict societies beget violence. Furthermore, heavy-handed tactics to reassert control in areas devoid of state presence can instigate a cyclical pattern of state-sanctioned violence and war crimes. Hence, security strategies emphasizing community involvement are essential for sustaining peace. Onoda (2004) discusses the role of security pacts as vital institutional tools for ensuring long-term peace.

The concept of power elites offers insight into this issue. As originally posited by C. Wright Mills (2018), a select group from the political, corporate, and military sectors wields significant influence over national affairs. Mills' observations highlight the dynamics of how and why local conflicts can be influenced or organized by this group, especially those of a paramilitary nature.

Subsequent authors expanded this concept. Domhoff (1978) delved into the relationship between economic elites and political decision makers, suggesting that power is concentrated within a few families with a large influence, who decree national policies, sometimes encouraging local paramilitary forces to safeguard their welfare.

In Jeffrey Winters' exploration of power dynamics (Winters 2011), he posits that wealthy individuals and groups protect their assets and influence by subtly shaping policies and sparking conflicts that distract from their actions. Within this context, actors who might

appear less visible or less powerful can still have a significant impact on national politics and decisions.

Likewise, Sheldon Wolin (2017) explores this idea but more in relation to corporate powers, who would dominate traditional democratic institutions, leading to potential localized conflicts because of larger national and international strategies. Wolin's work implies that local conflicts can be seen not just as isolated incidents but as manifestations of a broader power structure influenced by elite interests. This is called 'inverted totalitarianism' and describes a system in which corporations discreetly control and manipulate democratic processes without overt leadership. In this paradigm, corporate interests silently and anonymously co-opt democratic structures. A continuous state of warfare and emergency further consolidates power.

Nancy Fraser (2017) and Saskia Sassen (1991) also examine the relationship between national elites and local paramilitary conflicts, focusing on neoliberalism and how global capital flows and elite decisions can affect local communities, sometimes leading to conflicts. Sassen (1991) explores the concept of global cities where local conflicts and paramilitary groups may find support from hidden ties with power elites.

From the international literature review, several converging themes from the examined post-conflict experiences emerged. First, historical conditions played a pivotal role in defining the demographics of conflict. Second, post-conflict recovery was an endogenous process that proved more stable when a participatory approach was adopted. Third, peace accords necessitated binding conditions grounded in community engagement, which needed regular monitoring and evaluation. In addition, targeted initiatives in institutional fortification, local capability enhancement, societal and personal safety frameworks, revitalization of financial systems, and investment in human capital have been vital in fostering sustainable peace. The subsequent section succinctly outlines the historical backdrop of the Colombian civil conflict to pinpoint factors linked with a heightened likelihood of conflict recidivism.

2.2. Social Dynamics and Institutional Context of the Colombian Civil Conflict

In the early stages of state-building after Colombia's independence, conservative forces sought to prevail over the liberals. This political class struggle transcended several dimensions: political, economic, and social. Such battles shaped the prevailing perception that elites dominated the government, establishing it as a closed system marked by a persistent discourse of exclusion toward the less affluent. In this context, the relative strength or weakness of the Colombian state has remained a central topic in discussions about the origins and persistence of violence.

The initial stages of configuring the Republic lacked cohesion, resulting in the institutional framework being primarily developed in urban centers rather than in the suburbs or rural areas. In these outer areas, large landlords, known as "gamonales", maintained territorial control, upholding feudal institutional figures that had roots in the preceding colonial era. Daniel Pecaut (1997) was among the early authors to elucidate the connection between the political regime, state-building, and violence. The state's fragility prevented it from expanding, establishing market rules, and reigning in local political powers. This dynamic between the state and society could lead to social tensions. This was the core premise of Migdal et al. (2011), who subsequently examined violence, social groups, and the rise of social and political conflicts. Additionally, Cubides et al. (1998) detailed how the multifaceted nature of violence comprised numerous violent acts; hence, a failure to recognize this complexity made it challenging to pinpoint the origins of violence and its association with state-building.

Conversely, Paul Oquist (1978) stressed that the state's presence incited civil conflict. During its formation, the two dominant parties, driven by their aspirations for dominance, established uniform patronage networks which did not truly represent the populace and offered no room for negotiation. As a result, numerous social disputes from the nineteenth century remained unresolved, coexisting with episodes of violence and civil wars. This overwhelmed the state's capacity to quell civil discord and impaired its responsiveness

to the people's needs. Similarly, Reyes Posada and Duica Amaya (2009) spotlighted the government's incapacity to address these predominantly agricultural social and territorial disputes, weakening the state's operations and eroding its monopoly on order.

The Commission on the Study of Violence (Jaramillo 2011) pointed out a pronounced vulnerability of the state due to a deficit in democratic practices, especially locally. Consequently, fostering social inclusivity became paramount for reinforcing a democratic ethos that genuinely engaged the citizenry. The 1991 constitution, superseding the one from 1886, was championed by social factions that emphasized a participatory agenda aimed at achieving inclusivity.

In the same way, Uricoechea (1986) contended that the state was not weak; its magnitude in terms of funding and staff for various public agencies, along with social investment, had grown in line with the increasing demands and responses to the needs of the vulnerable population. However, it was not representative of social demands because of a limited democratic inclusion of social forces at a local level due to the poor quality of democratic processes in local and rural areas.

Furthermore, González (2009) refers to such weakness in political representation and strength in government growth as normative categories that do not correspond to state-building but have created overlapping capabilities within the state. Lack of representation leads to state absence and growth in the size of government, implying that state presence has yet to be met at rural local levels. However, a nation should be an articulated social project built from the territories so that their fragmented capacities (González et al. 2012) to participate in and assemble the state is a conflict driver that goes beyond the argument of either a present or absent government.

In addition to the weakening of the state, the political system is one of the most important reasons related to the emergence of social conflicts that led to the formation of guerrilla groups in the mid-twentieth century. A lack of democracy, polarization between two political parties, and clientelistic structures that pervaded political positions weakened state control over the masses, particularly those outside the centralized institutional order. Moreover, according to Sanchez and Peñaranda (1986), the ruling elites of both political factions actively encouraged armed confrontations among the lower classes, a phenomenon they termed "endemic warfare".

In general, four main points converged from the reviewed literature: the fragility of the state in the face of restrictive democracy, the absence of regulatory boundaries, particularly for local authorities, the link between institutional bottlenecks and violence, and the political regime's association with local violence. Pecaut (1997) believed the issue stemmed from a state system that was not politically rigid but somewhat adaptable, leading to challenges in structuring and moderating local interests. Conversely, Carbo (2006) argued that bipartisanship resulted in social exclusion and catered exclusively to the elite, thereby generating societal tensions. Consequently, the institutional frameworks that underpinned the state system indicated a plausible link between the state and violence. Vasquez (2014) and Garcia de la Torre (2004) contended that the construction of social identity within a territorial space shaped violence when governance lacked inclusivity. Political decentralization yielded mixed outcomes for state-building processes. While Ritter Gutierrez (2022) illustrated how political decentralization was vital for state-building at the grassroots, Fals-Borda (1991) proposed that meaningful decentralization should center on the interplay of social movements, identity, and violence within a territory. From this, regional institutional analysis should emphasize two dominant themes: (1) the role of political decentralization in molding the state's relationship with territorial social identities and (2) institutional shortcomings that incite regional violence.

Political decentralization, municipal advancement, and unlawful economic proceeds closely correlated with aggressive local developments (Sanin et al. 2006), augmenting the danger of government co-optation for private gains. Drug trafficking and paramilitary activities, for instance, were linked with spatial elements like drug routes and land ownership. Lopez Muñoz (2019) segmented the paramilitary phenomenon into three phases:

(1) the rise of paramilitary forces, (2) their autonomy, and (3) their local dimension. Initially, the paramilitary surge was a response by local elites and the state to insurgent movements. However, the allure of the narcotics trade's international revenue provided an economic rationale for exerting social control over territories to penetrate the global illicit drug market.

Subsequently, paramilitary forces gained autonomy, becoming less aligned with the state's ideology (Medina Gallego 1990). They resorted to forced displacement to confiscate rural lands, enhancing political susceptibility to local elites and degrading democratic processes. The paramilitary forces' violent tactics redefined local dynamics. Reyes Posada and Duica Amaya (2009) and Medina Gallego and Tellez Ardila (1994) recounted the state's diminished control over the paramilitary movement and the latter's eventual domination of territories, evolving into a multifaceted paramilitary initiative, from state terrorism to regional crime syndicates.

Interactions between political entities and illicit groups controlling territories unveiled shared interests in unlawful activities (Gutierrez-Sanin 2022). Meanwhile, the paramilitary movement infiltrated and co-opted local governance, defying the central administration, a phenomenon evident in the parapolitics scandal (Romero 2003). González et al. (2002) believed such dynamics fostered 'armed amorality', mirroring the objectives of local elites and agribusinesses within paramilitary factions. Though the inception of paramilitary forces was a countermeasure against guerrilla movements (Romero and Torres 2011), both entities discerned illegal revenues as pivotal to their economic and political missions. This led to a fluid social transformation where the local institutional landscape was revamped by the decentralization process, enabling violent control mechanisms by the paramilitary to function within the state's confines (Garay 2009; Lopez Muñoz 2019). Consequently, drug trafficking, illicit mining, extorting multinational corporations, proprietary financial assets, and corrupting local public institutions became the primary revenue streams for the paramilitary initiative (Richani 2010; Pearce 2007).

To comprehend these funding avenues, Duncan (2005) posited that they offer insight into the paramilitary's evolution into a criminal syndicate amidst the Colombian civil unrest. Likewise, Romero (2003) championed a profound grasp of economic dividends when detailing the paramilitary strategy. The preeminence of economic motivations over ideological factors in both the paramilitary and guerrilla agendas is not novel. Rangel Suarez (1998) contested that structural and ideological shifts were not the principal drivers behind territorially based violent endeavors. For example, illicit profits augmented guerrilla revenues to approximately 1000 million pesos in 1998, primarily sourced from drug trafficking and extortion. This narrative solidified during the 1990s when guerrilla factions exerted dominance in regions including Cauca, Putumayo, and Guaviare, levying taxes on locals through coercion and influencing electoral outcomes. In the paramilitary's case, illegal revenues funded training and weaponry procurement, equipping them with formidable arsenals.

3. Colombian's Geographical Paramilitary Conflict

Paramilitarism in Colombia first emerged in the 1950s when many landlords began forming their own armies. However, it was not until the 1980s that it expanded in terms of operations, combatants, and geographical presence. At the departmental level, the extent of the paramilitary phenomenon is gauged by the years since their first act of violence. There is also a consideration of the recidivism observed in each department, showing patterns of re-organization after negotiations with the Colombian state. Table 1 describes paramilitary violence at a departmental level regarding dates of massacres.

Table 1. Summary of the most important dates of the events of massacres perpetrated by paramilitary groups at departmental level.

Department	Start Year	Last Year of Significant Reduction	Date	Recidivism	Last Date
Antioquia	1982	2003	26-December-03	2004–2012	07-November-12
Arauca	1998	2004	31-December-04		
Atlantico	1994	2003	21-May-03		
Bolivar	1991	2003	16-March-03		
Boyaca	1982	2004	16-December-04		
Caldas	1990	2003	08-June-03	2005, 2010	09-January-10
Caqueta	1980	2001	15-February-01	2002, 2003, 2005, 2006, 2007, 2011	26-November-11
Casanare	1988	2000	17-October-00	2005, 2009	29-April-09
Cauca	1991	2002	08-November-02	2011	20-April-11
Cesar	1983	2002	08-December-02	2003-2005	04-December-05
Choco	1990	2002	17-April-02	2007, 2008	03-May-08
Cmarca	1990	2005	04-September-05		•
Bogota	1989	2003	08-March-03	2009	01-December-09
Cordoba	1988	2003	06-May-03	2008, 2010, 2011	25-September-11
Guaviare	1986	2004	16-September-04		•
Huila	1988	2006	15-May-06		
La Guajira	1992	2005	08-May-05		
Magdalena	1991	2003	16-October-03		
Meta	1988	2002	13-October-02	2003, 2004, 2006, 2012	14-February-12
Nariño	1999	2003	26-April-03	2007-2011	25-June-11
Norte Sder	1989	2004	25-December-04	2010, 2011	18-June-11
Putumayo	1991	2005	27-July-05	2011	11-February-11
Risaralda	1992	2003	26-February-03		·
Santander	1982	2003	07-April-03	2005, 2009, 2010	15-Janaury-10
Sucre	1992	2003	12-August-03		·
Tolima	1989	2005	15-September-05		
Valle Cauca	1986	2005	09-July-05	2006, 2011, 2012	20-March-06 and 18-October-12
Vichada	1998	1999	20-May-99		

Source: Own calculations based on the Centro de Memoria Historica.

At the national level, the paramilitary conflict had begun by 1980, marked by the first actions of paramilitary groups. Specifically, a massacre was reported in the municipality of Puerto Rico, in the department of Caqueta. On the departmental scale, the earliest paramilitary forces were found in Caqueta, Antioquia, Cesar, and Boyaca. These departments were notable for illegal mining activities (Boyaca and Antioquia) and narcotraffic production (Caqueta), and they provided routes to international markets (Antioquia and Cesar). Casanare, Guaviare, and Meta, known for their oil deposits and access to the natural and mineral resources of the Amazon jungle, had witnessed the presence of paramilitary forces since the late 1980s. During the first half of the 1990s, La Guajira, Magdalena, Bolivar, Atlantico, Choco, and Cauca saw a surge in paramilitary activities, coinciding with the growth of illegal narcotraffic income due to the control of export routes along both the Atlantic and Pacific coastlines. Between 1995 and 2000, paramilitary presence was evident in Vichada and Nariño, and in the capital city, Bogota, paramilitaries had been active since 1989. In 15 out of 28 departments, there were repeated instances of paramilitary activity; notably, Caqueta and Meta experienced five and four recurrences, respectively. Such patterns underscored the challenges in curbing and managing paramilitary forces, especially in departments rich in natural resources and prone to narcotraffic revenues.

Figure 1a,b refer to paramilitary violence within Colombia, characterized by massacres and conflict duration graphs. Illustration 1 shows that most of the territories suffered from at least one event related to paramilitary presence. The Amazon and Orinoquia regions in the south and east of Colombia were not significantly affected, as guerrillas have

traditionally dominated these areas. Additionally, Illustration 2 displays the territories with the longest durations of paramilitary conflict.

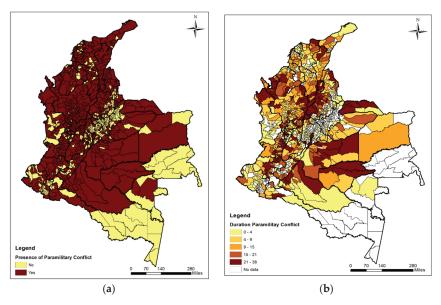


Figure 1. (a) Presence of paramilitary conflict; (b) length of paramilitary conflict.

Furthermore, the most substantial rise in paramilitary massacres during the conflict took place between 1996 and 2003, accounting for 5057 victims. This period alone represented 69.58% of all victims from such events in the paramilitary conflict up to 2012. At the department level, Antioquia bore the brunt of paramilitary violence during this observed period, suffering 2232 murders in massacres between 1980 and 2012. It was followed by Santander (526), Cesar (494), Bolivar (456), Norte de Santander (455), Magdalena (399), Valle del Cauca (386), Meta (325), Cauca (275), and Cordoba (253). Antioquia alone accounted for 30.74% of the victims of massacres committed by paramilitary groups in that period, along with Santander (7.26%), Cesar (6.8%), Bolivar (6.3%), Norte de Santander (6.9%), Magdalena (5.5%), Valle del Cauca (5.3%), Meta (4.5%), Cauca (3.8%), and Cordoba (3.5%). Those ten departments encompassed 79.71% of the massacre victims recorded between 1980 and 2012.

Grouping departments into regions illustrated that the central west region of Colombia was the most impacted by paramilitary violence between 1980 and 2012. The departments of Antioquia, Risaralda, Caldas, and Quindio belong to the central west region. In contrast, Norte de Santander, Santander, Boyaca, Cundinamarca, Bogota, Tolima, and Huila comprise the central east region. The departments of Atlantico, Bolivar, Cesar, Cordoba, Guajira, Magdalena, and Sucre constitute the Atlantic region. Valle del Cauca, Choco, Cauca, and Nariño form the Pacific region, while Orinoquia, Amazonia, and all other departments fall into the New Departments region. The central west region saw the most conflict, with a total of 2338 massacres (32%), trailed by the Atlantic region with 1975 massacres (27%), central east region with 1433 massacres (20%), Pacific region with 881 massacres (12%), and the New Departments region with 632 massacres (9%).

4. Econometric Model: Do Civil Wars Have Economic Causes?

The econometric model proposed is based on Collier (2009). According to Collier's findings, a country faces two primary challenges when forging a durable peace agreement: (1) catalyzing economic recovery from the severe repercussions of war and (2) diminishing the risk of conflict relapse. Collier provided evidence that half of the civil wars experienced

in the 1990s resulted from a return to warfare following a peace agreement. In many instances, conflict recurrence occurred within the first decade following the peace accord. Due to limited data, modeling this was challenging until similarities in certain African countries were taken into account. Collier began by identifying specific factors associated with the onset of conflicts, such as low per capita income, the state's inability to assert control over its territory, sluggish economic growth, and a high dependency on the export of economic resources.

Using a utility-theory-based model, Collier posited that civil war is contingent upon the benefits outweighing the costs of rebellion. Employing tobit, probit, and duration models, Collier et al. (2008) sought to ascertain the likelihood of civil war and its duration based on four variables: initial income, ethnolinguistic fractionalization, the abundance of natural resources, and initial population size. The onset of conflict hinged on the probability of victory, and the factors influencing this probability included the government's defensive capabilities, military expenditure, financial resources allocated to national defense, and tax rates or the per capita taxable base. A higher likelihood of a rebel victory was inversely related to the state's capacity, as gauged by its military strength and per capita tax base. Furthermore, Collier's model indicated that the propensity for relapse was influenced by the benefits and costs tied to the conflict. Gains were derived from seizing state power, while costs entailed opportunity losses stemming from hampered economic activity and transaction costs arising from coordination efforts within the insurgent group. Table 2 outlines both the benefits and costs of conflict recurrence.

Table 2. Gains and costs of conflict relapsing.

Ga	ins	Costs		
Explanatory Variables	Proxy	Explanatory Variables	Proxy	
Per capita taxable capacity of the economy	Per capita income and natural resource endowment	Loss in income due to the conflict	Per capita income	
Benefits of secession	Size of population	Cultural distinctness	Ethnolinguistic fractionalization	

Source: Collier et al. (2008).

Using Collier's approach, Equations (1) and (2) describe the economic model according to the adjusted panel data about the paramilitary violence in Colombia. Equation (1) describes the probability of conflict relapse, while Equation (2) describes the determinants of the number of years with the presence of paramilitary organizations. Both equations are adjusted at the municipality level. The model's purpose is to contrast re-search hypotheses against available data to show whether the economic aspects are relevant for explaining the occurrence of conflict relapse in Colombia.

$$\begin{split} \text{Conflict}_{it} &= \beta_{0it} + \beta_1 \text{PMI}_{i,t} + \beta_2 \text{PTI}_{i,t} + \beta_3 \left(\frac{\text{NRR}}{\text{TMI}}\right)_{i,t} + \beta_4 \text{MA}_{i,t} + \beta_5 \\ &+ \left(\frac{\text{MI}}{\text{TMI}}\right)_{i,t} + \beta_6 \text{RPD}_{i,t} + C_i + D_i + U_{it} \end{split} \tag{1}$$

Conflict is a variable that takes 1 when the municipality "i" exhibits a violent paramilitary event in a year "t" and 0 when it does not. PMI is the per capita municipality income for the municipality "i" in year "t". PMI equals total municipality income divided by the total population. PTI is the per capita tax income for each municipality in year "t". NRR represents natural resources royalties the municipality "i" received in the year "t". TMI is the total municipality income for each municipality "i" in the year "t". The proportion of NRR divided by TMI is an instrument that measures the relevance of municipal income from natural resources royalties to conflict relapse due to a non-random allocation of royalties in each municipality. MA is the municipality age to measure institutional development for the municipality "i" in year "t". MI is the municipal investment, and TMI is the total municipality income. MI/TMI is an instrument variable that controls the expected corre-

lation between PMI and MI at the municipality level. All monetary variables are in real terms. Correlations among independent variables show that there is not a high relationship between covariates. However, there is autocorrelation due to unobserved heterogeneity among municipalities that is constant over time (Ci), and there are also temporal effects for each municipality (Di). Uit represents the estimation errors for each municipality in year "t" conditioned to Equation (1).

$$\begin{split} NYPR_{it} &= \beta_{0it} + \beta_1 PMI_{i,t} + \beta_2 PTI_{i,t} + \beta_3 \left(\frac{NRR}{TMI}\right)_{i,t} + \beta_4 MA_{i,t} + \beta_5 + \left(\frac{MI}{TMI}\right)_{i,t} \\ &+ \beta_6 RPD_{i,t} + C_i + D_i + U_{it} \end{split} \tag{2}$$

NYPR represents the number of years with the presence of paramilitary organizations the municipality "i" has in year "t". Covariates are the same as those included in Equation (1). In this regard, the number of years with the presence of paramilitary organizations is a function of per capita municipality income (PMI), per capita tax income (PTI), the relative relevance of natural resources royalties on total municipality income (NRR/TMI), municipality age (MA), municipal investment participation as a proportion of total municipality income, rural population density (RPD), unobserved municipality heterogeneity constant over time, and fix temporal effects (Di). Uit is the error estimation of the number of years with paramilitary presence, given Equation (2).

Table 3 compares the research hypothesis between Collier's framework and the identified econometric model. Per capita income measures the cost opportunity of conflict relapse. Higher per capita income brings about a higher opportunity cost, reducing the conflict probability and the presence of paramilitary organizations. Regarding expected gains, the research hypothesis relates higher levels of per capita tax income and higher relative importance in the municipality's total income of natural resources royalties as drivers of conflict relapse and the greater extended presence of paramilitary organizations in each municipality. Those variables replace the share of primary commodities exports used by Collier and Hoeffler at the national level.

Table 3. Research hypothesis.

Cost/Benefit Analysis of	Collier et al. (2008)		Research Hypothesis		
Conflict	Coefficient	Impact	Coefficient	Expected Impact	
Higher levels increase the conflict opportunity cost	Per capita Income	Negative	Per capita municipality income	Negative	
	Share of primary commodity exports to GDP	Positive	Per capita tax income	Positive	
Higher levels increase expected benefits	Share of primary commodity exports to GDP	Negative	Relative relevance of natural resources royalties over total municipality income.	Positive	
Higher levels increase coordination cost/higher levels	Index of ethnolinguistic fractionalization, ranges 1–100	Positive	 Rural population density 	Nagativa	
increase pressure on valuable scare resources (land)	Index of ethno-linguistic fractionalization2, ranges 1–100	Negative	- Kurai population density	Negative	
Higher levels increase an incentive to rebellion	Population	Positive	All variables are percapta variables.		
Higher levels increase the direct cost of having a private army			Relative relevance of municipal investment over total municipality investment.	Negative	
Older municipalities bring about institutional path dependence			Municipality age	Negative	

Note: Based on Collier et al. (2008).

Furthermore, higher rural population density causes higher coordination costs related to a lower probability of conflict relapse and a lower presence of paramilitary organizations in each municipality. The rural population density replaces the index of ethnolinguistic

fractionalization index used by Collier et al. (2008). Moreover, having higher levels of municipality investment as a proportion of total municipality income means better safety networks to protect public investment. Increasing public investment brings about a lower probability of conflict and fewer years with paramilitary organizations in each municipality. Finally, older municipalities have better institutional capabilities to confront paramilitary organizations to reduce the probability of conflict relapse and the number of years with the presence of paramilitary organizations.

4.1. Methods and Data

Equations (1) and (2) specify the probability of conflict relapse and the presence of paramilitary organizations in a panel data environment. The dependent variable is a dichotomy variable, meaning the adjusted model involves non-linear panel data. In this regard, Cameron and Trivedi (2009) show how panel data methods can be used to obtain predicted probabilities using logistic and normal distributions. The most relevant assumption in the econometric fitting is related to unobserved heterogeneity (Ci), which caused errors in autocorrelation, meaning that the municipality's differences that were not captured in Equations (1) and (2) could affect the probability of conflict over time. Thus, the random-effects model in the panel data assumes that the unobserved heterogeneity might be modelled using normal distributions of each municipality's unobserved differences through time.

In contrast, the fixed-effects model assumes that the unobserved heterogeny is constant over time. Although there are concerns about the estimator's consistency and efficiency while using non-linear data models to adjust probability, it is shown that whenever the within-group variation in each municipality is lower than the between-group variation of conflict outcomes, the fixed-effects model in the non-linear panel will not be very efficient because such model estimation is mainly based in within variation among municipalities. That is the case for the sample used for adjusting Equations (1) and (2). In addition, Equation (2) uses a tobit model in a panel data environment because not all municipalities show paramilitary organizations' presence. In this regard, some of the municipalities in the sample exhibit zero presence of paramilitary organizations, which means their outcome variable for conflict is censored, given Equation (2).

Data were obtained from the National Historical Center (NHC) and the National Department of Planning (NDP). Data relating to paramilitary organizations about events, number of victims, and years of presence were acquired from the NHC for years 1998, 2001, 2002, 2005, and 2009. In addition, variables for financial records regarding total income, tax income, natural resources royalty income, investment expenditures, rural population, municipal area in squared kilometres, and municipality age were taken from the municipalities database of the NDP. Table 4 describes the variables used in Equations (1) and (2). The model database gathered a total of 5610 observations for 1122 municipalities for each year.

Table 4 exhibits descriptive statistics for dependent variables and identified covariates in Equations (1) and (2). The conflict variable represents paramilitary violence regarding massacre events at the municipality level. The conflict average increased from 1998 to 2009, whereas the standard deviation shows a reduction over the same time. Therefore, the number of municipalities affected by paramilitary violence increased over time, and its average is more representative as the standard deviation suggested more concentration around the mean value. In addition, the variable of the number of years with the presence of paramilitary organizations shows an increasing average from 1998 to 2009, but its standard deviation increases, which shows that paramilitary organizations mobilized around municipalities. Therefore, there were more municipalities affected by paramilitary violence, but the number of years that a paramilitary organization remained in each municipality decreased over time.

Year	Conflict	NYPR	PMI	PTI	NRR/TMI	MA	MI/TMI	RPD	N
1998	0.837 (0.36)	5.01 (6.10)	0.35 (0.21)	0.04 (0.06)	0.02 (0.08)	152 (110)	0.36 (0.29)	37.91 (56.6)	1122
2001	0.89 (0.30)	7.11 (6.9)	0.47 (0.36)	0.46 (0.06)	0.047 (0.11)	152 (110)	0.28 (0.14)	37.09 (58.3)	1122
2002	0.91 (0.28)	7.94 (7.11)	0.58 (0.43)	0.05 (0.06)	0.049 (0.10)	152 (110)	0.30 (0.14)	37.07 (58.37)	1122
2005	0.92 (0.25)	10.67 (7.44)	0.57 (0.41)	0.06 (0.07)	0.035 (0.11)	152 (110)	0.34 (0.14)	37.07 (59.07)	1122
2009	0.93 (0.24)	14.5 (7.6)	0.74 (0.49)	0.09 (0.11)	0.048 (0.11)	152 (110)	0.36 (0.16)	37.07 (60.09)	1122
N	5610	3765	5174	5166	5175	5610	5175	5570	5610

Table 4. Covariates' descriptive statistics: mean and standard deviation.

Per capita municipality income and per capita tax income variables calculated using total amount of municipality income and taxes income and the total population value show an increasing trend from 1998 to 2009. The two variables are unrelated because not all municipalities can collect taxes, and the total income figures are regulated through national regulation of central government transfers to municipalities.

The natural resources royalties, being a central government transference, exhibit higher values in municipalities with more significant natural resource deposits. This raises the potential of a correlation with the error term of Equations (1) and (2), as long as the distribution is not random. To mitigate endogeneity issues and avoid collinearity with municipality per capita income and investment, we constructed the relative share of natural resources royalties income within the total municipal income.

Notably, the relative share of natural resources royalties income within the total income exhibits minimal variation across the data sample over time, with its standard deviation consistently exceeding the mean. This observation underscores the uneven distribution of natural resources across municipalities.

Furthermore, we calculated other fixed factors such as municipality age (MA) and rural population density (RDP) using the municipality's foundation year and total area. Since these municipality characteristics remain constant, the model enhances the efficiency and consistency of coefficient estimation by identifying factors that persist over time, serving as proxies for institutional strength and coordination costs related to potential violent events involving paramilitary organizations.

The data panel remain balanced, encompassing 1122 municipalities each year, resulting in a total of 5610 observations. All variables expressed in monetary values have been deflated using the price consumption index for each respective year.

4.2. Estimation Results

4.2.1. Probability of Conflict Occurrence and Impact of Income on Conflict Probability

Table 5 displays the estimated conflict probabilities utilizing four distinct models within a data panel framework. These non-linear probability models, accounting for constant unobserved heterogeneity, employ logistic, probit, fixed-effects, and random-effects models. The estimation also integrates a variable identifying the region to which each municipality belongs. Colombia consists of five regions: (1) the Andean region, (2) the Caribbean region, (3) the Pacific region, (4) the Orinoquia region, and (5) the Amazon region. Among the 5610 total observations, the distribution is as follows: in the Andean region, 3145 observations (56%); in the Caribbean region, 985 observations (17.56%); in the Pacific region, 890 observations (15.86%); and 295 observations (5.26%) each in the Orinoquia and Amazon regions.

Table 5. Conflict probability in panel data.

Pr(Y = Conflict)	Logit Panel	Probit Panel	OLS F.E.	OLS R.E.
Municipal income per capita	-0.0928829 ***	-0.0926089 ***	-0.1237967 ***	-0.0941488 ***
Municipal tax income per capita	0.3626739 ***	0.3181913 ***	0.3400631 ***	0.406781 ***
% Natural resources royalties in total municipal income	0.1453259 ***	0.14652 **	0.1723304 ***	0.1432395 ***
Municipality age	-0.0000455	-0.0000368	-0.0000442	-0.0000552
% Municipal investment in total municipal income	-0.10033937 ***	-0.1127963 ***	-0.1375722 ***	-0.1469465 ***
Rural population density	-0.0002004 ***	-0.000221 ***	-0.000291	-0.0003115 ***
Andean region	Reference group	Reference group	Reference group	Reference Group
Caribbean region	0.0721543 ***	0.0694576 ***	0.0539826 ***	0.0633122 ***
Pacific region	0.0287513 **	0.0249112 **	0.0230852 **	0.0295414 ***
Orinoquia region	0.0940144 ***	0.093217 ***	0.107966 ***	0.0962675 ***
Amazonia region	0.038487	0.0346611	0.0257659	0.0240842
N	5166	5166	5166	5166
Number of groups	5	5	5	5
Min obs. per group	928	928	928	
Max obs. per group	1096	1096	1096	
Average obs. per group	1033	1033	1033	
Wald Chi2	201.69	237.98		277.56
Prob > Chi2	0.0000	0.0000	0.0000	0.0000
Log likelihood	-1203.90	-1197.65		
F			31.29	
Prob > F			0.0000	
R2 within			0.0573	0.0549
R2 between			0.4484	0.1426
R2 overall			0.0487	0.0511

^{*} p < 0.05; ** p < 0.01; *** p < 0.001.

The results show that a 1% increase in municipality income per capita leads to a decrease in the probability of conflict across all adjusted models. In the logit, probit, and random-effects models, this increase corresponds to a 9% rise in the probability of a paramilitary conflict while keeping covariates constant at their mean values. The fixed-effects model also exhibits a reduced probability of conflict, but with a more pronounced negative effect, showing a decrease of 12 percentage points in the probability of conflict occurrence. Essentially, greater economic development improves the prospects of reducing conflict recidivism. In simpler terms, a decrease in income per capita heightens the likelihood of conflict occurrence, highlighting the economic underpinnings of conflict. The estimated effect of municipality income per capita is statistically significant at a 1% confidence level in all four adjusted models.

In contrast, municipal tax income per capita exhibits a positive correlation with the probability of paramilitary violence in all the adjusted models. Specifically, a 1% increase in tax income per capita is associated with an escalation in the likelihood of conflict recurrence ranging from 31% to 40%. This effect is statistically significant at a 1% confidence level across all four adjusted models. In theory, a higher level of tax income is expected to be linked to a greater probability of conflict, as it anticipates increased gains from conflict

recurrence. Consequently, municipalities with the capacity to collect taxes are more likely to experience paramilitary violence due to the heightened expected benefits of conflict.

Empirically, as previously noted in the historical review of paramilitary organizations in Colombia, there was a clear incentive to control fiscal resources as a means of financing paramilitary activities through corruption and forced displacement. This was especially evident in municipalities with higher levels of tax income and a weak presence of central government control agencies. It is important to note that only a limited number of municipalities in the sample can collect taxes, which results in increased variability in the sample data.

Similarly, the relative significance of natural resources income within the total municipality income is positively associated with the probability of conflict in all four adjusted models. An increase of 1% in natural resources income corresponds to an increase in conflict probability ranging from 14% to 17%. This effect is statistically significant at a 1% confidence level in the logit, fixed-effects, and random-effects models.

As posited in the research hypothesis, natural resources income serves as a proxy for valuable natural assets within the municipality, representing potential gains from occurrence of violent conflict. Consequently, the higher the economic value of natural resources in proportion to the total municipality income, the greater the likelihood of experiencing paramilitary violence, while holding all other covariates constant at their mean values.

Furthermore, the relative significance of municipal investment, measured in relation to the total municipality income, serves to diminish the probability of paramilitary violence. A 1% increase in municipal investment as a proportion of total income results in a decrease in conflict probability ranging from 10% to 14%. This effect is statistically significant at a confidence level of 1% across all adjusted models. This inverse relationship between municipal investment and conflict probability is associated with the indirect benefits that public investment brings to municipalities. For instance, higher levels of public investment in local infrastructure development, aimed at enhancing economic activities, often entail improved security networks for safeguarding newly established assets at the local level. Consequently, municipalities with greater participation in investment are better equipped to protect their territories from paramilitary violence.

4.2.2. Impact of Fixed Effects

The fixed effects related to municipality age and rural population density exert a mitigating influence on the likelihood of conflict occurrence in all the adjusted models. Although these effects are negative in direction, their quantitative impact is nearly negligible. Both variables serve as control measures for the economic factors assessed in the income, tax, and royalties income variables. The negative effect is statistically significant only for rural population density in the logit, probit, and random-effects models. The fixed-effects models exhibit lower explanatory power for both covariates, given that they lack within-municipality variation in the database. Irrespective of the statistical value, the coefficients reflect the institutional strength and coordination costs associated with the occurrence of paramilitary violence. Older municipalities with higher rural population density demonstrate superior institutional capacities for defense and incur greater coordination costs in protecting themselves against paramilitary violence when compared with younger municipalities with lower rural population density.

4.2.3. Conflict Occurrence across Regions

Using the Andean region as a reference group due to its higher economic development, the municipalities that belong to the Caribbean region exhibit an increase of between 5% and 7% in paramilitary violence compared with the reference group of municipalities in the Andean region. The estimated effect is statistically significant at a 1% confidence level in all adjusted models. Municipalities located in the Pacific region have an increase of 2% in conflict occurrence compared with the reference group. The estimated effect is statistically

significant at a 5% percent confidence level in the logit, probit, and random effect models. In contrast, it has a statistical significance at a 1% confidence level in the fixed-effects model. Also, municipalities in the Orinoquia region have an increased conflict probability of 2% in all adjusted models. The estimated effect is statistically significant at a 1% confidence level in all the adjusted models. Finally, municipalities in the Amazon region show an increase in conflict probability between 2% and 3% higher than those in the reference group. In this regard, less economic development has a positive impact on conflict occurrence, given that the Andean region reveals higher per capita income (0.56) in the sample compared with the Caribbean region (0.48) and the Pacific region 0.43). Per capita income in the Amazon region (0.56) is equal to the per capita income average in the Andean region, while that in the Orinoquia (0.98) region is higher due to a lower population density compared with the population density in the Andean region.

Table 6 describes the estimated effects of the covariates identified in Equations (1) and (2) on the conflict length using a tobit model in a data panel environment. An increase of 1% in the income per capita brings about, on average, a reduction of 4 years in paramilitary violence, holding all the other covariates constant at their mean value. The estimated effect is statistically at 1% of the level of confidence. Tax income per capita and the relevance of royalties income to total income increase the conflict duration by an average of 14 and 8 years. Thus, a municipality that experiences an increase of 1% in taxes and royalties revenues has a more prolonged presence of paramilitary violence. Positive estimated effects of taxes and royalties revenues are both statistically significant at a 1% percent level of confidence. Investment as a proportion of municipal income also reduces the length of the paramilitary presence in the municipalities that show a higher proportion of investment on average. An increase of 1% in investment as a proportion of the total municipality income reduces the conflict length to 5 years on average. Control variables related to fixed effects of municipality age and rural population density have a negative estimated effect on the number of years with paramilitary presence. Municipalities located in the Caribbean and the Pacific regions have, on average, fewer years with the presence of paramilitary violence than the reference group. In contrast, municipalities in the Amazon and Orinoquia regions have more years of paramilitary presence. All the estimated effects are statistically significant at a 1% confidence level.

Table 6. Conflict length tobit panel data.

Y = Conflict Length in Years	Tobit Panel
Income per capita	-4.359 ***
Tax income per capita	14.137 ***
% Royalties in total income	8.186 ***
Municipality age	-0.001
% Investment in total income	-5.342 ***
Rural population density	-0.008 ***
Andean region	Reference group
Caribbean region	-2.090 ***
Pacific region	-1.568 ***
Orinoquia region	1.715 **
Amazonia region	1.884 **
N	3.530
Number of groups	5

Table 6. Cont.

Tobit Panel
634
750
706
181.71
0.0000
-10,858
590
1940
0

^{*} *p* < 0.05; ** *p* < 0.01; *** *p* < 0.001.

5. Conclusions

In conclusion, this paper provides evidence that descriptively contrasts with theoretical assumptions about post-conflict sustainability of peace agreements. From the case study evidence examined in an exploratory manner, it can be stated that economic factors rank prominently among the causes of paramilitary violence in Colombia. Moreover, considering the significance of institutional and security aspects, long-term impacts on economic development through social investment in health and education are crucial, as gaps in economic opportunities become a primary driver of conflict recidivism. In particular, there is a positive effect of higher per capita income in reducing conflict probabilities due to the increased opportunity cost of disrupting economic activities during a conflict. Additionally, a greater reliance on natural resource income, coupled with lower levels of public investment, heightens both the probability and duration of conflicts at the municipal level.

This paper shows a positive correlation between economic income and paramilitary conflict. In agreement with the previous international and national specialized conflict literature, the findings add evidence in favor of the economic causes of civil conflicts. In particular, in the international academic context, Collier (2009) and Collier et al. (2008) identify specific factors associated with the onset of conflicts, such as low per capita income, the state's inability to assert control over its territory, sluggish economic growth, and a high dependency on the export of economic resources. Moreover, at the national level, Giraldo et al. (2015) and Prieto-Bustos and Manrique (2018) concluded that in Colombia, critical investments have to be made in regional economic growth, human capital, social capital, institutional quality, and social development to reduce the probability of conflict recidivism. Although each case requires a contextual analysis, having evidence that supports a theoretical approach to conflict recidivism is a contribution relevant to complementing comparative conflict analysis with a universal theoretical hypothesis for understanding the use of violence for resolving social conflicts.

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References

Akresh, Richard, Philip Verwimp, and Tom Bundervoet. 2011. Civil war, crop failure, and child stunting in Rwanda. *Economic Development and Cultural Change* 59: 777–810. [CrossRef]

Ansoms, An. 2005. Resurrection after civil war and genocide: Growth, poverty and inequality in post-conflict Rwanda. *The European Journal of Development Research* 17: 495–508. [CrossRef]

Braithwaite, John, and Bina D'Costa. 2015. Cascades Across An "Extremely Violent Society": Sri Lanka. *International Journal of Conflict and Violence (IJCV)* 10: 10–24.

Cameron, Adrian Colin, and Pravin K. Trivedi. 2009. Microeconometrics Using Stata. College Station: Stata Corp LP, 677p.

Carbo, Eduardo. 2006. La nacion soñada: Violencia, liberalismo y democracia en Colombia. Bogota: Norma.

Collier, Paul. 2009. Post-conflict recovery: How should strategies be distinctive? *Journal of African Economies* 18: ejp006. [CrossRef] Collier, Paul, Anke Hoeffler, and Dominic Rohner. 2008. Beyond greed and grievance: Feasibility and civil war. *Oxford Economic Papers*

Collier, Paul, Anke Hoeffler, and Dominic Rohner. 2008. Beyond greed and grievance: Feasibility and civil war. Oxford Economic Papers 61: 1–27. [CrossRef]

Cubides, Fernando, Jaime Arocha, and Myriam Jimeno. 1998. Las violencias inclusion creciente, 1st ed. Bogota: Utopica Ediciones Facultad de Ciencias Humanas UN.

Ding, Wei, and Christine Wallich. 1996. Bosnia and Herzegovina: Toward Economic Recovery. Washington, DC: World Bank Publications. Domhoff, G. William. 1978. Who Really Rules?: New Haven and Community Power Reexamined. Piscataway: Transaction Publishers, vol. 65.

Duncan, Gustavo. 2005. Del campo a la ciudad en Colombia. La infiltracion urbana de los señores de la guerra. Bogota: Universidad de los Andes.

Englebert, Pierre, and Denis M. Tull. 2008. Postconflict reconstruction in Africa: Flawed ideas about failed states. *International Security* 32: 106–39. [CrossRef]

Eriksson, Jhonn R., Alcira Kreimer, and Margaret Arnold. 2000. El Salvador: Post-Conflict Reconstruction. Washington, DC: World Bank Publications.

Fals-Borda, Orlando. 1991. Knowledge and Social Movements. Santa Cruz: Merrill Publications, University of California.

Fraser, Nancy. 2017. The end of progressive neoliberalism. *Dissent*. 2. Available online: https://www.dissentmagazine.org/online_articles/progressive-neoliberalism-reactionary-populism-nancy-fraser/ (accessed on 15 October 2021).

Garay, Luis Jorge. 2009. Tragedia humanitaria del desplazamiento forzado en Colombia. *Estudios Politicos* 35: 153–77. [CrossRef] Garcia de la Torre, Clara Ines. 2004. Resistencias. Analisis comparado de la accion colectiva frente a la guerra en Uraba y Oriente Antioqueño. *Nomadas* 20: 102–10.

Garstka, Grant Jude. 2010. Post-conflict urban planning: The regularization process of an informal neighborhood in Kosova/o. *Habitat International* 34: 86–95. [CrossRef]

Giraldo, Fabio, Edgar Reveiz, Amylkar Acosta, Jose Guillermo Garcia, Jorge Ivan Gonzalez, Dario Restrepo, Cecilia Lopez, Gustavo Malagon, Ruben Dario Utria, Rafael Colmenares, and et al. 2015. El posconflicto: Una Mirada Desde la Academia, 1st ed. Bogota: Academia Colombiana de Ciencias EconoMicas, p. 243. Available online: https://www.acceconomicas.org.co/product-page/el-posconflicto-una-mirada-desde-la-academia (accessed on 15 October 2021).

González, Fernán E. 2009. Espacio, conflicto y poder: Las dimensiones territoriales de la violencia y la construccion del Estado en Colombia. *Sociedad y Economia* 17: 185–214.

González, Fernán E., Ingrid Bolivar, and Teofilo Vasquez. 2002. Violencia politica en Colombia. De la Nacion fragmentada a la construccion del Estado. Bogotá: CINEP.

González, Fernán E., Omar Jaime Gutiérrez Lemus, Camilo Nieto Matiz, Andrés Felipe Aponte González, and José Darío Rodríguez Cuadros. 2012. Conflicto y territorio en el Oriente colombiano. Bogotá: CINEP.

Gutierrez-Sanin, Francisco. 2022. Illicit economies and political opportunity. the case of the Colombian paramilitaries (1982–2007). *Journal of Political Power* 15: 80–100. [CrossRef]

Haynes, Dina Francesca. 2010. Lessons from Bosnia's Arizona Market: Harm to women in a neoliberalized postconflict reconstruction process. *University of Pennsylvania Law Review* 158: 1779–829.

Huerou, P. H. 2010. Implementation Completion and Results Report (ida-35380 ida-35381) on Credits in the Amount of sdr 11.8 million (us\$ 15.0 million Equivalent) and sdr 3.4 million (us\$ 5.0 million Equivalent) to Bosnia and Herzegovina for a Community Development Project and Additional Financing. Washington, DC: World Bank Publications.

ILO. 2010. Local Economic Recovery in Post-Conflict Situations. Crisis Response and Reconstruction Program (ILO/CRISIS). Geneva: International Labour Organization.

Iyer, Lakshmi, and Indhira Santos. 2012. Creating Jobs in South Asia's Conflict Zones. World Bank Policy Research Working Paper, 6104. Washington, DC: World Bank.

Jaramillo, Jefferson. 2011. Expertos y comisiones de estudio sobre la violencia en Colombia. Estudios Políticos 39: 231-58.

Klapper, Leora F., and Georgios A. Panos. 2009. Entrepreneurship in Post-Conflict Transition: The Role of Informality and Access to Finance. Washington, DC: World Bank.

Kreimer, Alcira. 2000a. Bosnia and Herzegovina: Post-Conflict Reconstruction. Washington, DC: World Bank Publications.

Kreimer, Alcira. 2000b. Uganda: Post-Conflict Reconstruction. Washington, DC: World Bank Publications.

Lawrence, Peter. 2007. Collier on War and Peace in Africa: Statistics in Command. Review of African Political Economy 34: 168–76.

Lemmon, Gayle Tzemach. 2012. Entrepreneurship in Postconflict Zones. New York: Council on Foreign Relations.

Lopez Muñoz, Laura Vanessa. 2019. Poverty and Rural Underdevelopment in Colombia. An Analysis from the Urban Bias Theory. Estudios Politicos 54: 59–81.

Lynch, Kenneth, Roy Maconachie, Tony Binns, Paul Tengbe, and Kabba Bangura. 2013. Meeting the urban challenge? Urban agriculture and food security in post-conflict Freetown, Sierra Leone. *Applied Geography* 36: 31–39. [CrossRef]

Massaquoi, William N. 2007. Women and Post-Conflict Development: A Case Study on Liberia. Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, MA, USA.

McMahon, Patrice C. 2004. Rebuilding Bosnia: A model to emulate or to avoid? Political Science Quarterly 119: 569–93. [CrossRef]

Medina Gallego, Carlos. 1990. Autodefensas, paramilitares y narcotrafico en Colombia: Origen, desarrollo y consolidacion, el caso Puerto Boyaca (9589515517). Documentos Periodisticos. Available online: https://biblioteca.ugc.edu.co/cgi-bin/koha/opac-detail.pl?biblionumber=24385 (accessed on 15 October 2021).

Medina Gallego, Carlos, and Astrid Mireya Tellez Ardila. 1994. *La violencia parainstitucional, paramilitar y parapolicial en Colombia.* Bogota: Rodriguez Quito, 254p.

Menjivar, Cecilia, and Victor Agadjanian. 2007. Men's migration and women's lives: Views from rural Armenia and Guatemala. Social Science Quarterly 88: 1243–62. [CrossRef]

Migdal, Joel S., Liliana Andrade Llanas, and Victoria Schussheim. 2011. Estados debiles, Estados fuertes. Mexico: Fondo de Cultura Economica, p. 116.

Mills, C. Wright. 2018. The power elite. In Inequality in the 21st Century. London: Routledge, pp. 80–88.

Nasi, Carlo, and Angelika Rettberg. 2005. Studies on Armed Conflict and Peace: A constantly evolving field. *Colombia Internacional* 62: 64–85. [CrossRef]

Ocampo, Jose Antonio. 2015. Los retos del desarrollo latinoamericano a la luz de la historia. Cuadernos de Economia 34: 479-506.

Ohanyan, Anna. 2002. Post–Conflict Global Governance: The Case of Microfinance Enterprise Networks in Bosnia and Herzegovina. International Studies Perspectives 3: 396–416. [CrossRef]

Onoda, Setsuko. 2004. The Peace System in Critical Situations in Post-War and Current Japan: Conflict, Reparations, and the Constitution. *Asian Perspective* 28: 233–61. [CrossRef]

Oquist, Paul H. 1978. Violencia, conflicto y politica en Colombia. Bogotá: Instituto de Estudios colombianos, vol. 1.

Patel, P. 2005. Implementation Completion Report (grtd-h0090 tf-51247 tf-51429) on a Grant in the Amount of sdr33.7 million (us\$42 million Equivalent) to the Islamic Republic of Afghanistan for the Emergency Community Empowerment and Public Works Project. Washington, DC: World Bank Publications.

Pearce, Jenny. 2007. Oil and Armed Conflict in Casanare, Colombia: Complex Contexts and Contingent Moments. In *Oil Wars*. Edited by En M. Kaldor, T. L. Karl and Y. Said. London: Pluto Press, pp. 225–73.

Pecaut, Daniel. 1997. Presente, pasado y futuro de la violencia. Analisis Politico 30: 3-36.

Prieto-Bustos, William Orlando, and Johanna Elizabeth Manrique. 2018. ¿Es factible el resurgimiento del conflicto armado en Colombia en la fase de postconflicto? Semestre Economico 21: 57–94. [CrossRef]

Prieto-Bustos, William Orlando, Johanna Manrique-Hernandez, Maria Alejandra Duenas-Portes, Marlen Cecilia Torres-Castiblanco, and Maria Camila Jaramillo-Cruz. 2021. Conflicto Armado y Desplazamiento Forzado: Un caso de Migracion Forzada en Colombia. Bogota: Universidad Catolica de Colombia. [CrossRef]

Randall, Sara. 2005. The Demographic Consequences of Conflict, Exile and Repatriation: A Case Study of Malian Tuareg. European Journal of Population 21: 291–320. [CrossRef]

Rangel Suarez, Alfredo. 1998. Nuestra guerra y otras guerras. Revista de Estudios Sociales 2: 117-32. [CrossRef]

Reyes Posada, Alejandro, and Liliana Duica Amaya. 2009. Guerreros y campesinos. El despojo de la tierra en Colombia. Bogota: Norma.

Richani, Nazih. 2010. State capacity in postconflict settings: Explaining criminal violence in El Salvador and Guatemala. *Civil Wars* 12: 431–55. [CrossRef]

Ritter Gutierrez, Sebastian. 2022. Economic Effect of Splitting a Region: A Case from the South of Chile. Master's thesis, University of Barcelona, Barcelona, Spain.

Romero, Mauricio. 2003. Paramilitares y autodefensas 1982-2002. Bogota: IEPRI-Planeta Colombia.

Romero, Mauricio, and Diana Torres. 2011. *Drummond, Chiquita y paramilitares: Adaptación y negociación de ventajas en medio del conflicto. La Econ los paramilitares Redes corrupció n, negocios y política.* Bogotá: Corporación Nuevo Arco Iris, Bogotá: Random House Mondadori, SA, pp. 149–89.

Rugumamu, Severine, and Osman Gbla. 2003. Studies in Reconstruction and Capacity Building in Post-Conflict Countries in Africa, Some Lessons of Experience from Rwanda. Harare: The African Capacity Building Foundation.

Rugumamu, Severine, and Osman Gbla. 2004. Studies in Reconstruction and Capacity Building in Post-Conflict Countries in Africa. Some Lessons of Experience from Sierra Leone. Harare: ACBF Executive Board.

Sanchez, Gonzalo, and Ricardo Peñaranda. 1986. Pasado y presente de la violencia en Colombia. Bogotá: CEREC, 492p.

Sanin, Francisco G., Maria Emma Wills, and Gonzalo Sanchez, eds. 2006. Nuestra guerra sin nombre: Transformaciones del conflicto en Colombia. Bogota: Norma.

Sassen, Saskia. 1991. The Global City: New York, London, Tokyo. Princeton: Princeton University Press. [CrossRef]

Smet, Stijin. 2009. A window of opportunity-improving gender relations in post-conflict societies: The Sierra Leonean experience. *Journal of Gender Studies* 18: 147–63. [CrossRef]

Tabak, Shana. 2011. False dichotomies of transitional justice: Gender, conflict and combatants in Colombia. New York University Journal of International Law and Politics 44: 103. [CrossRef]

Thomson, Frances. 2011. The agrarian question and violence in Colombia: Conflict and development. *Journal of Agrarian Change* 11: 321–56. [CrossRef]

Thorsell, Stefan. 2013. towards People-Centred Economic reintegration? an analysis of the Economic reintegration strategy of demobilised Combatants in Colombia. *Colombia Internacional* 77: 177–215. [CrossRef]

Tobias, Jutta M., and Karol C. Boudreaux. 2011. Entrepreneurship and conflict reduction in the post-genocide Rwandan coffee industry. Journal of Small Business and Entrepreneurship 24: 217–42. [CrossRef]

UNDP. 2010. Leadership and Change in Post-Conflict States: A Case Study of Liberia. New York: United Nations Development Programme. Uricoechea, Fernando. 1986. Estado y burocracia en Colombia. Bogota: Universidad Nacional de Colombia.

Vasquez, Teofilo. 2014. El papel del conflicto armado en la construccion y diferenciacion territorial de la region de "El Caguan", Amazonia occidental Colombiana. El Agora USB 14: 147–75. [CrossRef]

Winters, Jeffrey A. 2011. Oligarchy. Cambridge: Cambridge University Press.

Wolin, Sheldon S. 2017. Democracy Incorporated: Managed Democracy and the Specter of Inverted Totalitarianism-New Edition. Princeton: Princeton University Press.

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Article

Exploring Responses to Community Violence Trauma Using a Neighborhood Network of Programs

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Abstract: Responses to community violence should include interventions not just for those who are offenders but also for those who are victims of the violence and community members who are affected by the violence. In this study, one city's public health response to victims of community violence using a neighborhood trauma team network (NTTN) is explored. Neighborhood trauma teams provide victims and their families with psychological first aid, logistical guidance, and referral to long-term therapeutic services. These teams also provide referral and community meeting support for community residents exposed to violence. To better understand program operations and identify the strengths and challenges of this response model, semi-structured interviews with lead program staff were used as well as a review of program documents. The results show that the NTTN has a clear purpose in meeting immediate client needs, but ambiguity exists in the network's role in community healing and in community violence prevention. The NTTN response is mapped onto a social–ecological framework of violence prevention to contextualize this community-based public health response in the broader public health–criminal justice setting in which it operates. Implications for NTTN function and coordination are discussed.

Keywords: community violence responses; trauma; public health; socio-ecological framework; cross-sector partnerships

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1. Introduction

Community violence, defined as violence outside the home in a public space among individuals who may or may not know each other, is widespread and disproportionately affects urban neighborhoods (Armstead et al. 2021). In the United States, community violence in the form of homicide is the leading cause of death among young people (Centers for Disease Control and Prevention 2020). One U.S. state estimates that nearly two-thirds of adults in California have been exposed to community violence as direct victims or witnessed the immediate or aftermath of such incidents (Wintemute et al. 2022). It comes as no surprise that violence itself has been identified as a public health problem (Dahlberg and Mercy 2009; World Health Organization 2022). Responses to the crisis have increased in recent years with governments providing funding to craft interventions (see, for example, Council on Criminal Justice 2021; Murray et al. 2021). At this time, the bulk of the knowledge about responses to community violence is primarily focused on the offender and the criminal justice system, often with various criminal justice-related interventions identified to address the problem (e.g., Abt 2019; Roman et al. 2020). Notwithstanding the need to address offenders, comprehensive approaches to community violence reduction must also focus on victims' and community members' traumas resulting from that violence.

Research shows that unresolved personal trauma can result in negative outcomes such as mental health problems, substance use problems, school/employment failure, and crime and violence (Sharkey 2018). Even when not a direct recipient of the violence, exposure to community violence can increase fear of crime at the individual level, as well as decrease social cohesion and undermine legitimate economic activities at the community

level (Sharkey 2018; Stacy et al. 2017). From a public health perspective, individual and community trauma must be addressed to reduce health inequities and to promote well-being and social justice. Relatively recent community-based initiatives created to address the needs of direct victims and residents exposed to community violence include hospital-based violence intervention programs and community trauma response teams. Little is known, however, about the operations of programs assisting victims and communities in this broader context of responses to violence (Bonne et al. 2022; Jennings-Bey et al. 2015). Knowledge of how programs operate, successes and challenges, as well as the inter-coordination of work are needed to understand what works and what does not with regard to effectively addressing the needs of victims and community members.

To advance knowledge of community violence responses to victims and communities, we investigate a neighborhood trauma team network that is activated after firearm shootings. The operations, successes, and challenges of the network are examined. We explore how this public health response fits into the violence prevention landscape. The results of this exploration can help inform the development of similar programs, approaches to victims of community violence, and violence prevention generally.

1.1. Existing Community Violence Responses

A search was conducted in June, July, and September of 2023 for published studies on community violence response programs. The Web of Science, EBSCO, JSTOR, Google Scholar, and Google search engines were used. The investigation revealed few community violence intervention programs that simultaneously address victim and community needs. Existing published programs seem to be located in the United States where marginalized urban populations experience a disproportionate share of gun violence compared with other locations and other industrialized nations (Small Arms Survey 2022). Table 1 lists these programs and key features.

Table 1. Community Violence Programs for Victims and/or Community Members.

Program Name	Location	Components/Features
Columbus CARE Coalition	Columbus, OH	 → Trauma-informed community support. → Direct engagement with victims and community members. → Canvassing and community outreach. → Volunteer working groups.
Network of Neighbors' Trauma Response Network	Philadelphia, PA	 → Trauma-informed care. → Volunteer responders trained in psychological first aid. → Coordination of services/resources. → Post-traumatic stress management interventions.
Charlestown Trauma Response Team	Charlestown, MA	 → Referral to treatment resources. → Trauma-informed care. → Psychological first aid. → Support for the community using social activities.
Hospital-Based Violence Intervention Programs	Various locations in the United States	 → Evaluation of violence-related injury. → Community resource connections. → Referrals to services.
Trauma Recovery Centers	Various locations in the United States	 → Clinical case management. → Psychological distress support. → Referrals for therapy and medical treatment.

One program that most closely aligns with the program examined in this study is the Columbus CARE Coalition in Columbus, Ohio. This program aims to create a trauma-informed community by supporting and educating residents who have experienced

community violence. The CARE Coalition includes the Community Trauma Response Team (CTRT), which provides individuals with trauma-informed care and resources following a violent or traumatic event in their neighborhood (City of Columbus, Ohio 2023). This coalition directly engages with victims based on reports of community trauma present in their neighborhoods. When neighborhood violence or trauma occurs, the CARE Coalition reaches out to the victims and immediate family members to offer their support services and engages the residents by canvassing the area, asking community members if they need help processing their trauma, connecting them to resources, and facilitating community healing conversations. Community members can volunteer to be a part of working groups that focus on community building, trauma-response training, and community outreach. Although there is little published about the operations or outcomes of the CARE program, a 2018 community survey affirmed the need for this type of program that works to reduce community traumas and build resilience (City of Columbus, Ohio 2023).

Other published accounts of community violence response programs address either solely the victims' needs or the community's needs. Community violence interventions that serve neighborhood residents respond to trauma from exposure to violence rather than service direct victims. One example is the Network of Neighbors' Trauma Response Network in Philadelphia, which uses a trauma-informed healing approach as a way to restore a sense of community safety and instill hope in community residents after a violent and/or traumatic event (City of Philadelphia 2023). The network is run by two staff members and a cohort of trauma responders who are residents of a variety of neighborhoods in the city. These volunteer trauma responders are given extensive training in trauma-informed care and provide coordination of resources and services for community residents. The network offers post-traumatic stress management interventions that include incident briefing, topic-specific stabilization group sessions, and psychological first aid (PFA) to secure the immediate safety of an individual when support is needed following a crisis (City of Philadelphia 2023).

Similarly, the Charlestown, Massachusetts, Trauma Response Team (TRT) was created to support the community through traumatic incidents occurring in their neighborhood including community violence and substance abuse-related situations. When the team responds to community violence incidents, they offer psychological first aid and provide treatment resource referrals to residents (Charlestown Coalition 2022). TRT responders receive training in administering PFA and using trauma-informed care in their interactions. Additionally, the TRT supports the community with the creation of social activities meant to foster community connections that can indirectly lead to a reduction in community violence.

Alternatively, hospital-based violence intervention programs (HVIP) seek to address the needs of victims of community violence with services, triage, and community resource connection starting when victims are at the hospital. A network of HVIPs exists throughout the United States through the Health Alliance for Violence Intervention that shares innovations and best practices in a public health approach (see https: //www.thehavi.org/community-violence, accessed on 12 July 2023). While more evaluations are needed (Affinati et al. 2016), one outcome evaluation of an HVIP in Philadelphia, PA, found that the program was successful in reducing violence-related injury over an eight-year period (Bell et al. 2018). Meanwhile, trauma recovery centers (TRCs) serve victims of violence, often from marginalized areas where traditional forms of therapeutic care are not well known or difficult to access. There are over 50 TRCs located across the United States (National Alliance of Trauma Recovery Centers 2022). TRCs use evidence-informed practices in their clinical case management to address the psychological distress of trauma victims and provide strategies for recovery. Case management is catered to the victims' needs including referrals to different types of therapy, medical treatments, and forms of legal assistance. Studies have found that TRCs provide underserved victims with better knowledge of the services available to them and have led to positive survivor outcomes (Houston-Kolnik 2017). For example, a study in Long Beach, California, found that 95% of participants felt better emotionally and 52% described a decrease in depressive symptoms

after 16 TRC sessions, which can be indicators of trauma reduction (National Alliance of Trauma Recovery Centers 2020). Considering these programs as a whole, there are several key features that are a part of community violence responses addressing the needs of victims and community residents: psychological first aid, trauma-informed care, and collaborative structures. These features are discussed more fully in the next sections.

1.2. Key Response Features

While many community violence response programs have not been formally evaluated, many seem to use psychological first aid (PFA) to address immediate trauma. PFA is a disaster relief technique that was carried over to community violence responses to assist individuals experiencing stressful situations. The main goals of PFA are to ensure safety, promote calmness, and build resiliency by assessing immediate needs, listening to victims, providing emotional support, and linking victims to services, such as therapy, for further help following an incident (First Aid Platform 2021). A benefit of PFA is that it can be delivered by trained volunteers and does not rely solely on clinicians who may not be able to serve all those in need in the immediate aftermath of a traumatic event. Some community violence intervention programs offer PFA training to community volunteers who can then administer the intervention. Research shows that quality PFA empowers victims to access resources and promotes resilience through the emotional support provided by those who administer it (Wang et al. 2021).

Another key feature of community violence responses is the use of trauma-informed care as a primary technique to address the needs of victims and neighborhood residents. Trauma-informed care recognizes that past traumatic events may influence behaviors and how present situations are experienced. Individuals are trained on how to provide services in ways that minimize negative experiences. This technique may be administered using a healing-centered approach that focuses on individual strengths and personal reflection. The goal is to facilitate healing by focusing on a holistic sense of well-being rather than solely focusing on isolated symptoms or a traumatic incident (Ginwright 2018). Victim referrals to counseling and support groups and coordinating community vigils and healing circles are key features of these programs.

Finally, the community violence responses reviewed demonstrate that there are collaborative structures consisting of a variety of program staff, volunteers, and sometimes government stakeholders. Program staff tend to consist of clinicians and/or local health agencies that support the existence of a program and volunteers. Volunteers range from a few key individuals in the neighborhood to a large portion of the collaborative arrangement who act as the foundation of the organization, like the Network of Neighbors or the Charlestown Coalition. Other community stakeholders including social services, healthcare professionals, and community organizations such as churches, youth centers, and cultural centers may be resources for victims and community residents. These types of cross-sector partnerships help to maximize resources, share expertise, and create a comprehensive support system for the community members they serve.

1.3. Other Trauma Response Initiatives

Given the lack of literature on community violence responses for victims and communities, violence response initiatives focusing on sexual and domestic violence trauma can be informative. While such programs primarily prioritize supporting individual victims, examining their designs provides valuable insights into trauma response teams within the broader scope of the violence response literature. These programs also use PFA, trauma-informed care, and collaborative partnership structures.

Sexual assault response teams (SARTs) were established in the United States in the 1970s to increase the awareness of and access to victim services, while also attempting to minimize the potential harm using formal help. SARTs do this by fostering collaboration among medical, legal, and mental health systems to support victims and provide evidence for the legal process in the least intrusive way. Core members of SARTs include rape victim

advocates, program staff, police, and prosecutors. While a review of SART programs found that they increase victims' service referrals and can sometimes increase victim participation and satisfaction with the legal process, challenges include role confusion, role conflict, and the need for collaborative training. While these challenges are difficult, one recommendation is to increase training, opportunities for cross-collaboration, and information sharing (Greeson and Campbell 2012). Similar difficulties in establishing clear roles and responsibilities across agencies were observed in a study conducted on the Child Trauma Response Team (CTRT) in New York. The CTRT works with the police, criminal justice and law offices, and a crime victim's organization to provide coordinated, trauma-informed responses to children exposed to intimate partner violence. Stakeholder interviews revealed the need for better cross-communication to decrease confusion amongst partnership collaborations, increase relationship building across teams, and imbue a strong understanding of partners' roles in the coordinated response model (Stylianou and Ebright 2021).

Similarly, with regard to domestic violence, community-coordinated responses (CCRs) aim to facilitate coordination and communication among various stakeholders to improve victim safety, satisfaction, support, and access to resources. Partnering entities include social services, healthcare providers, women's-based community organizations, and criminal justice agencies. A systematic review CCRs found that most studies demonstrated increased victim access to services, higher overall satisfaction with the services provided, and decreased post-traumatic stress disorder (PTSD) and depressive symptoms among victims (Johnson and Stylianou 2020). Additionally, increased conviction rates and longer probation sentences for offenders were found. The review identified a typical coordinated response structure where law enforcement agencies collaborated with at least one other stakeholder organization to provide support to victims; however, the specific response models used varied across the studies. To establish a comprehensive, best-practice CCR model, researchers recommended that teams prioritize activities such as documenting practices, developing logic models, and implementing fidelity measures to ensure consistent and effective service delivery.

Supporting the victim and raising awareness of services are important pieces of these responses to violence, though they also come with challenges, particularly with role confusion and conflict. Meanwhile, research on community violence responses that explore the operations, goals, and overarching connection to violence prevention work is needed to understand their particulars and how they may be similar to work in the sexual assault and domestic violence arenas. Further, these violence response models also should be grounded in a conceptual framework that links to the health and well-being of individuals, families, and communities.

1.4. Conceptual Framework

The socio-ecological framework can root the work of violence prevention into broader networks of individuals, families, and communities to connect with health goals. This framework is the result of Bronfenbrenner's (1979) research on human ecology. He posited that complex relationships exist between an individual and their environment, thus shaping the individual's actions and impacting the actions of others in their existing environments. Influenced by that human ecological work, a public health approach to violence prevention identifies four key spheres of influence: individual, relational, community, and societal (Centers for Disease Control and Prevention 2022b; World Health Organization 2022). At the individual level, working with those who have committed offenses, especially those who are at the center of violence, is critical. Traditional community violence prevention programs and street outreach workers focus solely on those individuals, but as we know, the aftershocks of violence are pervasive, affecting victims, their families, and communities (Centers for Disease Control and Prevention 2022a). Using a socio-ecological model emphasizes the importance of addressing the complexity of influences in different domains of life. This includes tackling trauma and encouraging healing for victims and families at both the individual and relational levels and addressing the needs of neighborhood

residents at the community level. Finally, understanding the underlying causes of violence and implementing policy changes and reforms at the societal level is critical.

Examining current community violence responses with such a socio-ecological framework can help understand and contextualize interventions. Utilizing the perspectives of stakeholders, community members, and practitioners is a critical initial step in a systematic exploration of such responses. We now turn to an empirical exploration of one city's response to community violence victimization and trauma utilizing feedback from initiative providers to examine program goals and operations.

2. Materials and Methods

2.1. Description of Study Site and Initiative

The current study was part of a larger research and evaluation project on the Neighborhood Trauma Team Network (NTTN) in Boston, Massachusetts. The City of Boston has six neighborhood trauma teams in the areas of the city where the most community violence occurs. Each site team consists of mental health clinicians, family partners, and community partners coordinated and funded by the citywide health commission. Site partners meet as needed, and the health commission organizes a monthly meeting for all network partners. The goal of the NTTN is "to support the healing journey of families and communities impacted by community violence"). The NTTN partners go about their work in multiple ways that are authentic to the neighborhood in which they operate and that leverage existing services and collaborations to benefit those impacted by violence.

At the individual level, victims and those at the scene receive psychological first aid, follow-up therapy, and referrals. Family members of victims also are able to access these services provided by community-based organizations. The community is canvassed with literature for those who are experiencing trauma as a result of the violence incident and want to seek help. Additionally, the neighborhood team may be part of the coordinating health commission's work in organizing community meetings with community and city leaders to discuss the incident and broader issues that may have precipitated the incident that affects community health in order to problem-solve community violence. As a relatively new response to community violence, research and evaluation is needed on the NTTN.

2.2. Data Collection and Analytical Strategy

Researchers examined NTTN documents, including an operations handbook, a logic model, and a de-identified database review of incidents and responses. Because the NTTN documents showed that databases and program outcomes need better alignment in order to track the outputs and outcomes identified in the logic model, this study's results focus on provider feedback.

Researchers sought input from NTTN providers using interviews. The provider interviews were requested from neighborhood lead clinicians and family and community partners at each NTTN site. The interview schedule asked participants open- and close-ended questions about how well the NTTN logic model matched with their work, how well they felt supported in their work by team members and the health commission, and how well communication and coordination occurred among team members and with the health commission. The latter series of questions was adapted from the relational coordination survey, which has been shown to be a valid and reliable measure of communication and coordination (Gittell 2016). The other survey questions were developed from the logic model and in collaboration with the health commission NTTN staff. Researchers then used the review and interview results to explore the connections to a public health-informed community violence response framework.

Provider interviews were conducted by the lead researcher primarily via Zoom with one interview conducted over the phone. Data were gathered from March 2022 to June 2022. Of the 18 lead providers at NTTN sites, 13 were interviewed, resulting in a 72% response rate, which is very good for this type of survey with individuals connected to a partnership

(Hutchinson and Sutherland 2019). There were responses across each of the six NTTN sites and across all provider types.

Close-ended questions were analyzed using descriptive statistics. Because the initiative has six sites and three leads in each site, there was not enough data to conduct meaningful higher-order quantitative analyses. Open-ended responses were handwritten and typed and were coded as soon as possible after the interview by the two researchers. A grounded theory approach was used to analyze qualitative data. Following the work of Braun and Clarke (2012), the two researchers independently examined the data and created open codes. Each researcher reviewed again to group codes into themes. Researchers then met to discuss and create final themes aligned with qualitative data analysis best practices (Guest et al. 2012). Qualitative responses were used to enhance the understanding of the quantitative questions and to provide context for community violence and trauma services in general.

3. Results

To examine the alignment of program documents identifying purposes of the network with provider perception, providers were asked their perspectives on the purposes and outcomes of the NTTN. To examine the interorganizational collaboration among the network, communication and coordination questions were asked, examining provider perspectives within the network and with the lead organization. Results for each of these are presented. To gain a better understanding of the community violence context within which providers operate, respondents were asked about their perceptions of the root causes of community violence. Responses included violence stemming from structural and institutional racism, lack of opportunities, and longstanding conflicts between groups. One interviewee said that conflict arises because people do not have the skills to address their trauma, "When you have trauma, the only thing you know how to do is offer it back". Respondents understood community violence as a holistic problem that had multiple causal levels and the need for engagement at each socio-ecological level-individual, relational, institutional, and societal levels. In particular, providers noted that schools (n = 4) and communities (n = 4)were places where violence prevention services could be best implemented. It is within this context that provider perspectives on the network goals and communication and coordination can be understood.

3.1. Perspectives on NTTN Goals

The program logic model identified ten outcomes of the NTTN. The logic model is a living document that is meant to be revisited as needed by the NTTN. At the time of the interviews, the outcomes were: (a) an increase in community awareness of NTT services; (b) an increase in community referrals to services; (c) an increase in community residents feeling supported physically, psychologically, and socially; (d) an increase in the capacity of the community to support residents going through trauma; (e) providing support for clients' healing journeys; (f) a reduction in client trauma; (g) a reduction in community trauma; (h) an increase in community efficacy (meaning willingness and ability of community members to help residents in need; willingness and ability to provide services/resources to the community); (i) a reduction in community violence; and (j) an increase in the capacity to interrupt violence.

The NTTN outcomes were not always agreed upon by stakeholders. The interview results show that 38% (n = 5) of respondents commented that interrupting violence was not within the scope of the NTTN and pointed to streetworkers as collaborating partners for that work; however, they were not part of the network. Streetworkers' focus was to engage with group-involved individuals to help steer them from violence by promoting well-being. Additionally, two respondents commented that reducing client trauma and reducing community violence were outside the control of NTT services, while another respondent commented that it is difficult to assess if there is less client trauma because clients are often dealing with multiple forms of trauma. On the whole, respondents felt

that client support, community support, awareness of NTT services, and referrals were central to their jobs.

Five interviewees discussed other areas where trauma support was needed. These included shots fired (where there is no direct victim), suicides, domestic violence, accidental deaths, and immigration trauma that comes with immigrants from war-torn countries as well as from how they are treated in the U.S. Others (n=4) noted that there were not enough resources to address community violence as it is, so the network needed to stay with what they currently accomplish with additional resources.

3.2. Connection among Teams

Overall, there was a strong link among NTT partners in their catchment areas; they expressed an ability to navigate the system for their clients, and they understood the NTT process. Among providers in the network, communication and coordination averaged between 3.31 ("others in the network know what you do") and 4.31 ("others in the network respect what you do" and "share your goals"), normed as high moderate based on relational coordination survey norming results (see Table 2) (Gittell 2016).

As a Whole, How Well Do You Feel the NTTN	Average	Standard Deviation
Engages in frequent communication	4.08	0.86
Engages in timely communication	3.85	0.80
Engages in accurate communication	3.92	0.76
Engages in problem-solving communication	4.15	0.99
Others in the network know what you do	3.31	1.44
Others in the network respect what you do	4.31	0.86
Others in the network share your goals	4.31	0.75

Table 2. Relational Coordination among NTTN sites.

Almost universally, those responding to the NTTN survey felt that their biggest strength was their team and their personal connections with each other and with their community. Most respondents also felt that their experience, their ability to deliver culturally appropriate services, and their diversity of staff strengthened their capacity to work with clients and the community. Respondents also mentioned access to resources, commitment, passion, and flexibility as important strengths of their team. As one interviewee stated, "I feel supported knowing that I have a good group of people I can call on when I need help. They are reliable and have lots of experience. I feel more empowered with them; more motivated. They have my back".

Of the seven different aspects of communication and coordination asked on the survey, the respondents were more neutral when asked if people knew what they did, demonstrating the need to understand what team members do in each site. Some (n = 5) felt like NTTN work was hampered because relationships were not well connected across sites and with others working in the community violence response space. Four other interviewees noted that communication issues stemmed from a lack of clarity about roles and responsibilities. As one interviewee stated, "Communication is an issue. There are times where there are multiple individuals on a case and it is confusing when there are multiple [people] in same role. Need to know who's working on it". Similarly, another longstanding provider stated, "Get us all on the same page with roles and responsibilities. We were supposed to do this pre-Covid and didn't. Not clear who is doing what. [An] example is housing. If someone [one site] is doing it, then we all have to do it".

This consistent menu of services across sites was mentioned by two respondents as a way to cut down on competition among sites and "service-shopping" by families, whereby a family that has roots in two NTT sites, may choose what NTT to access based on who can offer them the most services. Sites may not necessarily know that the family is utilizing other NTT site services until much later in the process. This results in conflict and role confusion.

3.3. Connection with the Organization Lead

Meanwhile, communication and coordination were generally high between providers and the Boston Public Health Commission (BPHC) parent organization (See Table 3) with scores ranging from 4.00 (engaging in frequent communication and problem-solving communication) to 4.85 (respecting what the provider does). Over half of the respondents (n = 7) identified key personnel turnover (in BPHC and the NTTN) over the last few years as a barrier to working more collaboratively, citing that network partners needed to build relationships to best continue/enhance NTTN work.

Table 3. Relationa	Coordination	with Lead	Organization.
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How Well Do You Feel the BPHC	Average	Standard Deviation
Engages in frequent communication	4.00	0.82
Engages in timely communication	4.15	0.80
Engages in accurate communication	4.08	0.86
Engages in problem-solving communication	4.00	1.00
Knows what you do	4.54	0.52
Respects what you do	4.85	0.38
Shares your goals	4.46	0.52

4. Discussion

This study examined an underexplored but growing area of intervention within community violence: responses for victims and communities affected by the violence. While there are seemingly few programs that address both victim and community needs under the same umbrella, there are still fewer examinations of program operations and empirical investigations of worker perceptions of those operations. An analysis of one program serving high-violence neighborhoods in Boston served as an entry point for examination. The results of this study show that there was widespread agreement among providers on some of the goals of the NTTN including providing support to victims and communities, raising awareness of services, and reducing individual trauma. There was less agreement among providers on program goals including reducing community trauma, reducing community violence, and increasing community capacity to intervene in violence. Those goals are likely not achievable by the NTTN alone; and logically, providers were less likely to identify those goals as core to the mission of the network.

Communication and coordination as measured using the relational coordination survey was generally good across the network of providers and very good to excellent between the providers and the lead health commission agency. Many providers commented that they had excellent working relationships and deep respect for providers with whom they worked closely within their neighborhoods. Issues arose across sites with regard to the lack of standardization of roles and communication with client load and services offered. These cross-functional challenges commonly arise as a result of siloed work groups (Mendenhall and Berge 2010). At the same time, lead agencies can address those cross-site differences through things like communication, coordination, and clear role identification (e.g., Gittell 2016; Greeson and Campbell 2012). Given the positive perceptions of the health commission by providers, cross-functional work appears to be an area where positive gains could be quickly realized.

Within the broader public-health-informed violence intervention context, attention to the needs of victims and community members is necessary to support health and well-being and meet violence prevention goals of addressing the trauma caused by such actions. The NTTN is one example of a secondary prevention program that works with neglected populations in recognition that community violence ripples throughout each socio-ecological domain. From a violence intervention perspective, solely working with offenders while ignoring the needs of victims and communities is not likely to result in healthy people and healthy long-term outcomes. Investments must be made in others affected by community violence.

This study was exploratory in nature, so no definitive conclusions about best practices for the operation of programs serving victims and communities can be made. Further, this study took place in one location, and there may be unique dynamics of community violence that occur in Boston; although research shows that community violence has similarities across locations (e.g., Matei et al. 2022; Papachristos and Kirk 2015). Another limitation of this study is that the primary data source was providers. Client and community member perspectives and experiences were not included, and those may be different from providers. While outcomes could not be assessed with their current data tracking indicators, the NTTN was scheduled to update their databases and logic model as a living document at the time of this writing. Future work can examine outcome-based indicators of success. Database indicators of health and well-being as well as the perceptions of clients and community members are potentially rich sources of future research to better understand the awareness and impact of services.

Boston's response to community violence that focuses on victims and communities can be a helpful resource to other locations attempting to create such programs. These programs would do well with a national network of community violence trauma response teams who can support and learn from each other. Similar network models exist nationally and internationally, such as crisis intervention teams that seek to bring together and share knowledge from those working in the law enforcement—mental health—substance abuse team spaces (e.g., https://www.citinternational.org/What-is-CIT, accessed on 20 June 2023). Such networks can build capacity, knowledge, and support among practitioners as they grapple with the devastating effects of community violence.

A socio-ecological framework is a way to understand the larger context of victim-centered work in relation to violence. As a way to move forward in this city and for locations crafting such programs, theory of change tools can be incorporated into the development process of future programs and utilized to examine the operation among initiatives that currently respond to community violence. A theory of change, or ToC, can be described as both a process and a product (Taplin et al. 2013). It is a process of creating programs and initiatives by defining long-term goals and working backward to map out the steps needed to reach the desired outcomes. It is a product that serves as an evaluation tool to assess whether the achieved outcomes align with the program's goals and allows for the restructuring of current processes by designing an 'outcomes pathway', similar to a logic model. The pathway maps the desired long-term and intermediate outcomes, providing measurable evidence and interventions to achieve established outcomes. The ToC can be valuable for understanding the underlying mechanisms by which the intervention is expected to meet its goals (Breuer et al. 2015).

On a broader level, community violence intervention and prevention conversations must be framed holistically, taking into account victims of violence and residents who are exposed to that violence. Working with all those involved, from those committing violence to those experiencing violence, directly and indirectly, are critical pieces to fully addressing community violence. The impact of violence is documented as far-reaching (Sharkey 2018), and while focusing on those committing the violence is well-warranted, we must not be short-sighted and must respond to the needs of all those affected by those events. The health and well-being of people, neighborhoods, and cities depend on it.

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References

- Abt, Thomas. 2019. Bleeding Out: The Devestating Consequences of Urban Violence—And a Bold New Plan for Peace in the Streets. New York: Basic Books.
- Affinati, Steven, Desmond Patton, Luke Hansen, Megan Ranney, A. Britton Christmas, Pina Violano, Aparna Sodhi, Bryce Robinson, and Marie Crandall. 2016. Hospital-based violence intervention programs targeting adult populations: An Eastern Association for the Surgery of Trauma evidence-based review. *Trauma Surgery & Acute Care* 1: e000024. [CrossRef]
- Armstead, Theresa L., Natalie Wilkins, and Maury Nation. 2021. Structural and social determinants of inequities in violence risk: A review of indicators. *Journal of Community Psychology* 49: 878–906. [CrossRef] [PubMed]
- Bell, Teresa M., Dannielle Gilyan, Brian A. Moore, Joel Martin, Blessing Ogbemudia, Briana E. McLaughlin, Reilin Moore, Clark J. Simons, and Ben L. Zarzaur. 2018. Long-term evaluation of a hospital-based violence intervention program using a regional health information exchange. *Journal of Trauma and Acute Care Surgery* 84: 175–82. [CrossRef]
- Bonne, Stephanie, Ashley Hink, Pina Violano, Lisa Allee, Thomas Duncan, Peter Burke, Joel Fein, Tamara Kozyckyj, David Shapiro, Katherine Bakes, and et al. 2022. Understanding the makeup of a growing field: A committee on trauma survey of the national network of hospital-based violence intervention programs. *American Journal of Surgery* 223: 137–45. [CrossRef] [PubMed]
- Braun, Virginia, and Victoria Clarke. 2012. Thematic analysis. In *APA Handbook of Research Methods in Psychology*. Edited by Harris Ed Cooper, Paul M. Camic, Debra L. Long, Abigail T. Panter, David Ed Rindskopf and Kenneth J. Sher. Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological. Washington, DC: American Psychological Association, vol. 2, pp. 57–71. [CrossRef]
- Breuer, Erica, Lucy Lee, Mary De Silva, and Crick Lund. 2015. Using theory of change to design and evaluate public health interventions: A systematic review. *Implementation Science* 11: 1–17. [CrossRef] [PubMed]
- Bronfenbrenner, Urie. 1979. The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press. [CrossRef]
- Centers for Disease Control and Prevention. 2020. National Center for Injury Prevention and Control. Retrieved from Web-Based Injury Statistics Query and Reporting System (WISQARS). Available online: https://wisqars.cdc.gov/data/lcd/home (accessed on 12 June 2023).
- Centers for Disease Control and Prevention. 2022a. *The Social-Ecological Model: A Framework for Prevention;* Washington DC: Centers for Disease Control and Prevention. Available online: https://www.cdc.gov/violenceprevention/about/social-ecologicalmodel.html (accessed on 30 May 2023).
- Centers for Disease Control and Prevention. 2022b. *Using a Health Equity Lens*; Washington DC: Centers for Disease Control and Prevention. Available online: https://www.cdc.gov/healthcommunication/Health_Equity_Lens.html#:~:text=What%20is% 20a%20health%20equity%20lens%3F%20It%20means,bias%20and%20stigmatization%2C%20and%20effectively%20reach%20 intended%20audiences (accessed on 30 May 2023).
- Charlestown Coalition. 2022. *Trauma Response Team*. Boston: Charlestown Coalition. Available online: https://charlestowncoalition.org/trauma-response-team/ (accessed on 15 March 2023).
- City of Columbus, Ohio. 2023. *About the Coalition*; Columbus: Columbus CARE Coalition. Available online: https://www.columbus.gov/Templates/Detail.aspx?id=2147529086 (accessed on 22 March 2023).
- City of Philadelphia. 2023. *Network of Neighbors: A Trauma Response Network*; Philadelphia: Department of Behavioral Health and Intellectual disAbility Services (DBHIDS), June 5. Available online: https://dbhids.org/about/organization/planning-innovation/emergency-preparedness-and-response-unit/network-of-neighbors/ (accessed on 22 March 2023).
- Council on Criminal Justice. 2021. Integrating Local Violence Reduction Efforts: State and Federal Support (Meeting Bulletin #7). Available online: https://counciloncj.org/meeting-bulletin-7/ (accessed on 17 January 2023).
- Dahlberg, Linda L., and James A. Mercy. 2009. History of violence as a public health issue. *AMA Virtual Mentor* 11: 167–72. Available online: http://virtualmentor.ama-assn.org/2009/02/mhst1-0902.html (accessed on 17 January 2012). [PubMed]

- First Aid Platform. 2021. Psychological First Aid. Montrouge: First Aid Reference Centre. Available online: https://www.globalfirstaidcentre.org/psychological-first-aid/#:~:text=Psychological%20first%20aid%20is%E2%80%A6%201%20comforting%20someone%20in,helping%20people%20access%20information%2C%20services%20and%20social%20supports (accessed on 5 May 2023).
- Ginwright, Shawn. 2018. The Future of Healing: Shifting from Trauma Informed Care to Healing-Centered Engagement. Kensignton: Kinship Cares Victoria. Available online: http://kinshipcarersvictoria.org/wp-content/uploads/2018/08/OP-Ginwright-S-2018-Future-of-healing-care.pdf (accessed on 20 November 2022).
- Gittell, Jody Hoffer. 2016. Transforming Relationships for High Performance: The Power of Relational Coordination. Stanford: Stanford University Press.
- Greeson, Megan R., and Rebecca Campbell. 2012. Sexual Assault Response Teams (SARTs). *Trauma, Violence, & Abuse* 14: 83–95. [CrossRef]
- Guest, Greg, Kathleen M. MacQueen, and Emily E. Namey. 2012. Applied Thematic Analysis. Thousand Oaks: Sage. [CrossRef]
- Houston-Kolnik, Jaclyn. 2017. A Comprehensive Model for Underserved Victims of Violent Crime: Trauma Recovery Centers; Chicago: Illinois Criminal Justice Information Authority. Available online: https://icjia.illinois.gov/researchhub/articles/a-comprehensive-model-for-underserved-victims-of-violent-crime-trauma-recovery-centers (accessed on 15 March 2023).
- Hutchinson, Mary Katherine, and Melissa A. Sutherland. 2019. Conducting surveys with multidisciplinary health care providers: Current challenges and creative approaches to sampling, recruitment, and data collection. *Research in Nursing & Health* 42: 458–66. [CrossRef]
- Jennings-Bey, Timothy, Sandra D. Lane, Robert A. Rubinstein, Dessa Bergen-Cico, Arnett Haygood-El, Helen Hudson, Shaundel Sanchez, and Frank L. Fowler. 2015. The trauma response team: A community intervention for gang violence. *Journal of Urban Health* 92: 947–54. [CrossRef] [PubMed]
- Johnson, Laura, and Amanda M. Stylianou. 2020. Coordinated Community Responses to Domestic Violence: A Systematic Review of the Literature. *Trauma, Violence, & Abuse* 23: 506–22. [CrossRef]
- Matei, Andreea, Leigh Courtney, Krista White, Lily Robin, Paige Thompson, Rod Martinez, and Janine M. Zweig. 2022. *Implementing Youth Violence Reduction Strategies: Findings from a Synthesis of the Literature on Gun, Group and Gang Violence*. Washington, DC: Urban Institute. Available online: https://www.urban.org/sites/default/files/publication/105301/implementing-youth-violence-reduction-strategies_0.pdf (accessed on 28 November 2022).
- Mendenhall, Tai J., and Jerica M. Berge. 2010. Family therapists in trauma-response teams: Bringing systems thinking into interdisciplinary fieldwork. *Journal of Family Therapy* 32: 40–54. [CrossRef]
- Murray, Jennifer, Inga Heyman, Nadine Dougall, Andrew Wooff, Elizabeth Aston, and Iniobong Enang. 2021. Co-creation of five key research priorities across law enforcement and public health: A methodological example and outcomes. *Journal of Psychiatric and Mental Health Nursing* 28: 3–15. [CrossRef] [PubMed]
- National Alliance of Trauma Recovery Centers. 2020. Trauma Recovery Centers: Addressing the Needs of Underserved Crime Survivors. *Alliance for Safety and Justice*. Available online: https://allianceforsafetyandjustice.org/wp-content/uploads/2020/10/TRAUMA-RECOVERY-CENTERSAddressing-the-Needs-of-Underserved-Crime-Survivors.pdf (accessed on 10 May 2023).
- National Alliance of Trauma Recovery Centers. 2022. Our History at the NATRC. Available online: https://nationalallianceoftraumarecoverycenters.org/about/history (accessed on 10 May 2023).
- Papachristos, Andrew V., and David S. Kirk. 2015. Changing the street dynamic: Evaluating Chicago's group violence reduction strategy. *Criminology & Public Policy* 14: 525–58. [CrossRef]
- Roman, Caterina G., Megan Forney, Jordan M. Hyatt, Hannah J. Klein, and Nathan W. Link. 2020. Law enforcement activities of Philadelphia's group violence intervention: An examination of arrest, case processing, and probation levers. *Police Quarterly* 23: 232–61. [CrossRef]
- Sharkey, Patrick. 2018. The long reach of violence: A broader perspective on data, theory, and evidence on the prevalence and exposure to violence. Annual Review of Criminology 1: 85–102. [CrossRef]
- Small Arms Survey. 2022. The Calm Before the Storm: Global Violent Deaths Update 2019–20. Available online: https://smallarmssurvey.medium.com/the-calm-before-the-storm-global-violent-deaths-update-2019-2020-5b56c53b6834 (accessed on 5 June 2023).
- Stacy, Christina Plerhoples, Helen Ho, and Rolf Pendall. 2017. Neighborhood-level economic activity and crime. *Journal of Urban Affairs* 39: 225–40. [CrossRef]
- Stylianou, Amanda M., and Elizabeth Ebright. 2021. Providing Coordinated, Immediate, Trauma-Focused, and Interdisciplinary Responses to Children Exposed to Severe Intimate Partner Violence: Assessing Feasibility of a Collaborative Model. *Journal of Interpersonal Violence* 36: NP2773–NP2799. [CrossRef] [PubMed]
- Taplin, D. H., H. Clark, E. Collins, and D. C. Colby. 2013. A Series of Papers to Support Development of Theories of Change Based on Practice in the Field. *ActKnowledge*. Available online: https://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToC-Tech-Papers.pdf (accessed on 17 May 2023).
- Wang, Ling, Ian Norman, Tao Xiao, Yamin Li, and Mary Leamy. 2021. Psychological First Aid Training: A Scoping Review of Its Application, Outcomes and Implementation. *International Journal of Environmental Research and Public Health* 18: 4594. [CrossRef] [PubMed]

Wintemute, Garen J., Amanda J. Aubel, Rocco Pallin, Julia P. Schleimer, and Nicole Kravitz-Wirtz. 2022. Experiences of violence in daily life among adults in California: A population-representative survey. *Injury Epidemiology* 9: 1. [CrossRef] [PubMed] World Health Organization. 2022. *WHO Violence Prevention Unit: Approach, Objectives and Activities*, 2022–2026. Geneva: World Health Organization. Available online: https://cdn.who.int/media/docs/default-source/documents/social-determinants-of-health/who_2022_plv_strategy_2022-2026_finalfile.pdf?sfvrsn=c819ff54_3&download=true (accessed on 15 September 2022).

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Article

Strategies for Territorial Peace: The Overcoming of the Structural Violence in Women Living in Palmira, Colombia [†]

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Abstract: Women experience different types of violence, and poverty is one of them. The aim of this work was to show the situation of poverty experienced by women in Palmira and how this condition affects both their participation in and contribution to the achievement of territorial peace—a central political target in our country. For this, a descriptive and predictive study was carried out by applying a survey to measure the different types of violence affecting Palmirana women. The results demonstrate the predominance of structural violence suffered by women, which creates unfavorable conditions for the construction of peace in Colombia.

Keywords: feminization of poverty; territorial peace; structural violence; women; Palmira

1. Introduction

The degree of satisfaction regarding Economic, Social, and Cultural Rights (ESCR), i.e., food, social security, physical and mental health, housing, work, unionization, education, a healthy environment, and water, is decisive in terms of knowing whether a person or society lives under conditions of poverty. According to the human development approach promoted by both the United Nations (UN) and authors like Sen (PNUD 2016), poverty deprives people of their rights to the point where it undermines the enjoyment of a fulfilling life, for example, when the people lack any options for transportation, education, food, and work.

According to the Latin American and Caribbean 2019 statistical yearbook from the Economic Commission for Latin America and the Caribbean (ECLAC 2020), 30.4% of women in the region live in conditions of poverty (including extreme poverty) in comparison with only 29.6% of men. This trend is the same in Colombia: this issue impacts more women than men, as was observed in recent studies conducted by national and international organizations, showing a significant increment in the number of poor women compared to poor men, from 102.5 in 2008 to 118 in 2018—i.e., 102.5 and 118 poor women for every 100 poor men, respectively—(DANE and UN Women 2019)¹. Notably, in Valle del Cauca, a Colombian state located in the southwest of the country, and the gender poverty index figure is 126 (DANE and UN Women 2019). Thus, the rate of feminine poverty in Colombia reflects regional

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DANE acronym stands for the National Department of Statistics.

inequality between men and women, indicating the obstacles to be faced by women when seeking to access essential goods and services.

These figures become more relevant in gender-sensitive studies because a correlation has been identified between poverty and violence against women. This was highlighted by the General Secretary of the UN (2006), who stated that the economic inequalities evidenced in relation to employment, income, access to other economic resources, and the lack of economic independence create or promote the conditions for violent acts to appear, affecting women in their ability to act and make decisions.

In 2018, Cali, the capital of Valle del Cauca, was the city which experienced the most women's homicides (Instituto Nacional de Medicina Legal y Ciencias Forenses 2019). Similarly, in 2019, the state suffered the second highest number of feminicides (Observatorio Feminicidios Colombia 2020). In this landscape, poverty correlates very closely with violence against women, at least in this region.

The municipality of Palmira is part of the 42 municipalities of Valle del Cauca; it is the third most populated municipality with approximately 310,000 inhabitants, and in 2019, it occupied 37th place in the ranking of the 50 most violent cities in the world based on figures developed by the Citizen Council for Public Security and Criminal Justice (2020). The latest reported numbers of violence in the area showed a total of 685 cases of family violence and 105 cases of sexual violence in 2017 (Observatorio de Familia 2017).

The latter is related to the post-conflict and peace-creation phase in the country that began when the peace agreement between the Colombian government and FARC (Revolutionary Armed Forces of Colombia) guerrilla forces was signed. This agreement details the negotiation results from both parties with the aim of ending the armed conflict, and to build stable and long-lasting peace in the country.

In this context, we hypothesize that the structural violence (including poverty) has a more significant impact than direct violence (physical and psychological) and cultural violence (ideological) on the construction of territorial peace from the perspective of Palmirana's women.

Although the Peace Agreement prioritized the vulnerable population living in rural areas because the armed conflict largely occurred in these areas, this research focused on the vulnerable population living in urban areas, and specifically, on women in unfavorable socioeconomic conditions, in order to understand their context and thus to be able to create and design the conditions that allow them to empower themselves, use their full potential, and thus contribute to peace in the country.

This paper starts by analyzing how the peace concept is related to transitional justice, in the Colombian context beyond the simplistic end of the armed conflict, in order to understand what kind of peace was intended with the final signing of the agreement. Then, how the poverty phenomenon significantly disturbs the life of women is explored, establishing that the feminization of poverty represents a new type of structural violence that must be solved through the active participation of women in this process. The methodological aspects of the study are detailed, and finally, the results and discussion are presented.

2. The Construction of Peace as the Objective of Transitional Justice

The transitional justice system was applied to open a new avenue for a real peace process. This form of justice was designed to overcome large-scale conflicts (United Nations 2004), like transitions from dictatorships to democracies, or from war to peace. This fact explains why, as this field has evolved, the research carried out has incorporated and highlighted the importance of the concept of peace within transitional justice (Sharp 2014). It also allows for the understanding of how the elimination of war has commonly been associated with the achievement of peace throughout history, as referred to by Fisas (Cabello-Tijerina et al. 2016).

Therefore, if peace has become essential to the field of transitional justice, it is worth defining it and knowing what is understood as "peace". In this context, Galtung (1969) explains the concept of

peace in a broader sense, paying more attention to the phenomenon of violence² than to war. In this vein, it is worth noting that Galtung links the concepts of violence and peace, pointing out that the absence of violence is needed for the construction of peace. This approach allowed the notion of peace to be extended based on the analysis of the two types of violence identified in his initial study: personal or direct—physical violence; and structural violence—the absence of social justice. He also noted that if we are in the absence of direct violence, one could say that negative peace has been achieved, whereas if structural violence is absent, there is positive peace.

Thus, if looking at the scope of transitional justice by taking these concepts into account, it can be seen that it has been more focused on achieving a negative peace, i.e., aimed at the elimination of war and armed conflict, whilst leaving aside other forms of violence, such as structural forms, which are related to phenomena such as poverty and corruption. For this reason, it is not uncommon to find many democracies where, although the rule of law is firmly established, high levels of poverty and other forms of structural violence are maintained (Sharp 2014). A transitions can be a step towards varying degrees of peace (Duthie 2014); however, if sustainable peace is to be achieved, it is necessary to aim towards the achievement of negative peace and positive peace, along with the proper management of the underlying causes of the conflict, as stated by Galtung (Lambourne 2014).

The Peace Sought in Colombia

Taking into account the context of poverty and violence outlined above, it is appropriate to analyze the type of peace that Colombia is seeking. In this context, the Peace Agreement specifies that its purpose is to achieve a stable and lasting peace (Gobierno Nacional, y FARC-EP 2016), i.e., one that is maintained and sustained over time, or in other words, what is sought is that the steps towards peace and the achievements therein move in a direction that will prevent the resurgence of the conflict that is being overcome. Thus, one can say that the transition of the agreement is one that points to the construction or consolidation of peace, which can also be seen in the considerations written in the document which highlighted "the fundamental right of each individual and society not to suffer again the tragedy of the internal armed conflict that this Agreement intends to overcome definitively" (Gobierno Nacional, y FARC-EP 2016).

The term peacebuilding, as initially conceived, is referred to in the UN Secretary-General's Policy Committee as:

A range of measures targeted to reduce the risk of lapsing or relapsing into conflict by strengthening national capacities at all levels for conflict management, and to lay the foundation for sustainable peace and development. Peacebuilding strategies must be coherent and tailored to the specific needs of the country concerned, based on national ownership, and should comprise a carefully prioritized, sequenced, and relatively narrow set of activities aimed at achieving the above objectives (United Nations Peacebuilding Support Office 2014, p. 4).

Massive human rights violations, involving a systematic and deliberate rupture of norms, allow all citizens and not just direct victims to feel their effects (De Greiff 2009). For this reason, it is difficult to say that armed conflicts, like the one in Colombia that lasted for more than half a century, cannot affect the whole of society. They happen at different levels and in different contexts. Because of the latter, the Office of the High Commissioner for Peace presented the concept of territorial peace, whose most predominant field of activity focuses on the active participation of society in the construction of peace

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Galtung (1969) says that the somatic incapacity, deprivation of health, and death (most visible consequence of wars) are certainly manifestations of violence, but not all parts of it, because if violence were only understood according to these manifestations, it would mean that the absence of these situations would imply peace, and therefore, a close understanding of the concept of violence would limit the concept of peace.

from various territories or regions (Jaramillo 2016), and according to Criado (2017), corresponds to the construction stage or what is known as "post-conflict" in Colombia.

The territorial peace approach (2016) considers the economic, cultural, and social features of communities, ensuring socioenvironmental sustainability, and seeking to implement the different measures in a comprehensive and coordinated way with the active participation of the citizens. Authors like Guarín (2016) highlight the basic concepts that make up the notion of territorial peace, which are: territorial development (the possibility of attending to community aspirations); context according to the needs of the territories; the primacy of the territorial approach to the sectoral; decentralization; debt of the most vulnerable rural population; and citizen participation.

Additionally, Criado (2017, p. 53) mentions that "the territorial approach is a participatory planning system for the implementation of the content of the Peace Agreement in rural territories." This situation is because, as has been indicated, the rural population has suffered the main consequences of the armed conflict. However, the agreement also includes a "large number of people affected in one way or another across the territory, including women, children and adolescents, peasant, indigenous, Afro-Colombian, black, palenquera, raizal and Rom communities, political parties, social and trade union movements, economic associations, among others" (Gobierno Nacional, y FARC-EP 2016, p. 6); additionally, the "general participation of society in the construction of peace" (Gobierno Nacional, y FARC-EP 2016, p. 7) is needed in order to regain the confidence lost during the time of conflict and promote a culture of tolerance, respect, and coexistence.

In this regard, the priority that the territorial approach sets for the attention of some areas that have suffered the consequences of the conflict more aggressively should not be understood as or confused with the concept of territorial peace. Criado (2017, p. 22) suggests that "territorial peace can be defined as the creation of effective conditions for peace in territories that have directly and most intensely suffered from armed conflict", but if so, then where is the contribution to peace and the participation of the other territories that were not directly affected by the conflict? Territorial peace in Colombia cannot be understood as a fractional concept; instead, all territories must create the necessary conditions to achieve the construction of peace.

While the agreement is explicit in considering the importance of the society in the construction of peace—as it should be—given the characteristics and consequences of such an ongoing conflict, it focuses directly on the attention and prioritization of its direct victims; hence, some questions arise: Is the direct attention of the victims of armed conflict sufficient to achieve a stable and lasting peace? How is it possible for other members of society, who are not direct victims of the conflict but who are vulnerable or who have suffered the indirect consequences of the conflict such as poverty, to participate in the creation of peace?

3. The Feminization of Poverty and Structural Violence

Intersectional theory allows us to analyze the context and degree of vulnerability and discrimination through which women experience unfavorable socioeconomic conditions, because it explains the categories of inequality that often coincide in the same person or group of people. The example provided by Kimberle Crenshaw, which motivated this framework of understanding, teaches how intersectionality operates; in this particular case, it explains how race and gender come together, creating "square discrimination" for black women (Crenshaw 2016). With the intersectional approach, the author emphasizes that these categories cannot be understood separately as is usually possible, because this is insufficient to discern the contexts and different situations of inequality that women face (Crenshaw 1991). The author admits that the study only considers part of this problem, as there are additional factors other than gender and race involved, such as class and sexual orientation, which also affect women (Crenshaw 1991).

Intersectionality comprehension "can be understood as a study on power relationships, which also include experiences that can be designated as 'despicable', 'belonging to margins' or 'dissidents'" (Platero 2014, p. 82). It allows us to explore discrimination based on women's multi-leveled

identities (AWID 2004) and how historical, social, and political contexts perpetuate different types of discrimination such as racism, patriarchy, and class oppression.

An essential reason for using an intersectional approach is given by Collins (2008) when explaining how people are often put into binary categories, such as white/black, male/female, or thought/feeling. However, these categories are insufficient in identifying people's unique experiences. For instance, she takes the example of the lives of African-American women. In her specific experience, the categories of race and gender are combined, but in other cases or experiences, the interactions may be different. Mainly for this analysis, it is not appropriate to group women's status and poverty, because following Collins' argument, it is invalid to think that a woman wakes up one day as a woman who suffers poverty and another day in poverty decoupled from her biological condition as a woman.

Bearing in mind that it is possible to find different categories of inequality, one can make progress precisely by considering this intersectionality between gender and class. Today, this distinction can be better understood under what literature has stated as the feminization of poverty, which "can be defined as (a) an increase in the difference in poverty levels between women and men; (b) an increase in the difference in poverty levels between woman-headed, man-headed and couple-headed households" (Medeiros and Acosta 2008, p. 116).

This study uses the first notion, even if it is not intended to compare the levels of poverty between men and women. However, it only focuses on the situation of poverty experienced by women, because the degree of vulnerability of women to men is a widely documented and recognized phenomenon today. Thus, the intersectional approach is an ideal framework to explain how gender and class categories interact simultaneously in Colombia's population of poor women and why their study is essential.

Poverty as a Manifestation of Structural Violence

Consequently, it is necessary to understand the effect of poverty on women, and then establish how this relates to the achievement of a stable and lasting peace. To this end, the concepts offered by Johan Galtung related to direct, structural, and cultural violence are used, the latter introduced as a continuation of the initial study on the other types of violence mentioned (Galtung 2003).

Galtung (2003) highlights how structural violence occurs by exploitation as a central element within the society's structure and is perceived through a division existing in any society among those who are in a higher position and benefit more than those in a lower position. Because of this exploitation, those in lower positions may starve or end up in a permanent state of misery, including through facing malnutrition and disease. Likewise, this unequal structure that the author describes clearly resembles the traditional division between poor and rich (Cabello-Tijerina and Quiñones 2019).

As for direct violence, Galtung says that "a typology of physical, personal violence focused on the tools used, can be developed by starting with the human body itself (in the elementary forms of fistfights and more advanced forms, such as Karate and Aikido), heading towards all kinds of weapons, completing, so far, with ABC weapons"—Atomic, Biological, and Chemical—(Galtung 1969, p. 174).

Concerning cultural violence, these are "aspects of culture, the symbolic realm of our existence (materialized in religion and ideology, language and art, empirical sciences and formal sciences—logic, mathematics—), which can be used to justify or legitimize direct or structural violence" (Galtung 2003, p. 7).

Some examples provided by Galtung allow the difference between the types of violence to be understood. If children are said to be killed, a reference would be made to direct violence, but if it is indicated that they die from poverty, then this is structural violence. Anything that is undetectable through eyesight is part of cultural violence (Ramsbotham et al. 2017). In this way, when reference is made to direct and structural violence, it is about the creation of a need deficit (Galtung 2003).

Taking into account this type of violence, the feminization of poverty could be understood as the inability to meet basic needs. Regarding the unequal treatment of women, in terms of the distribution of goods and services within the social structure, it can be easily inferred that women affected by this

condition face a type of structural violence within society, which places them in a lower position and deprives them of access to goods and services on an equal footing with respect to others. Therefore, women face different difficulties than men when meeting their basic needs. Thus, throughout history, it has been considered that women are in this unsatisfactory situation because of the fact of being women and therefore being "inferior", encouraging aspects of cultural violence. This fact explains, for example, why "women [are] up to 11 percentage points more likely to develop food insecurity", "globally, there are 122 women between 25 and 34 years old living in extreme poverty for every 100 men of the same age", and why "the global gender wage gap is 23%. Women's activity rate is 63%, while men's activity rate is 94%" (UN Women 2018, p. 4).

Galtung explains that this type of violence interacts as a causal chain and uses a vicious triangle to illustrate how that chain can initiate with any of the three types of violence and then degenerate into another one. Thus, manifestations of violence can begin with cultural violence by indoctrinating people to end up naturally accepting exploitation; in other circumstances, direct violence is used to subdue, while in others, there appears to be an unequal social division representative of structural violence that is slowly legitimized by an appropriate doctrine that supports it (Galtung 2003). In this way, they are all intertwined, and one causes the other.

For this reason, it is not surprising that women are the poorest, so they are openly affected by the manifestation of structural violence (Schwarz and Estrada 2017), which in turn makes them an easy target of direct violence (UN 2006), all of which has increased culturally perpetuated male hegemony and has allowed women to broadly accept male power (Connell 2012).

4. Methodology

A model of logistic regression was used, taking variable women suffering from violence versus women who do not suffer violence as a dichotomous dependent. Independent variables were direct, structural, and cultural violence. This was a non-experimental study as a single sample was analyzed, and it had a cross-sectional design because a survey instrument was used once; it was predictive to the extent that under certain conditions of independent variables, the model of logistic regression classifies, for this particular case, whether the women perceive themselves to be suffering from violence or not suffering from it.

The study selected a sample by using conglomerates involving the four schools that educate the largest number of students in the commune number 1 of the city of Palmira, consisting of 26 neighborhoods whose houses are located in socioeconomic strata 1 and 2³. In the first stage, two schools were chosen at random: Jorge Eliécer Gaitán and the Polytechnic School of the Valley. In the second stage, 425 mothers or women 18 years of age or older were randomly chosen through student lists who provided training to 43 students from higher groups to implement the instrument used for the study. Fieldwork was carried out in March 2019. The time of the survey ranged from 12 to 15 min.

The instrument initially consisted of 16 identification questions and 23 questions on a Likert scale—this was reduced to 20 due to the unreliability of three questions according to Cronbach's analysis (i.e., questions: C19: "to build peace in Colombia, do you need people to be close to God?"; C24: "do you think that men should earn more than women?"; E30: "in the last two years, have you depended economically on men?")—and eight multiple choice questions. Concerning the internal consistency of the instrument, a Cronbach Alpha coefficient of 0.715 was obtained, which is considered acceptable (Hernández and Pascual 2017).

The 20 Likert questions were written on a scale represented as follows: always = 1; almost always = 2; sometimes = 3; almost never = 4; and never = 5. The corresponding items, E31, D35, D36, D37, D38, and D39, were negatively asked, and the valuation scale of 1 to 5 was coded (never = 1;

Strata and methodology. Residential properties to which public services are provided were classified in six socioeconomic strata as follows: (1) low-low; (2) low; (3) medium-low; (4) medium; (5) medium high; and (6) high (Congreso de Colombia 1994).

almost never = 2; sometimes = 3 almost always = 4; and always = 5). A woman does not experience violence was scored as a total valuation of 20 to 60, and a woman that experiences violence had a summary assessment of 61 to 100; this score yielded results showing that 0.409 (or 41%) of the surveyed women perceived themselves to suffer from violence, which represents the letter P (the probability of success) for the sample size, while 0.591 (or 59%) was the proportion who perceived themselves to not suffer from violence, which represents letter Q (the probability of Failure). The study had a 95% confidence rate and an estimated error rate of 4.67%. The analyses were performed with the help of the SPSS version 20 statistical program. Questions were asked based on the concepts of direct, structural, and cultural violence developed by Galtung, which were explained.

5. Results

Regarding the multivariate analysis in the logistic regression model, the two-response assessment options were defined concerning the dependent variable (b), representing the cut-off point at 0.5; the probability of "women who do not experience violence" extended from 0.0 to 0.5 (it represented 59.1%) versus "women who suffer from violence" with a probability of 0.5 and 1.0 (it represented 40.9%). The model was as follows: $Pr\{b\} = \frac{1}{1+e^{-z}}$, where z is the linear combination Z = -2.908 + 1.737 *(single) + 2.06 *(free union) + 1.871 *(divorced) – 0.326 *(studies) – 0.340 *(the number of inhabitants in the house) + 2.214 *(has decent housing).

For example, this indicates that a single woman (single = 1), who has completed university studies (studies = 5), who lives in a house with 1 to 3 people (the number of inhabitants in the house = 1), who considers that she does not live in a decent house (decent housing = 2), will have a probability range of 0.5 and 1.0, which can be obtained by replacing these values in the linear combination z = 1.287, where: $Pr\{b\} = \frac{1}{1+e^{-1.287}} = 0.784$. In this case, the probability value of 0.784 within the scale indicates that this woman suffers violence under the conditions of being single, has completed university studies, lives in a home with 1 to 3 people, and does not live in a decent house.

By replacing the individual behavior of each of the most significant variables with their categories to predict the likelihood of a woman's violence through the logistic regression model, $\Pr\{b\} = \frac{1}{1+e^{-2}}$ was obtained and $\Pr\{\text{decent house}\} = \frac{1}{1+e^{-(-2.908+2.214+2)}} = 0.8205$ was obtained, indicating that there is a tendency to experience violence of 82.05% when not living in a decent house. Likewise, if $\Pr\{\text{married}\} = \frac{1}{1+e^{-(-2.908)}} = 0.0518$ (which was taken as a reference with respect to

Likewise, if $\Pr\{\text{married}\} = \frac{1}{1+e^{-(-2.908)}} = 0.0518$ (which was taken as a reference with respect to marital status: dummy variable), $\Pr\{\text{single}\} = \frac{1}{1+e^{-(-2.908+1.737)}} = 0.2367$, $\Pr\{\text{free union}\} = \frac{1}{1+e^{-(-2.908+2.067)}} = 0.3013$, and $\Pr\{\text{divorced}\} = \frac{1}{1+e^{-(-2.908+1.871)}} = 0.2617$, then it can be seen with respect to marital status that vulnerability to violence is higher when in a free union with 30.13%, followed by being divorced with 26.17%, with a very low chance if married with 5.18%.

Taking into account having completed university studies, $Pr\{university studies\} = \frac{1}{1+e^{-(-2908+0.3265)}} = 0.2179$, meaning the probability of women suffering violence under these circumstances is 21.79%. Finally, regarding $Pr\{number of inhabitants in the house from 1 to 3\} = \frac{1}{1+e^{-(-2908-0.340)}} = 0.0374$, the probability of violence is 3.74% if 1 to 3 people live at home. The most significant variables of the model according to the variables in the equation are represented in the Table 1.

		В	Standard Error	Wald	gl	Sig.	Exp(B)
Step 1 ¹	STA2			10.559	4	0.032	
•	STA2(1)	1.737	0.734	5.605	1	0.018	5.682
	STA2(2)	2.067	0.717	8.309	1	0.004	7.899
	STA2(3)	1.871	0.710	6.942	1	0.008	6.494
	STA2(4)	1.230	0.806	2.329	1	0.127	3.422
	STA3	-0.326	0.130	6.263	1	0.012	0.722
	People5	-0.340	0.146	5.384	1	0.020	0.712
	House16	2.214	0.593	13.948	1	0.000	9.156
	Constant	-2.908	1.063	7.478	1	0.006	0.055

Table 1. Variables in the equation.

It may be noted that the most significant variable that shows that a woman suffers violence is related to having a decent home, followed by her marital status, without considering if she is single [ESTA2(1)], is in free union [ESTA2(2)], or is separated [ESTA2(3)]. The latter turns out to be significant because it shows that being a woman in itself creates a condition of vulnerability that makes women prone to violence. Negative estimators can also be analyzed in terms of their level of education by indicating that the more education [ESTU3] women have, the lower the risk of them facing violence.

As for the number of people living in their homes [HOUSE5], it was obtained that there is a tendency for women to suffer less violence in houses with more inhabitants; meanwhile, women are at risk of more violence in houses with fewer people. Other significant results that demonstrated identification and multiple choice questions indicate that 27.5% of Palmirana women surveyed who live in a house with 4 to 6 people are in extreme poverty (DANE 2019).

Concerning the level of studies, women were only able to finish high school in 60.5% of cases, i.e., public education. This is an essential point because it indicates that public education encourages women to train intellectually, so their access to the university level could be increased, thus expanding their participation in the field of work, which is a critical factor because only 54.6% of surveyed women work. Furthermore, 72% do not own a house or apartment. This fact demonstrates the high inequality in the distribution of these goods against women.

The place where women feel more subject to discrimination is on the street, primarily due to their physical appearance (49.4%) followed by their economic situation (25.6%), which may explain why the development of values needed to build peace in the country was so important to them. This fact is evident because when asked whether they lived a life with values that aim towards the construction of peace in Colombia, they responded: always 60.2%; almost always 19.5%.

For these women, the president and the government are the ones in charge of constructing peace (54.6%), i.e., women do not see themselves as peacemakers. Another important result is that according to them, the effect of the conflict was the same both in the countryside and in the city (44%); this could affect the degree of violence these women feel they are exposed to, although when asked if they were victims of the conflict, 76.9% answered no.

When asked what factor needed to be eliminated for peace in Colombia to occur, 28.6% of women mentioned corruption as the most relevant obstacle to building peace, followed by unemployment and guerrillas forces with 14%. It is interesting to see that even though 45.4% of women surveyed said they did not work, they consider corruption as an issue that deserved to be resolved with higher priority than unemployment itself. Likewise, 16.9% of respondents reported being victims of the conflict and 14.6% being displaced. This result shows that although the conflict had a significant impact in rural areas, urban areas are also home to a significant population of direct victims of the conflict.

How poverty affects women as an expression of structural violence can be observed in their low level of studies, in the number of people living in their home, in the total household income, the level of unemployment, and the lack of any property ownership. In addition, there is a relationship between the level of studies of women and the way they perceive violence, i.e., the higher the level of studies

¹ Variables specified in step 1: ESTA2, ESTU 3, People 5, HOUSE16.

completed, the lower women's perception of the pervasiveness of violence is, because their tendency to suffer from it reduces.

6. Discussion

6.1. The Impact of Structural Violence in the Construction of Territorial Peace

This quantitative study showed that structural violence affects the construction of territorial peace from the perspective of Palmirana women more than direct violence and cultural violence; it was also observed that the vulnerability of women increases with violence. The latter is similar to the finding of Ríos and Gago (2018) who, in analyzing the conditions that allow for territorial peace in Colombia, found that aspects of structural violence constitute the most major concerns in the municipalities that were the subject of their study.

These results were also compared to Ross (2019) findings in the Canadian context, where the direct violence suffered by women within a peacebuilding framework was studied. Ross was able to show that physical violence against women is directly related to types of structural and cultural violence to the extent that these are the basis for or provide support for physical violence, and that these forms of violence end up being more visible.

Therefore, addressing structural violence for the construction of territorial peace is an effective form of prevention that discourages the emergence of direct violence against Palmirana women and promotes the elimination of existing forms of violence such as discrimination they experience in the street because of their physical appearance or their economic situation. During the process of dealing with this kind of violence, women make decisions and, therefore, participate in the construction of peace as empowered citizens for their territory.

6.2. Indirect Impact of the Conflict in Women

Even though participants showed that the conflict is something that has not impacted them directly because the most notorious events of the conflict occur in the rural sectors, they perceive that the conflict does affect everyone in the city and the countryside. As shown in the study, this contrasts with the information presented by Criado (2017), which is aimed exclusively at rural territories. It also agrees with the contribution stated by Bautista (2017) when saying that the dynamics and impact of social conflict are present throughout the national territory of Colombia. Following the above, it should be noted that territorial peace should be sought in all areas of the country; notably, rural population victims of this armed conflict are present in cities as well, as indicated in this study, with 16.9% of women being in this condition.

Otherwise, assuming that territorial peace is a matter that applies only to conflict areas, as was affirmed, would lead the inhabitants of areas where violent conflict did not have a direct impact to not be actively involved, as was indeed evidenced by this study. This is better understood after noting that women pointed out that peace cannot exist until corruption, unemployment, and guerrilla activities cease, aspects which they assume that they cannot intervene in directly. This assumption is made because they consider that there is nothing they can do to solve it. After all, they consider that these are outcomes that the president and his government should work towards.

This finding calls for a reassessment of the view that women are apathetic bystanders in efforts to achieve peace. For example, Salaudeen and Gombi (2019) discussed some limitations that hinder women's visibility in the construction of peace in Nigeria. They mentioned that one of them is tokenism because women do not participate in high-level peace initiatives and, when invited, are relegated to auxiliary or subsidiary functions. In Colombia, while progress was made in terms of women's inclusion in the peace process, taking into account that they achieved a 15.69% representation in the signing of the FARC agreements, decision-making and roles in the negotiations were ultimately influenced by a male majority, as mentioned by Chaparro González and Osorio (2016).

Likewise, Féron (2020) when studying Burundian women showed that governments tended to ignore women's groups because conflicts have a political–military connotation. Since the women did not belong to these areas, they were not deemed necessary to consult. While it is comprehensible that during a post-conflict period, attention will be directed towards the areas where conflict has had more impact, in a conflict like the one in Colombia, which lasted for more than half a century, there is no doubt that the whole society and the lives of all citizens have been directly or indirectly impacted. Hence, while more direct action is needed in some territories, others require prevention and the elimination of current violence in order to create conditions for the active participation of citizens in the construction of peace, while reducing situations of violence.

6.3. How Poverty Is Expressed in Palmirana Women

Difficulties regarding access to employment and the ownership of property are also obstacles faced by Palmirana women, as well as their vulnerability to their low levels of education, income, and greater economic dependence, all of which increase poverty. This result is compared to the information presented in the second national survey of perceptions of violence against women in Bolivia (Schwarz and Estrada 2017). This is a problem because while direct violence did not turn out to be as shocking as structural violence in this study, the fact that different types of violence interact in a vicious triangle should not be overlooked (Galtung 2003), meaning that women with these problems are more exposed to suffering direct violence.

Considering the situations lived by women in each territory is a momentous task. Pierson (2019), in a study conducted in Northern Ireland, explains how significant this problem is and indicates the need for international instruments that regulate violence against women to be interpreted in context. This can be achieved by taking into account the circumstances of these unique situations because women are not only affected and victimized by conflict, but they also face disadvantages in areas such as employment and education. To illustrate this, the study highlights the level of importance of United Nations Security Council Resolution 1325 from 2000, which regulates the issues of women, peace, and security of the United Nations Security Council, as an international instrument for the protection of women. However, it also shows the need for an application of its postulates in a particular way, considering the needs of women in each society. In this regard, Pierson points out that although this resolution seeks to address important issues such as sexual violence, female activists do not consider this issue to have been part of the 1325 debate thus far. For this reason, it is worth examining and knowing the context of women in order to address the difficulties they face effectively.

Accordingly, in the transition from war to peace that Colombia is currently going through, this study allowed the situations of poverty and inequality faced by urban women in the territory of Palmira to be analyzed. Furthermore, to understand the formation of violence that these phenomena generate, which in turn provides the territorial peace approach, a current view of the problems faced by women in this city is necessary. It is essential to consider the aspects of direct violence, and cultural violence, and especially structural violence as having a direct effect on women, and on their ability to act and contribute to the achievement of the territorial peace enshrined in the Peace Agreement.

In view of this, a territorial peace approach that takes these issues into account makes peacekeeping and peacebuilding processes not only more common but also more visible for citizens, especially for marginalized populations. However, it also suggests a severe understanding of the type of peace people, or specifically women, need to obtain in each territory. Such an understanding is only possible through the generation of data that contribute to gender equity by looking into the ways of seeing and feeling peace that women have. This understanding contributes to the design and implementation of public policies in the municipality of Palmira, and is guided by it.

For this reason, territorial peace would make peacekeeping and peacebuilding a real and observable process for citizens, particularly for marginalized populations. However, a major analysis of the type of peace that people, especially women, want to achieve in each territory is necessary. This understanding is only possible through the generation of data that contributes to gender equity by researching the

individual perspectives that women have regarding peace. The data will also help to fill the gaps on this topic, which relates to the Sustainable Development Goal of ending poverty (Departamento Nacional de Planeación 2019). Besides, the research allows public policies to be designed based on knowledge. As a result, these data will contribute to (1) the analysis and impact of each territory and (2) the design of policies in the Palmira municipality. In addition, the benefit of such a study is that it takes into account the real conditions of its citizens, contributing to the elimination of structural violence in order to promote peace.

Finally, although this study was only carried out in the city of Palmira, the proposal is addressed to other local governments along with their institutions. There is a call to action to become sensitive to gender equity problems during this crucial phase of transition to peace, adopting a territorial peace approach that considers the specific circumstances of women in their territories, i.e., a peace that is widely understood and encompasses the main problems faced by women in their communities. The intention is to allow these women to recognize the skills and capacities they have in order to contribute to the achievement of a stable and lasting peace.

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References

- AWID. 2004. Interseccionalidad: Una herramienta para la justicia de género y la justica económica. *Derechos de las Mujeres y Cambio económico* 9: 1–8.
- Bautista, Sandra Carolina. 2017. Contribuciones a la fundamentación conceptual de paz territorial. *Ciudad Paz Ando* 10: 100–10. [CrossRef]
- Cabello-Tijerina, Paris A., and Karen Quiñones. 2019. La Relevancia de la Perspectiva Territorial y Femenina en la Construcción de Paz en Colombia. *Convergencia* 80: 25. [CrossRef]
- Cabello-Tijerina, Paris Alejandro, Sandra Emma Valdés Carmona, Francisco Javier Gómez Gorjón, Emilia Ortuño Iglesias, Karla Annett Cynthia López Sáenz, and y Reyna Lizeth Gutiérrez Vázquez. 2016. Cultura de paz. Ciudad de México: Universidad Autónoma de Nuevo León.
- Chaparro González, Nina, and Margarita Martínez Osorio. 2016. Negociando Desde Los Márgenes: La Participación Política de Las Mujeres En Los Procesos de Paz de Colombia (1982–2016). Bogotá: Dejusticia, Available online: https://www.dejusticia.org/publication/negociando-desde-los-margenes-laparticipacion-politica-de-las-mujeres-en-los-procesos-de-paz-de-colombia-1982-2016/ (accessed on 6 July 2020).
- Citizen Council for Public Security and Criminal Justice. 2020. Boletín Ranking 2019 de Las 50 Ciudades Más Violentas Del Mundo. Ciudad de México: Consejo Ciudadano para la Seguridad Pública y Justicia Penal, Available online: http://www.seguridadjusticiaypaz.org.mx/sala-de-prensa/1590-boletin-ranking-2019-de-las-50-ciudades-mas-violentas-del-mundo (accessed on 9 June 2020).
- Collins, Patricia. 2008. Toward a New Vision: Race, class, and gender as categories of analysis and connection. *Race Sex & Class* 1: 25–45.
- Congreso de Colombia. 1994. *Régimen de los Servicios Públicos Domiciliarios: Ley 142 de 1994*; Bogotá: Diario Oficial. Available online: https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=2752 (accessed on 12 June 2019).
- Connell, Raewyn. 2012. Masculinity research and global change. Masculinities and Social Change 1: 4-18.
- Crenshaw, Kimberle. 1991. Mapping the margins: Intersectionality; Identity politics and violence against women of color. *Stanford Law Review* 6: 1241–99. [CrossRef]
- Crenshaw, Kimberle. 2016. The Urgency of Intersectionality. TED Women 2016. Available online: https://www.ted.com/talks/kimberle_crenshaw_the_urgency_of_intersectionality#t602206 (accessed on 1 October 2018).

- Criado, Marcos De Diego. 2017. Qué es la paz territorial? In *La paz en el Territorio Poder Local y Posconflicto en Colombia*. Edited by Marcos De Diego Criado. Bogotá: Universidad Externado de Colombia, pp. 17–68.
- DANE. 2019. Boletín Técnico: Pobreza Monetaria en Colombia; Bogotá: DANE. Available online: https://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/2018/bt_pobreza_monetaria_18.pdf (accessed on 3 May 2019).
- DANE and UN Women. 2019. Boletín Estadístico: Empoderamiento Económico de las Mujeres en Colombia; Bogotá: DANE and ONU Mujeres. Available online: https://www.dane.gov.co/files/investigaciones/genero/publicaciones/BoletinEstadístico-ONU-Mujeres-DANE.pdf (accessed on 6 July 2020).
- De Greiff, Pablo. 2009. Articulating the Links between Transitional Justice and Development: Justice and Social Integration. In *Transitional Justice and Development: Making Connections*. Edited by Pablo De Greiff and Roger Duthie. New York: International Center for Transitional Justice and Social Science Research Council, pp. 28–75.
- Departamento Nacional de Planeación. 2019. La Agenda 2030 En Colombia—Objetivos de Desarrollo Sostenible; Bogotá: Departamento Nacional de Planeación. Available online: https://www.ods.gov.co/es/data-availability (accessed on 11 June 2020).
- Duthie, Roger. 2014. Transitional Justice, Development, and Economic Violence. In *Justice and Economic Violence in Transition*. Edited by Dustin N. Sharp. New York: Springer, pp. 165–201.
- ECLAC. 2020. Anuario Estadístico de América Latina y el Caribe 2019. Santiago: Naciones Unidas, Available online: https://www.cepal.org/es/publicaciones/45353-anuario-estadistico-america-latina-caribe-2019-statistical-yearbook-latin (accessed on 6 July 2020).
- Féron, Élise. 2020. Reinventing Conflict Prevention? Women and the Prevention of the Reemergence of Conflict in Burundi. *Conflict Resolution Quarterly* 3: 239–52. [CrossRef]
- Galtung, Johan. 1969. Violence, peace, and peace research. Journal of Peace Research 3: 167–91. [CrossRef]
- Galtung, Johan. 2003. Violencia cultural. Gernika Gogoratuz 14: 1–36.
- Gobierno Nacional, y FARC-EP. 2016. Acuerdo Final para la Terminación del Conflicto y la Construcción de una Paz Estable y Duradera; Bogotá: Gobierno Nacional, y FARC-EP. Available online: http://www.altocomisionadoparalapaz. gov.co/herramientas/Documents/Acuerdo-Final-AF-web.pdf (accessed on 10 July 2020).
- Guarín, Sergio. 2016. La Paz Territorial y sus Dilemas: La Participación Ciudadana. Available online: https://www.razonpublica.com/index.php/conflicto-drogas-y-paz-terrisorial-y-sus-dilemas-la-participaci%C3%B3n-ciudadana.html (accessed on 1 August 2018).
- Hernández, Héctor Andrés, and Alina Eugenia Barrera Pascual. 2017. Validación de un instrumento de investigación para el diseño de una metodología de autoevaluación del sistema de gestión ambiental. Revista de Investigación Agraria y Ambiental 1: 157–63. [CrossRef]
- Instituto Nacional de Medicina Legal y Ciencias Forenses. 2019. Forensis 2018: Datos para la Vida; Bogotá: Instituto Nacional de Medicina Legal y Ciencias Forenses. Available online: https://www.medicinalegal. gov.co/documents/20143/386932/Forensis+2018.pdf/be4816a4-3da3-1ff0-2779-e7b5e3962d60 (accessed on 13 July 2020).
- Jaramillo, Sergio. 2016. Foro Cómo Construir La Paz En Los Territorios? Oficina del Alto Comisionado para la Paz. Available online: https://www.youtube.com/watch?v=p5vX8wWnwMU (accessed on 12 June 2020).
- Lambourne, Wendy. 2014. Transformative justice, reconciliation and peacebuilding. In *Transitional Justice Theories*. Edited by Susanne Buckley-Zistel, Teresa Beck Koloma, Christian Braun and Friederike Mieth. New York: Routledge, pp. 19–39.
- Medeiros, Marcelo, and Joana Acosta. 2008. Is there a feminization of poverty in Latin America. *World Development* 1: 115–27. [CrossRef]
- Observatorio de Familia. 2017. Municipio de Palmira. Violencia Intrafamiliar, Maltrato Infantil y Violencia Sexual. Enero - Julio 2017. Palmira: Fundación Progresamos, Available online: http://www.fundacionprogresamos. org.co/datos-y-cifras-ob-familia (accessed on 31 May 2018).
- Observatorio Feminicidios Colombia. 2020. Feminicidios en Colombia en el Año 2019: Resumen Anual. Medellín: Observatorio Feminicidios Colombia, Available online: http://www.observatoriofeminicidioscolombia.org/index.php/seguimiento/noticias/412-571-feminicidios-en-colombia-en-el-ano-2019 (accessed on 13 July 2020).
- Pierson, Claire. 2019. Gendering Peace in Northern Ireland: The Role of United Nations Security Council Resolution 1325 on Women, Peace and Security. Capital and Class 1: 57–71. [CrossRef]

- Platero, Raquel Lucas. 2014. Es el análisis interseccional una metodología feminista y queer? In *Otras Formas de Reconocer*. Edited by Irantzu Mendia Azkue, Marta Luxan, Matxalen Legarreta, Gloria Guzman and Iker Zirion y Jokin Carballo Azpiazu. Bilbao: Universidad del País Vasco, pp. 79–95.
- PNUD. 2016. Objetivos de Desarrollo Sostenible, Colombia: Herramientas de Aproximación al Contexto Local. Bogotá: Programa de las Naciones Unidas para el Desarrollo, Available online: http://www.co.undp.org/content/dam/colombia/docs/ODM/undp-co-ODSColombiaVSWS-2016.pdf (accessed on 9 May 2018).
- Ramsbotham, Oliver, Tom Woodhouse, and Hugh Miall. 2017. Contemporary Conflict Resolution. Cambrigde: Polity. Ríos, Jerónimo, and Egoits Gago. 2018. Realidades y desafíos de la paz territorial en Colombia. Papers 2: 281–302. [CrossRef]
- Ross, Nancy. 2019. Applying a Peacebuilding Framework to Gendered Partner Violence in Rural Canada. Peace Research 2: 7–42.
- Salaudeen, Abdulkadir, and Dahiru Dauda Gombi. 2019. View of Gender Mainstreaming in Peace Building and Conflict Resolution in Nigeria: North East in Focus. *KIU Journal of Social Sciences* 1: 139–46.
- Schwarz, Vivian Blum, and Cecilia Ponce Estrada. 2017. Segunda Encuesta Nacional de Percepciones sobre Situación de Violencia Contra las Mujeres en Bolivia. Cochambamba: Ciudadanía, Available online: http://www.ciudadaniabolivia.org/sites/default/files/archivos_articulos/SENPALSV_2017.pdf (accessed on 15 June 2019).
- Sharp, Dustin. 2014. Transitional Justice, Development, and Economic Violence. In *Addressing Economic Violence in Times of Transition*. Edited by Dustin N. Sharp. New York: Springer, pp. 1–26.
- UN. 2006. Secretario General. In Poner Fin a la Violencia contra la Mujer: De las Palabras a los Hechos. New York: Naciones Unidas, Available online: http://www.un.org/womenwatch/daw/public/VAW_Study/VAW-Spanish. pdf (accessed on 26 February 2019).
- United Nations. 2004. The Rule of Law and Transitional Justice in Conflict and Post-conflict Societies; Report of the Secretary General 23 August, S/2004/616. New York: United Nations.
- United Nations Peacebuilding Support Office. 2014. *Guidelines on Application and Use of Funds*. New York: United Nations Peacebuilding Fund.
- UN Women. 2018. Hacer las Promesas Realidad: La Igualdad de Género en la Agenda 2030 para el Desarrollo Sostenible. New York: ONU Mujeres, Available online: http://www.unwomen.org//media/headquarters/attachments/sections/library/publications/2018/sdg-report-gender-equality-in-the-2030-agenda-for-sustainable-development-2018-es.pdf?la=es&vs=834 (accessed on 10 May 2018).

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