

Special Issue Reprint

Sustainability and Human Resources Management

Evaluating Challenges and Impacts for
the Employee-Organization Relation

Edited by
Daniel Roque Gomes, Neuza Ribeiro and Maria João Santos

mdpi.com/journal/admsci

Sustainability and Human Resources Management: Evaluating Challenges and Impacts for the Employee-Organization Relation

Sustainability and Human Resources Management: Evaluating Challenges and Impacts for the Employee-Organization Relation

Editors

Daniel Roque Gomes

Neuza Ribeiro

Maria João Santos



Basel • Beijing • Wuhan • Barcelona • Belgrade • Novi Sad • Cluj • Manchester

Editors

Daniel Roque Gomes
Rua Dom João III
Coimbra
Portugal

Neuza Ribeiro
CARME—Centre of Applied
Research in Management and
Economics, ESTG
Leiria
Portugal

Maria João Santos
Rua do Quelhas
Lisboa
Portugal

Editorial Office

MDPI
St. Alban-Anlage 66
4052 Basel, Switzerland

This is a reprint of articles from the Special Issue published online in the open access journal *Administrative Sciences* (ISSN 2076-3387) (available at: https://www.mdpi.com/journal/admsci/special_issues/sustainability_leadership).

For citation purposes, cite each article independently as indicated on the article page online and as indicated below:

Lastname, Firstname, Firstname Lastname, and Firstname Lastname. Article Title. *Journal Name* **Year**, *Volume Number*, Page Range.

ISBN 978-3-7258-1471-8 (Hbk)

ISBN 978-3-7258-1472-5 (PDF)

doi.org/10.3390/books978-3-7258-1472-5

© 2024 by the authors. Articles in this book are Open Access and distributed under the Creative Commons Attribution (CC BY) license. The book as a whole is distributed by MDPI under the terms and conditions of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) license.

Contents

About the Editors	vii
Daniel Roque Gomes, Neuza Ribeiro and Maria João Santos “Searching for Gold” with Sustainable Human Resources Management and Internal Communication: Evaluating the Mediating Role of Employer Attractiveness for Explaining Turnover Intention and Performance Reprinted from: <i>Adm. Sci.</i> 2023 , <i>13</i> , 24, doi:10.3390/admsci13010024	1
Marlene Sousa, Eulália Santos, Tânia Santos and Márcio Oliveira The Influence of Empowerment on the Motivation of Portuguese Employees—A Study Based on a Structural Equation Model Reprinted from: <i>Adm. Sci.</i> 2023 , <i>13</i> , 230, doi:10.3390/admsci13110230	16
Afriyadi Cahyadi, Diah Natalisa, József Poór, Badia Perizade and Katalin Szabó Predicting the Relationship between Green Transformational Leadership, Green Human Resource Management Practices, and Employees’ Green Behavior Reprinted from: <i>Adm. Sci.</i> 2023 , <i>13</i> , 5, doi:10.3390/admsci13010005	29
Olubanke Tolulope Bayode and Ana Patrícia Duarte Examining the Mediating Role of Work Engagement in the Relationship between Corporate Social Responsibility and Turnover Intention: Evidence from Nigeria Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 150, doi:10.3390/admsci12040150	44
Ana Patrícia Duarte and Vítor Hugo Silva Satisfaction with Internal Communication and Hospitality Employees’ Turnover Intention: Exploring the Mediating Role of Organizational Support and Job Satisfaction Reprinted from: <i>Adm. Sci.</i> 2023 , <i>13</i> , 216, doi:10.3390/admsci13100216	59
Pilar Mosquera, Paula C. Albuquerque and Winnie Ng Picoto Is Online Teaching Challenging Faculty Well-Being? Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 147, doi:10.3390/admsci12040147	76
Nurul Mohammad Zayed, Friday Ogbu Edeh, Khan Mohammad Anwarul Islam, Vitalii Nitsenko, Tetiana Dubovyk and Hanna Doroshuk An Investigation into the Effect of Knowledge Management on Employee Retention in the Telecom Sector Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 138, doi:10.3390/admsci12040138	92
Minsuck Jin and Boyoung Kim Effects of ESG Activity Recognition Factors on Innovative Organization Culture, Job Crafting, and Job Performance Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 127, doi:10.3390/admsci12040127	106
Carla Freire, Joana Gonçalves and Maria Rita Carvalho Corporate Social Responsibility: The Impact of Employees’ Perceptions on Organizational Citizenship Behavior through Organizational Identification Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 120, doi:10.3390/admsci12030120	122
Jéssica Fachada, Teresa Rebelo, Paulo Lourenço, Isabel Dimas and Helena Martins Green Human Resource Management: A Bibliometric Analysis Reprinted from: <i>Adm. Sci.</i> 2022 , <i>12</i> , 95, doi:10.3390/admsci12030095	140

About the Editors

Daniel Roque Gomes

Daniel Roque Gomes is a Professor at the School of Education, Polytechnic University of Coimbra, Portugal. He has also been the Vice-President of the Polytechnic University of Coimbra since 2021 and was the Administrator of the Polytechnic University of Coimbra from 2017 to 2021. Daniel Roque Gomes holds a post-doc from Socius-ISEG—the Higher Institute of Economics and Management at the University of Lisbon. He also holds a PhD in Work and Organizational Psychology from ISCTE-IUL. His research interests are broadly focused on human resource management, organizational internal communication, leadership, sustainable human resource management, and organizational behavior.

Neuza Ribeiro

Neuza Ribeiro is a Coordinator Professor at the School of Technology and Management, Polytechnic University of Leiria, Portugal. She is also a researcher at CARME—Center of Applied Research in Management and Economics. Neuza holds a post-doc in Management and a PhD in Industrial Management with a specialization in Organizational Behavior from Aveiro University. She served as a guest professor at the Faculty of Economics of the University of Coimbra and ISCAC, Polytechnic University of Coimbra. From 2015 to 2017, she was the head of the Department of Management and Economics at the School of Technology and Management. Furthermore, she served as the coordinator of CARME from 2019 to 2022 and is currently the coordinator of the Master of Management program. Her research broadly focuses on human resource management and organizational behavior.

Maria João Santos

Maria João Santos was awarded her doctorate in Economic and Organizational Sociology and is currently a tenured Associate Professor at ISEG—the Higher Institute of Economics and Management at the University of Lisbon and a full member of the specialist research unit SOCIUS. Maria Joao is the coordinator of the Inter-university OpenSoc Doctoral Degree Program in Sociology and also serves as a member of the Scientific Board for the master's degree in Human Resources and Management. She has supervised various research projects within the framework of sustainable development and the social responsibility of organizations and has authored and co-authored various books alongside peer-reviewed articles on these scientific fields for which she is an international award winner.

Article

“Searching for Gold” with Sustainable Human Resources Management and Internal Communication: Evaluating the Mediating Role of Employer Attractiveness for Explaining Turnover Intention and Performance

Daniel Roque Gomes ^{1,*}, Neuza Ribeiro ² and Maria João Santos ³

- ¹ Polytechnic Institute of Coimbra, ICNOVA—NOVA Institute of Communication, 1069-061 Lisbon, Portugal
² CARME—Center of Applied Research on Management and Economics, Polytechnic Institute of Leiria, 2411-901 Leiria, Portugal
³ Lisbon School of Economics and Management—ISEG, SOCIUS—Centro de Investigação em Sociologia e das Organizações, 1200-781 Lisboa, Portugal
* Correspondence: drmgomes@esec.pt

Abstract: Objective: The main objective of this study is to evaluate the impact of sustainable human resources management (SHRM) and internal communication (IC) on turnover intention (TI) and employee performance (PER) while assessing the mediating role of organizational attractiveness (AT) over these relationships. In this sense, this study intends to evaluate the effect of SHRM and IC on employee PER and TI, with AT acting as the mediator in a joint model of analysis. **Methodology:** To achieve the aforementioned purposes, a cross-sectional quantitative study was prepared using the Structural Equation Model (SEM). In total, 177 individuals participated in the study. Regarding gender, 62.4% were female. Participants came from all districts of Portugal and were aged from 21 years old to over 55 years old. **Results:** The main results show that both SHRM and IC are significantly correlated with AT, PER, and TI. Additionally, AT has a total mediation effect in the relationship between SHRM, PER, and TI and also between IC, PER, and TI. **Practical implications:** These results seem to support the need for organizations to invest in combined strategies and practices that aim to intertwine SHRM and IC towards the benefit of the worker. Both areas have been shown to have solid effects over PER and TI, as well as on the development of favorable worker perceptions that identify the organization as a good place to work. Practitioners should look at both SHRM and IC as valid ways of stimulating the quality of the worker–organization relationship. Incorporating these areas into common strategic planning and consecutive practices seems advisable regarding workers’ performance and employee retention.

Keywords: sustainable human resources management; internal communication; attractiveness; performance; turnover intention

Citation: Gomes, Daniel Roque, Neuza Ribeiro, and Maria João Santos. 2023. “Searching for Gold” with Sustainable Human Resources Management and Internal Communication: Evaluating the Mediating Role of Employer Attractiveness for Explaining Turnover Intention and Performance. *Administrative Sciences* 13: 24. <https://doi.org/10.3390/admsci13010024>

Received: 26 December 2022
Revised: 9 January 2023
Accepted: 12 January 2023
Published: 16 January 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Sustainability is hardly a recent subject with regard to human resources management (HRM) or research into communication. The subject has been the center of wide discussions from practitioners and researchers aiming to discover valid ways of enhancing firm competitiveness through sustainability for quite some time (e.g., Elkington 1998). The subject has been brought towards the attention of HRM over the last decade, as managers and researchers became interested in understanding how to build effective and impactful sustainable HRM (SHRM) practices (e.g., Ehnert et al. 2014; Wikhamn 2019). The idea of providing HRM with a focal relevance towards the maximum aim of supporting corporate sustainability (CS) development goals has gathered support from those who see it as a valid way of renewing the area’s strategic centrality. Likewise, communication professionals and researchers have also been exploring the challenges facing those seeking to realize

sustainability goals. As internal communication (IC) deals with the critical aspect of how information is managed within the organization, it is a central aspect for assuring workers' involvement with the strategic sustainability compromises of their firm.

It is interesting to see that, commonly, the areas of HRM and IC are considered independently from one another in terms of the development of internal policies, practices, or procedures aimed towards workers. This reality is mainly due to HRM and IC professionals not necessarily sharing the exact same starting points of analysis over organizations' development needs, as HRM is closely related to management orientations and IC is closely related to communication orientations. The area of HRM starts from HR being regarded as a matter of investment towards the maximization of productivity benefits. On the other hand, the area of IC emerges from an understanding that workers have informational needs that deserve adjusted forms of information dissemination regarding the existence of different internal publics. These starting points have led to the formation of distinctive kinds of practices (that can be developed independently from one another) that aim to attain diverse outputs. Both areas, however, agree over the importance of internal investment, and also agree that workers are a key element in organizational development. As managers and researchers traditionally make attempts to "search for gold" in order to find renewed ways of stimulating relevant outputs, generating alignment between both areas seems an appealing idea to search for. To stimulate proximity between these areas, organizations need to have sufficiently strong strategic compromises to bridge the two areas. Thus, there is an immediate question that has come to our attention: can SHRM and IC stimulate similar attitudinal and behavioral responses in workers?

This study's main research questions are the following: what is the predictive effect of SHRM and IC on workers' performance (PER) and turnover intention (TI) and does the perception of organizational attractiveness (AT) mediate these relationships?

2. Literature Review

2.1. Sustainable Human Resources Management and Internal Communication

The new millennium worldwide agenda has brought the sustainability issue to the forefront in terms of countries' development concerns. The current Sustainable Development Goals (SDGs) approved by the United Nation's General Assembly on the 25 of September 2015 have worked as an effective source of motivation that has pressured governments to consider environmental protection alongside their desire for economic prosperity. An important milestone for this current agenda was, without a doubt, the work carried out by the Brundtland Commission. This commission was a United Nation's sub-organization created in 1983 with the purpose of bonding countries to sustainable development concerns. In 1987, the Brundtland Commission was dissolved after releasing the report "Our Common Future" (also known as the Brundtland Report) (Brundtland Commission 1987). The report was effective at emphasizing environmental concerns as a core element of government policies and defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). Current SDGs share the philosophical alignment of the Brundtland Report.

Research into combining HRM and sustainability has been gathering contributions related to the SDGs, notably the (a) economic growth and (b) decent work SDGs, thus resulting in a visible trend in research on HRM (e.g., De Prins et al. 2014; Diaz-Carrion et al. 2018; Raveenther 2020). While this SHRM research trend is growing within HRM literature, existing research is still characterized by a focus on the impact of SHRM on business and on society (e.g., Randev and Jha 2019; Raveenther 2020) and not so much on discussing how to proceed (e.g., Ehnert et al. 2019).

SHRM consists of a way of permitting the "achievement of financial, social and ecological goals while simultaneously reproducing the HR base over a long term" (Kramar 2014, p. 1084). It may also be defined as "the adoption of HRM strategies and practices that enable the achievement of financial, social and ecological goals, with an impact inside and outside of the organization and over a long-term horizon" (Ehnert et al. 2016, para. 90).

Thus, it represents a long-term compromise with the cause of sustainability, inviting organizations to set up a display of HR practices seeking to “minimize the negative impacts on the natural environment and on people and communities, and acknowledges the critical enabling role of CEOs, middle and line managers, HRM professionals and employees” (Kramar 2014, p. 1084). Consequently, SHRM may be a quite viable way of enabling employee integration into the organization’s sustainability strategy.

Research under the remit of SHRM covers diverse topics. A very compelling classification typology is delivered by Ehnert et al. (2019), in which the authors propose four types of SHRM: (a) Socially Responsible HRM (type 1). A trend in research oriented towards the link between HRM and corporate social responsibility, majorly based on approaching in what way the firm’s HR systems and practices capture CSR concerns. (b) Green HRM (type 2). A trend in research aimed at investigating employee involvement in the organization’s environmental sustainability strategy. (c) Triple Bottom Line HRM (type 3). A trend in research approaching HR functions that is pointed towards the people-oriented practices that encapsulate triple bottom line influences and how they shape HRM actions. (d) Common Good HRM (type 4). An underdeveloped research trend aiming to deliver business models addressing “the call for a new paradigm by redefining the purpose of business in terms of common good values” (p. 5). This area of research also seeks to outline the ways in which HRM can “support business leaders and employees in contributing to ecological and social progress in the world” (p. 5).

From a pragmatic perspective, Gomes and Santos (2022) arranged existing literature within this field according to three core components of SHRM, in which each component makes its own contribution under the broader goal of developing sustainable HRM strategies and practices. Each component bears unique sets of action, thus facilitating the construction of pragmatic means of developing sustainability through the way people are managed according to sustainability strategies. The components are as follows: (1) Green HRM includes HR policies and practices that are intended to centralize a firm’s resources towards supporting workers’ ecological awareness, in which the practical implications are based on the shaping of HR practices for environmental actions. (2) Ethical and Socially Responsible HRM is directed towards the implementation of ethical premises in HRM practices and policies that aim to enrich organizational social performance within CSR performance. (3) Interactionist HRM is directed towards the development of consistent worker involvement in their company’s sustainability efforts. For this matter, this component calls attention to the need to enrich workers with stimuli regarding sustainability goals, in which, based on the functions and prospects of IC, both SHRM and IC should be outlined and prepared with solid contact points.

By definition, IC refers to the “strategic management of interactions and relationships between stakeholders at all levels within organizations” (Welch and Jackson 2007, p. 183). Thus, IC is a strategic area that permits organizations to produce value creation by dealing with the strategic management of information and communication within the organization. For this purpose, Vergheze (2017) argues that IC (1) enables employees to be educated concerning culture and values, (2) encourages the involvement of employees in the business, (3) aligns the employee’s actions with the needs of customers, (4) allows for the integration of new employees, (5) stimulates the sharing of internal information, and (6) supports leadership processes and outputs. IC is a strategic tool that can be used for information sharing and the creation of bonds between the workers and the organization, which thus helps build an organization’s culture. According to Westphalen (1998), IC assumes three main strategic global functions: (1) information exposition, (2) information transmission, and (3) the inclusion of workers in the organization’s reality and purposes. These global functions are central to the development of internal strategic agendas related to an organization’s superior intentions, such as sustainability compromises. Ćorić et al. (2020) suggest that IC deals with all communication that takes place inside a given organization and represents shared ideas and information, as well as the stimulation of attitudes and behavior that support the organization in meeting their objectives.

Designing IC strategies and practices demands action plans that have been developed in accordance with global strategic orientations. A very compelling way of considering how to manage IC deals with the symmetrical communication perspective model (Grunig 1992). The main idea surrounding the model here considered is that whenever IC is developed in accordance with symmetry, it will more likely stimulate openness and reciprocity concerning organizational values, culture, and practices, as well as openness between managers and organizations on the basis of mutual understanding and acceptance (Yue et al. 2020).

Grunig (1992) postulated that asymmetrical communication is unbalanced by nature as it only considers the top-down circuit of information inside an organization to be relevant. On the other hand, symmetrical communication is based on the notion that the information that circulates from a top-down perspective is as important as the information that circulates in a bottom-up circuit, implying that the workers are a very important and critical aspect in the growth of an organization's IC strategies. Thus, symmetrical communication allows for the interests of the organization and the worker to be presented, in which both sides are respected and considered in a similar way (Men and Stacks 2014). The notion of open communication and reciprocity, as well as negotiation between organization and workers, is thus widely accepted and desired, with the maximum goal of promoting ideas based on mutual respect that consider and involve both top-down and bottom-up circuits of information (Yue et al. 2020).

An analysis of the collaboration between sustainable HRM and IC seems not only possible but advisable. Despite the areas of HRM and IC being rooted in different orientations under different theoretical and practical guidance, both areas share a common concern: the workers. The area of IC has its roots in communication theory and mostly views the workers as internal publics having internal needs. On the other hand, HRM is rooted in management theory and is concerned with the development of HRM practices that result in relevant productive processes. From a holistic perspective embedded within the sustainability compromise, it seems quite possible and interesting to conceive that both areas could share a common alignment that is pointed toward valuing workers. Both SHRM and IC aim to develop activities and structures of action that favor workers within their productive processes. Stimulating interactive policies between SHRM and IC under the sustainability umbrella may very well be a valid path to follow. However, to understand how and if this is manageable, there is a fundamental empirical research question worthy of consideration: can SHRM and IC stimulate similar attitudinal and behavioral responses in workers, thus justifying the bridging of these areas?

2.2. Organizational Attractiveness, Performance, and Turnover Intention

Organizational attractiveness relates to the degree to which an organization is perceived as a good place to work or to the desirability of having a work relation with a given organization (Aiman-Smith et al. 2001). Due to the importance of this indicator, several researchers have dedicated their efforts toward an understanding of attractiveness predictors and consequences (e.g., Joseph et al. 2014; Krysz and Konradt 2022), especially in the context of understanding which factors determine the attraction of an organization to a worker in recruitment or employee retention contexts (Collins and Kanar 2013).

Several attractiveness predictors are known, such as person–organization fit (e.g., Lievens et al. 2001; Cinar 2019), job and organizational attributes (e.g., Gomes and Neves 2010; Gomes and Neves 2011; Lievens 2007; Roongrerngsuke and Liefoghe 2013) procedural justice (e.g., Ranjan and Yadav 2018), workplace authenticity (e.g., Reis et al. 2017), prior work experiences (e.g., Gomes and Neves 2010) and corporate social responsibility (Story et al. 2016). Attractiveness has also been associated with several relevant consequences for organizations, such as job pursuit intentions (e.g., Khan and Muktar 2020), intention to apply to a job vacancy (e.g., Gomes and Neves 2019), employee engagement (e.g., Slåtten et al. 2019), turnover intention (e.g., Ranjan and Yadav 2018; Slåtten et al. 2019), employee performance (e.g., Nguyen et al. 2021), and employer brand perception (e.g., Joglekar and Tan 2022).

However, it is interesting to see that, despite attractiveness being known for its association with relevant organizational indicators, not much is yet answered regarding its relation to internal communication. We were able to locate a study worthy of consideration in this matter, which indicated a promising association between IC satisfaction and attractiveness (Tkalac Verčič et al. 2021); this study explored the effect of IC on employee engagement and attractiveness, in which results showed a positive and significant association.

Also relevant and worthy of consideration is a certain absence of knowledge regarding the relationship between SHRM and organizational attractiveness, despite relevant clues seeming to suggest a relation. Existing research presents concrete evidence of an association between green human resources management and organizational attractiveness (e.g., Umrani et al. 2022; Merlin and Chen 2022; Chaudhary and Firoz 2022). This relation seems expected and justified by the importance of green HRM to current workers' evaluation of the values that their employer holds. Likewise, the relationship between CSR and attractiveness is also known (e.g., Duarte et al. 2014; Agnihotri and Bhattacharya 2021). Furthermore, the association between sustainable HRM and attractiveness has also been worthy of consideration, showing promising positive and meaningful associations in both conceptual (e.g., App et al. 2012) and empirical studies (e.g., Jafri 2021). Also worthy of consideration regarding this issue is a study developed by Merlin and Chen (2022), in which the authors found green human resource management to have a positive and significant influence on organizational reputation and organizational attractiveness. Likewise, Chaudhary (2020) also established a positive relationship between green human resources management and organizational attractiveness, in which attractiveness played a mediatory role in explaining the intention to pursue a career in an organization.

Due to this existing evidence, it seems that both IC and SHRM are associated with organizational attractiveness, and we thus propose the following hypotheses:

H1: *Internal communication is positively and significantly related to organizational attractiveness.*

H2: *Sustainable HRM is positively and significantly related to organizational attractiveness.*

Employee performance has been a subject of interest in many studies, as understanding how to predict an employee's efficiency or effectiveness in work contexts is a critical matter for every organization. It is considered as the duties and tasks that are committed to within the organization and that must be performed according to the goals prepared and determined by the organization (Liao 2009). The association between HRM and performance is known and seems to be quite stable based on the assumption that people are a strategic asset to organizations (e.g., Kazlauskaite and Buciuniene 2010). Several empirical studies have shown a link between HRM and employee performance in different contexts. For instance, Alsafadi and Altahat (2020) found a positive and meaningful association between HRM practices and employee performance. In the same manner, Mahfouz et al. (2021) observed that HRM practices have a significant impact on employee performance in a relation mediated by employee commitment.

Another aspect deserving consideration is renewed interest regarding the link between HRM and employee performance, which has arisen due to the sustainability issue in HRM. Empirical evidence regarding the relationship between SHRM and employee performance is still scarce, despite relevant indications showing the research effort that should be made to evaluate the relation. Jerónimo et al. (2020) developed a very interesting study showing that the relation between SHRM and employee performance is not a direct one and is mediated by either perceived organizational rationale for sustainability or organizational identification. Furthermore, Tortia et al. (2022) found compelling results showing that SHRM practices related to involvement and workload positively influence performance. In a similar way, Manzoor et al. (2019) found that sustainable HRM practices, such as selection, participation, and employee empowerment, have a significant and positive influence on employee job performance.

Following the same reasoning, the relationship between IC and employee performance is also very important to establish. The idea that the way how an organization informs

their workers and manages communication channels within the organization influences performance and productivity seems valid. Existing evidence, though scarce, seems to validate the relation. For instance, Titang (2013) provided empirical evidence regarding this relation, showing that IC has a significant impact on employee performance and that employee performance may be stifled due to inadequate communication structures. In the same line of research, Polycarp (2022) found that IC has a significant positive relationship with staff performance. Thus, it seems appropriate to suggest that both SHRM and IC should have a positive and meaningful association with employee performance. According to our line of reasoning, we propose the following hypotheses:

H3: *Internal communication is positively and significantly related to performance.*

H4: *Sustainable HRM is positively and significantly related to performance.*

The ability for an organization to produce depends on workers putting their talent up to the challenge of succeeding organizational goals, and thus retaining skillful workers will always be a priority for top managers. Understanding ways to avoid employee turnover is a vigorous challenge for modern organizations and is crucial if competitive organizations are to remain stable in terms of their long-term viability. This is because high turnover rates result in high recruitment costs and training requirements, a loss of experienced workers, and negative impacts on a company's performance (Ton and Huckman 2008).

Employee turnover intention (TI), by definition, is the employee's willingness to voluntarily abandon their current career at an organization (Lazzari et al. 2022). Studying what determines turnover intention and understanding valid ways of controlling employee's voluntary abandonment of organizations has been a matter of interest among researchers for quite some time, despite some doubts persisting over a complete perspective regarding relevant predictors. Nevertheless, several determinants of TI have been established, including intrinsic and extrinsic motivators (e.g., Miao and Rhee 2020), emotional intelligence (e.g., Ouerdian et al. 2021), CSR perceptions (e.g., Gaudêncio et al. 2020) emotional stability and organizational commitment (e.g., Tsaousoglou et al. 2022), job satisfaction (e.g., Jenkins and Thomlinson 1992), work–family conflict (e.g., Ribeiro et al. 2021a, 2021b), authentic leadership (e.g., Ribeiro et al. 2020b), organizational justice (e.g., Mengstie 2020), HRM practices (e.g., Memon et al. 2021), job characteristics (e.g., Ahmad 2018), training satisfaction and work engagement (e.g., Memon et al. 2016), leaders' coaching skills (Romão et al. 2022), and burnout (Gomes et al. 2022).

An overview of the content of IC and sustainable HRM research suggests that both indicators should be significantly and negatively related to employee's turnover intention. When searching for valid predictors of employee's TI, it seems that both IC and SHRM work well for organizations as structures that aid in predicting TI. In accordance, we propose the following hypotheses:

H5: *Internal communication is negatively and significantly related to turnover intention.*

H6: *Sustainable HRM is negatively and significantly related to turnover intention.*

When considering the revisions presented earlier, as well as the foreseen associations between IC, SHRM, organizational attractiveness, TI, and performance, we believe that an integrative and holistic model of analysis is possible to propose. The sequence of relationships we are proposing may be justified by the Theory of Reasoned Action (Fishbein and Ajzen 1975). Using the rationale suggested by this theoretical framework, there are a sequence of steps that explain behavior intention and behavior. A person's beliefs concerning the characteristics and attributes of an object determine an attitude, which is a personal positive or negative evaluative positioning regarding the object itself. A person's behavioral disposition results from attitudinal positioning regarding the object. Using the theoretical reasoning provided, we propose that both IC and SHRM may function as beliefs (descriptively formed beliefs) (Fishbein and Ajzen propose that individuals are able to form beliefs in several ways: informationally, through acceptance of information regarding an

object; descriptively, based on an individual's experience facing an object; or inferentially, based on inferences beyond observable events) about the organization that can shape favorable or unfavorable attitudes. Organizational attractiveness results from the belief formation process (subsequently leading to the status of attitude) as it deals, by definition, with the favorable positioning of an organization as a good place to work. Lastly, both TI and performance have the status of behavioral intention outputs. As such, we propose that TI and performance results from a process in which organizational attractiveness acts as a mediator in the relationship established between IC and sustainable HRM. According to the reasoning made, we propose the following mediation hypotheses:

H7: *Organizational attractiveness mediates the relation between internal communication and performance and between internal communication and turnover intention.*

H8: *Organizational attractiveness mediates the relation between sustainable HRM and performance and between sustainable HRM and turnover intention.*

3. Method

Sample and Procedure

A quantitative methodological approach was conceived to best explore this study's purposes and hypotheses through the use of a cross-sectional study design. Concerning the data collection procedure, a questionnaire was prepared on the Google Forms platform and made available on social networks from 15 June to 30 of July 2022, which thus provided a diverse group of participants for the study. The questionnaire was prepared using recommendations from Podsakoff et al. (2003), and the following indicators were built to measure the study variables through a *Likert scale* with scores ranging from 1 (totally disagree) to 5 (totally agree) regarding the statements presented:

Internal communication: 6 items used based on Dozier et al. (1995) ($\alpha = 0.95$). Sample item: *"most communication between management and employees can be said to be two-way communication"*.

Sustainable human resources management: 6 items used based on Xuan et al. (2021) ($\alpha = 0.96$). Sample item: *"in my organization HRM follows a sustainable development orientation"*.

Individual performance: 4 items used based on Rego and Cunha (2008) and Staples et al. (1999) ($\alpha = 0.79$). Sample item: *"I am an effective employee"*.

Turnover intention: 3 items used based on Bozeman and Perrewé (2001) ($\alpha = 0.79$). Sample item: *"I am actively searching for an opportunity to leave the organization"*.

Organizational attractiveness: 4 items used based on Aiman-Smith et al. (2001) and Highhouse et al. (2003) ($\alpha = 0.95$). Sample item: *"this organization is very attractive as a place to work"*.

The study sample was a non-probabilistic convenience sample composed of 177 participants. Regarding qualifications, the sample included participants with different qualifications levels (9.8% mandatory education; 45.7% graduate degree; 12.7% postgraduate level; 31.8% master's degree and above). Regarding gender, 62.4% were female. Regarding age, the highest percentage of participants fell in the 39 to 54 age group (56.1%), followed by those up to 38 years old (27.2%) and those over 55 years old (16.8%). Regarding seniority in the company, the majority of participants had worked in their organization for more than 15 years (38.7%), followed by those that had worked in their organizations for between 1 and 5 years (28.3%) and those that had worked in their organizations for between 6 to 10 years (15%).

4. Results

4.1. Statistical Procedure Overview

We carried out the Harman technique to assure that data did not suffer from common method bias. We also applied bootstrapping (at $n = 1000$ units) to permit re-sample distribution by calculating "the statistic of interest in multiple re-samples of the data set and by sampling n units with replacement from the original sample of n units"

(Preacher et al. 2007, p. 190). The usefulness of the bootstrap methodology has been noted (especially when accessing indirect effects) as the tests reliably detect whether sampling distribution of the mediated effect skews away from 0.

We developed our statistical procedures using a Structural Equation Model (SEM) and also tested the study hypothesis using the SEM due to overall fit indices being provided when estimating relationships between variables. For estimating model fit, the Tucker–Lewis index (TLI), comparative fit index (CFI), incremental fit index (IFI), root mean square error of approximation (RMSEA), and χ^2 values are reported.

4.2. Data Analysis

Data were analyzed in sequential stages to better understand the results achieved. We have presented the results of the correlation matrix of the study variables that shows how the variables of the study correlate with each other. After this analysis, how the study hypotheses were tested is presented, notably the mediation hypotheses foreseen in the model of analysis.

Table 1 displays the means, standard deviations, and correlations among the variables. The analysis presented in Table 1 shows significant correlations between the variables. Regarding reliability, our tests show that the Cronbach alpha values demonstrated strong internal reliability. Furthermore, we also tested the Composite Reliability (CR) and Average Variance Extracted (AVE) of all study variables, with solid values obtained by following Fornell and Larcker's (1981) recommendations.

Table 1. Correlation Matrix.

	MEAN	S.D	1.	2.	3.	4.	5	CR	AVE
1. SHRM	3.19	1.19	(0.96)	-	-	-	-	0.962	0.836
2. AT	3.58	1.03	0.75 *	(0.95)	-	-	-	0.954	0.838
3. PER	4.10	0.56	0.31 *	0.35 *	(0.79)	-	-	0.810	0.526
4. IC	3.31	1.05	0.84 *	0.76 *	0.27 *	(0.95)	-	0.946	0.747
5. TI	2.39	1.23	-0.47 *	-0.66 *	-0.21 *	-0.50 *	(0.91)	0.910	0.772

Cronbach alpha values reported in parentheses. * Correlation is significant at 0.01 (two-tailed). Note: the data displayed in the table relate to this specific study.

It is possible to see that all study variables are significantly and positively correlated with each other. Sustainable HRM is positively and significantly correlated with attractiveness ($r = 0.75$), as well as with performance ($r = 0.31$) and internal communication ($r = 0.84$); however, it is negatively correlated with turnover intention ($r = -0.47$). It is also possible to see that attractiveness is positively and significantly correlated with performance ($r = 0.35$) and internal communication ($r = 0.76$) while being negatively correlated with turnover intention ($r = -0.66$). In addition, internal communication is positively and significantly correlated with performance ($r = 0.27$) and negatively correlated with turnover intention ($r = -0.50$). Lastly, performance was negatively and significantly correlated with turnover intention ($r = -0.21$). These results seem to suggest that both sustainable HRM and internal communication are associated with important organizational outputs, such as how well an organization is perceived as being a good place to work, worker performance, and workers' intentions to abandon an organization. The results also suggest that sustainable HRM and internal communication are well associated with each other, suggesting the notion that these areas may be stimulated in a cohesive manner with the aim of developing relevant organizational outputs.

We also conducted additional tests using the SEM. Analysis of the goodness-of-fit of the theoretical model showed good fit of the data (χ^2 (221df) = 479,734, $p \leq 0.05$; RMSEA = 0.08; CFI = 0.94; TLI = 0.93; IFI = 0.94) with bootstrapping ($n = 1000$). An alternative single factor model of analysis revealed unacceptable fit indices. Figure 1 presents the theoretical model of analysis.

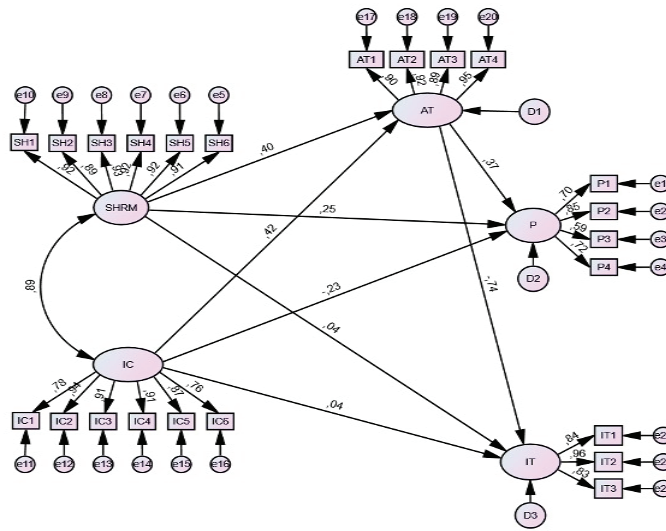


Figure 1. Theoretical model of analysis. Note: this figure was built based on the data retrieved for this study specifically.

The estimates of the model provide evidence for hypotheses testing. Path analysis was performed to assess H1 to H6, revealing that both H1 and H2 were supported. Both IC ($\beta = 0.478$; p sig. < 0.05) and sustainable HRM ($\beta = 0.357$; p sig. < 0.05) were revealed to be positively and meaningfully related to organizational attractiveness. These results support the important notion that both the IC and SHRM areas of action directly influence how an organization is appraised as a good place to work and reinforce the possibility that intertwined sets of action between SHRM and IC are pertinent and appropriate. Regarding H3 and H4, results revealed that there is no significant path effect between both IC ($\beta = 0.108$; p sig. *n.s.*) and SHRM ($\beta = 0.092$; p sig. *n.s.*) and performance. In the same way, H5 and H6 were not supported as results did not reveal a significant path effect between both IC ($\beta = 0.046$; p sig. *n.s.*) and SHRM ($\beta = 0.003$; p sig. *n.s.*) and turnover intention. The results of these non-confirmed hypotheses suggest the need to evaluate whether the relations between IC and sustainable HRM and turnover intention and performance are in fact indirect (in accordance with what is foreseen in H7 and H8) by estimating the indirect effect of attractiveness as a mediator in these relationships.

To test for the mediation hypotheses (H7 and H8), we followed Kenny and Judd’s (1984) directions for estimating mediation effects using an SEM. For total mediation effects, the indirect effect (via mediator) should be significant, whereas the direct effect should be non-significant. For partial mediation effects, the direct effects should be significant and so should the indirect effects (via mediator). Table 2 shows the standardized direct and indirect effects verified in the theoretical model.

Table 2. Theoretical model’s standardized direct and indirect effects.

Path	Direct Effect	Indirect Effect
	(D.E)	(I.E.) via Attractiveness
SHRM–PER	<i>n.s.</i>	0.147; sig < 0.05
SHRM–TI	<i>n.s.</i>	−0.299; sig < 0.05
IC–PER	<i>n.s.</i>	0.154; sig < 0.05
IC–TI	<i>n.s.</i>	−0.315; sig < 0.05

Note: the data presented in the table relate to this specific study.

In accordance with our results, it is possible to see that there is evidence of a significant total mediatory effect from organizational attractiveness in the relationship between sustainable HRM and performance (direct effect $p = n.s.$; indirect effect via mediator = 0.147; p sig. < 0.05), as well as in the relationship with TI (direct effect $p = n.s.$; indirect effect via mediator = -0.299 ; p sig. < 0.05). This result suggests that SHRM activates a process predicting both performance and turnover avoidance intention, with organizational attractiveness as a valid mediator of both processes. This means that SHRM explains workers' performance via attractiveness, implying that the way how an organization develops SHRM practices leads to a related appraisal of the organization as a place to work, and as a result, workers determine the resulting desire to improve their performance. Furthermore, SHRM has also shown similar abilities regarding the avoidance of turnover intention. Workers seem to perceive the organizations' investment in SHRM as an enhancement of how attractive the organization is as a place to work, resulting in reduced intention to voluntarily abandon the organization.

Our results also show that internal communication has similar abilities to those verified with SHRM. Internal communication showed predictive abilities in terms of performance and turnover intention avoidance via organizational attractiveness (direct effect $p = n.s.$; indirect effect via mediator = -0.315 ; p sig. < 0.05) and performance (direct effect $p = n.s.$; indirect effect via mediator = 0.154; p sig. < 0.05).

These results imply that internal communication can be viewed as a solid path towards improving the way how an organization is evaluated as a good place to work, thus leading to workers perceiving that they will likely improve their performance and avoiding intentions to voluntarily abandon the organization. Results also suggest the intertwining of SHRM and IC in courses of action regarding the maximization of workers' attitudinal and behavioral outputs. Thus, these results support H7 and H8.

5. Discussion and Conclusions

5.1. Discussion

Organizational studies are quite wide in terms of research interests for studies into the employee–organization relationship (e.g., Duarte et al. 2019; Ribeiro et al. 2020a; Balaskas et al. 2020; Gomes et al. 2021; Wiefek and Heinitz 2021). Within the wide plethora of relevant and current remits of investigation, the subjects of avoiding turnover intention and stimulating employee performance present themselves as key matters for promoting organizational success. Despite existing research into the turnover and performance subjects indicating clues for empirical research development and practitioners' courses of action, understanding if and how sustainable HRM and IC work together in solving this important issue is an open research question.

As mentioned earlier, the most common approach to studying the predictive abilities of HRM and IC is to consider them to be independent from one another, thus leading to a lack of research that aims to build bridges between them. Consequently, it is quite usual to manage the development of HRM and IC policies independently, despite both areas sharing the worker as the nuclear element that promotes organizational success.

Developing research with the agenda of understanding the determination of turnover intention and employee performance under the sustainability approach of HRM in connection with IC premises of action was thus an attempt to contribute toward the "search for gold" (having workers well aligned with the organization's development intentions). With this study, we have tried to understand if the sustainability challenge helps to bridge the areas of HRM and IC to each other. We also sought to understand whether sustainable HRM and IC have similar properties regarding the stimulation of workers' attitudinal and behavioral responses, which could thus justify intertwining the areas. Our main results show that internal communication and sustainable HRM have shown predictive abilities in terms of performance and turnover intention avoidance via organizational attractiveness. Our results reveal interesting remarks worthy of consideration regarding the theoretical, empirical, and practical perspectives.

5.2. Conclusions

In what can be considered the theoretical contributions of this study, we believe that sustainability compromises help to oversee and revisit HRM's reimits of action. When considering the common strategic functions and courses of responsibility attributed to this management area (e.g., Pfeffer 1994; Lawler et al. 1995; Orlitzky 2007), one can conclude that they are insufficient when facing current and future challenges for these managers, despite them being unquestionably well established. HRM is and will be a strategic area for organizational development, especially if approached under a wider umbrella of responsibilities (notably those facing an organizations' sustainability projects). Our results show that sustainable HRM has the ability to stimulate favorable attitudes regarding seeing the organization as a good place to work and can determine a distal process leading to turnover intention avoidance and performance improvement. This result deserves to be revisited in further studies attempting to stabilize the added responsibilities facing HR managers that are arising from a renewed sense of orientation toward the development of sustainability compromises within organizations. A relevant path to follow is the building of bridges with IC. Our results show that IC has similar abilities in terms of stimulating workers' responses; thus, an interesting idea to follow is the development of management models that foresee IC and HR professionals sharing responsibilities, with the maximum aim of enriching practices surrounding their workers. According to our results and the theoretical approach followed, this may be a relevant clue that can be followed in future research, as the identification of best common practices for sustainable HRM and IC is yet to be achieved. An additional and interesting study to address would be that of replicating this study using a sample comparing millennials to non-millennials via multi-group comparison, since existing research is quite clear in indicating that these two groups may have different attitudes to work.

Our results also identified relevant challenges that existing research faces in regards to the turnover intention and performance prediction subject (e.g., Titang 2013; Jerónimo et al. 2020; Miao and Rhee 2020; Ouerdian et al. 2021; Tsaousoglou et al. 2022) by jointly evaluating the predictive abilities of IC and sustainable HRM in the same model of analysis. Our results have empirically shown that both sustainable HRM and IC are able to stimulate a distal process that explains two key elements of concern for managers.

This study also had the aim of stimulating debate between practitioners regarding the benefits and difficulties of building bridges between sustainable HRM practices and IC practices. Although worthy of consideration regarding the promising results, intertwining the areas should be seen as a matter requiring great effort as the areas have their own well-established courses of action that will be subjected to a renewed challenge. Managers should view this bridge building as an opportunity to enhance the nature of actions surrounding the workers (under the umbrella of the sustainability compromises) in a way that it stimulates how the organization is favorably analyzed and accessed by the workers. Thus, both HRM and IC managers should receive a clear invitation from top management to develop common plans of action surrounding the worker and establish the existence of bottom-up ways that workers can participate in company activities. Following this reasoning, it seems crucial to annually plan for joint sustainable and IC activities in a way that one can support the other in the common goal of strengthening the sustainability project of the organization. For instance, using the opportunities brought by social media to share relevant information surrounding the organization's sustainability project in such a way that workers get to know the HRM practices that have been designed toward the goal of sustainability and involving workers in these efforts through the appropriate use of information may very well be a good practice to follow.

6. Limitations and Future Studies

Lastly, although the present study has found compelling results, they should also be read with the necessary caution and not be interpreted in a generalized way, as this was a cross-sectional study that shares all the limitations that can be found in similarly

designed studies. An issue also worthy of consideration is that performance indicators were measured using a subjective measure of performance.

The results achieved may very well stimulate new models of analysis that share similar research intentions in terms of widening the research subjects involved in the testing of different mediator variables that intervene in the path model, such as organizational commitment or organizational identification. Likewise, it would also prove useful to widen testing into the joint predictive abilities of sustainable HRM and IC by incorporating employee identification, perceived support, or employee well-being. Lastly, this research was developed and carried out in Portugal and thus may not be completely immune to cultural factors that may have intervened in the results. It would be very interesting to consider future replication of this study in other countries to further evaluate the reliability of our results.

Author Contributions: Conceptualization, D.R.G., N.R. and M.J.S.; methodology, D.R.G., N.R.; software, D.R.G.; validation, D.R.G., N.R. and M.J.S.; formal analysis, D.R.G., N.R. and M.J.S.; investigation, D.R.G.; resources, D.R.G., N.R.; data curation, D.R.G.; writing—original draft preparation, D.R.G., N.R. and M.J.S.; writing—review and editing, D.R.G.; visualization, D.R.G., N.R., M.J.S. All authors have read and agreed to the published version of the manuscript.

Funding: Fundação para a Ciência e Tecnologia: UIDB/04928/2020; Fundação para a Ciência e Tecnologia: UIDB/05021/2020.

Institutional Review Board Statement: Not applicable.

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

Data Availability Statement: Not applicable.

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

References

- Agnihotri, Arpita, and Saurabh Bhattacharya. 2021. CSR fit and organizational attractiveness for job applicants. *International Journal of Organizational Analysis*. ahead-of-print. [CrossRef]
- Ahmad, Arfat. 2018. The relationship among job characteristics, organizational commitment and employee turnover intentions: A reciprocation perspective. *Journal of Work-Applied Management* 10: 74–92. [CrossRef]
- Aiman-Smith, Lynda, Talya N. Bauer, and Daniel M. Cable. 2001. Are you attracted? Do you intend to pursue? A recruiting policy-capturing study. *Journal of Business and Psychology* 16: 219–37. [CrossRef]
- Alsafadi, Yousef, and Shadi Altahat. 2020. Human resource management practice and employee performance: The role of job satisfaction. *Journal of Asian Finance, Economics and Business* 8: 519–29. [CrossRef]
- App, Stefanie, Janina Merk, and Marion Büttgen. 2012. Employer branding: Sustainable hrm as a competitive advantage in the market for high-quality employees. *Management Revue* 23: 262–78. [CrossRef]
- Balaskas, Stefanos, Aliko Panagiotarou, and Maria Rigou. 2020. The Influence of Trustworthiness and Technology Acceptance Factors on the Usage of e-Government Services during COVID-19: A Case Study of Post COVID-19 Greece. *Administrative Sciences* 12: 129. [CrossRef]
- Brundtland Commission. 1987. *Report of the World Commission on Environment and Development: Our Common Future*. Oxford: Oxford University Press.
- Bozeman, D., and P. Perrewé. 2001. The effect of item content overlap on organizational commitment questionnaire-turnover cognition relationships. *Journal of Applied Psychology* 86: 161–73. [CrossRef]
- Chaudhary, Richa, and Mantasha Firoz. 2022. *Modeling Green Human Resources Management and Attraction to Organizations*. Edited by Pascal Paillé. Green Human Resources Management Research. Sustainable Development Goals Series; Cham: Palgrave Macmillan. [CrossRef]
- Chaudhary, Richa. 2020. Effects of green human resource management: Testing a moderated mediation model. *International Journal of Productivity and Performance Management* 70: 201–16. [CrossRef]
- Cinar, Esra. 2019. The effect of person-organization fit on organizational identification: The mediating role of organizational attractiveness. *Eurasian Journal of Business and Management Eurasian Publications* 7: 74–84. [CrossRef]
- Collins, Christopher J., and Adam M. Kanar. 2013. Employer Brand Equity and Recruitment Research. In *The Oxford Handbook of Recruitment*. Edited by Kang Yang Trevor Yu and Daniel M. Cable. Oxford: Oxford Library of Psychology.
- Ćorić, Dubravka Sinčić, Nina Pološki Vokić, and Ana Tkalac Verčić. 2020. Does good internal communication enhance life satisfaction? *Journal of Communication Management* 24: 363–76. [CrossRef]

- De Prins, Peggy, Lou Van Beirendonck, Ans De Vos, and Jesse Segers. 2014. Sustainable HRM: Bridging theory and practice through the “Respect Openness Continuity Model. *Management Review* 25: 263–84. [CrossRef]
- Diaz-Carrion, Rosalia, Macarena López-Fernández, and Pedro M. Romero-Fernandez. 2018. Evidence of different models of socially responsible HRM in Europe. *Business Ethics European Review* 28: 1–18. [CrossRef]
- Duarte, Ana Patricia, Daniel Roque Gomes, and José Neves. 2014. Finding the jigsaw piece for our jigsaw puzzle with corporate social responsibility: The impact of CSR on prospective applicants’ responses. *Management Research* 12: 240–58.
- Duarte, Ana, José Neves, Daniel Gomes, and Moisés G. 2019. Corporate social responsibility, job satisfaction and customer orientation in Angola. *World Review of Entrepreneurship, Management and Sustainable Development* 15: 93–109. [CrossRef]
- Ehnert, Ina, Brian Matthews, and Michael Muller-Camen. 2019. Common Good HRM: A paradigm shift in Sustainable HRM? *Human Resource Management Review* 30: 100705. [CrossRef]
- Ehnert, Ina, Sepideh Parsa, Ian Roper, Marcus Wagner, and Michael Muller-Camen. 2016. Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world’s largest companies. *International Journal of Human Resource Management* 27: 88–108. [CrossRef]
- Ehnert, Ina, Wes Harry, and Klaus J. Zink. 2014. Sustainability and HRM. In *Sustainability and Human Resource Management*. CSR, Sustainability, Ethics & Governance. Berlin: Springer. [CrossRef]
- Elkington, John. 1998. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. Gabriola Island: New Society.
- Fishbein, Martin, and Icek Ajzen. 1975. *Belief, Attitude, Intention and Behaviour: An Introduction to Theory and Research*. Reading: Addison-Wesley.
- Fornell, Claes, and David F. Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39–50. [CrossRef]
- Gaudêncio, P., Arnaldo Coelho, and Neuza Ribeiro. 2020. The impact of CSR perceptions on workers’ turnover intentions: Exploring the supervisor exchange process and the role of perceived external prestige. *Social Responsibility Journal* 17: 543–61. [CrossRef]
- Gomes, Daniel Roque, and José Neves. 2010. Do applicant’s prior experiences influence organizational attractiveness prediction? *Management Research* 8: 203–20.
- Gomes, Daniel Roque, and José Neves. 2011. Organizational attractiveness and prospective applicants’ intentions to apply. *Personnel Review* 40: 684–99. [CrossRef]
- Gomes, Daniel Roque, and José Neves. 2019. Combining behaviourist and interactionist approaches to explain applicants’ attraction to organizations. *International Journal of Human Resources Development and Management* 19: 209–24. [CrossRef]
- Gomes, Daniel Roque, and Maria João Santos. 2022. Designing an Interactionist Approach for Sustainable HRM: Might the Borders and Overlaps with Internal Communication Lead to a Common End? In *Sustainability and Intelligent Management*. Edited by Carolina Machado and J. Paulo Davim. Management and Industrial Engineering. Cham: Springer. [CrossRef]
- Gomes, Daniel Roque, Patricia Lourenço, and Neuza Ribeiro. 2021. When Covid-19 is the invader and internal communication is the hero: Understanding the influence of internal communication on individual performance and evaluating the mediating role of perceived support. *Administrative Sciences* 11: 136. [CrossRef]
- Gomes, Gabriela Pedro, Neuza Ribeiro, and Daniel Roque Gomes. 2022. The Impact of Burnout on Police Officers’ Performance and Turnover Intention: The Moderating Role of Compassion Satisfaction. *Administrative Sciences* 12: 92. [CrossRef]
- Grunig, James E. 1992. Symmetrical systems of internal communication. In *Excellence in Public Relations and Communication Management*. Hillsdale: Lawrence Erlbaum Associates, pp. 531–76.
- Highhouse, Scott, Filip Lievens, and Evan Sinar. 2003. Measuring attraction to organizations. *Educational and Psychological Measurement* 63: 986–1001. [CrossRef]
- Jafri, Saba. 2021. Can sustainable hr practices attract talent-cross lagged study amongst prospective employees in India. *Journal of Sustainability Science and Management* 16: 44–61. [CrossRef]
- Jenkins, Michael, and R. Paul Thomlinson. 1992. Organizational commitment and job satisfaction as predictors of employee turnover intentions. *Management Research News* 15: 18–22. [CrossRef]
- Jerónimo, Helena, Teresa Lacerda, and Paulo Henriques. 2020. From sustainable HRM to employee performance: A complex and intertwined road. *European Management Review* 17: 871–84. [CrossRef]
- Joglekar, Jayesh, and Caroline Tan. 2022. The impact of linkedin posts on employer brand perception and the mediating effects of employer attractiveness and corporate reputation. *Journal of Advances in Management Research* 19: 624–50. [CrossRef]
- Joseph, Sanskrity, Susmitri Sahu, and K. A. U. Z. Khan. 2014. Organizational attractiveness as a predictor of employee retention. *IOSR Journal of Business and Management* 16: 411–44. [CrossRef]
- Kazlauskaitė, Ruta, and Iлона Bucuniene. 2010. Disclosing hr-performance linkage: Current research status and future directions. *Transformations in Business and Economics* 9: 303–17.
- Kenny, David A., and Charles M. Judd. 1984. Estimating the nonlinear and interactive effects of latent variables. *Psychological Bulletin* 96: 201–10. [CrossRef]
- Khan, Muhammad Hamza, and Syaharizatul Noorizwan Muktar. 2020. Mediating role of organizational attractiveness on the relationship between green recruitment and job pursuit intention among students of Universiti Teknologi Malaysia. *Cogent Business & Management* 7: 1832811. [CrossRef]
- Kramar, Robin. 2014. Beyond Strategic Human Resource Management: Is Sustainable Human Resource Management the Next Approach? *International Journal of Human Resource Management* 25: 1069–89. [CrossRef]

- Krys, Sabrina, and Udo Konrad. 2022. Losing and regaining organizational attractiveness during the recruitment process: A multiple-segment factorial vignette study. *Journal of Work and Organizational Psychology* 38: 43–58. [CrossRef]
- Lawler, E., R. Anderson, and R. Buckles. 1995. Human resource management and organizational effectiveness. In *Handbook of Human Resource Management*. Edited by G. Ferris, S. Rosen and D. Barnum. Oxford: Blackwell.
- Lazzari, Matilde, Jose M. Alvarez, and Salvatore Ruggieri. 2022. Predicting and explaining employee turnover intention. *International Journal of Data Science and Analytics* 14: 279–92. [CrossRef]
- Liao, Hui. 2009. Do they see eye to eye? Management and employee perspectives of high-performance work systems and influence processes on service quality. *Journal of Applied Psychology* 94: 371–91. [CrossRef]
- Lievens, Filip. 2007. Employer branding in the Belgian Army: The importance of instrumental and symbolic beliefs for potential applicants, actual applicants, and military employees. *Human Resource Management* 46: 51–69. [CrossRef]
- Lievens, Filip, Christoph Decaestecker, Pol Coetsier, and Jo Geirnaert. 2001. Organizational attractiveness for prospective applicants: A person-organization fit perspective. *Applied Psychology: An International Review* 50: 30–51. [CrossRef]
- Mahfouz, Shatha, Ayu Suriawaty Bahkia, and Noryati Alias. 2021. The impact of human resource management practices on employee performance and the mediating role of employee commitment. *Journal of Governance & Regulation* 10: 222–34. [CrossRef]
- Manzoor, Faiza, Longbao Wei, Tamás Bányai, Mohammad Nurunnabi, and Qazi Abdul Subhan. 2019. An examination of Sustainable HRM practices on Job Performance: An application of Training as a moderator. *Sustainability* 11: 2263. [CrossRef]
- Memon, Mumtaz Ali, Rohani Salleh, and Mohamed Noor Rosli Baharom. 2016. The link between training satisfaction, work engagement and turnover intention. *European Journal of Training and Development* 40: 407–29. [CrossRef]
- Memon, Mumtaz Ali, Rohani Salleh, Muhammad Zeeshan Mirza, Jun-Hwa Cheah, Hiram Ting, Muhammad Shakil Ahmad, and Adeel Tariq. 2021. Satisfaction matters: The relationships between hrn practices, work engagement and turnover intention. *International Journal of Manpower* 42: 21–50. [CrossRef]
- Men, Linjuan Rita, and Don Stacks. 2014. The Effects of Authentic Leadership on Strategic Internal Communication and Employee-Organization Relationships. *Journal of Public Relations Research* 26: 301–24. [CrossRef]
- Mengstie, Missaye Mulatie. 2020. Perceived organizational justice and turnover intention among hospital healthcare workers. *BMC Psychology* 8: 19. [CrossRef] [PubMed]
- Merlin, Matumona, and Yinfei Chen. 2022. Impact of green human resources management on organizational reputation and attractiveness: The mediated-moderate model. *Frontiers in Environmental Science* 10: 962531. [CrossRef]
- Miao, Siyuan, and Jaehoon Rhee. 2020. How much does extrinsic motivation of intrinsic motivation affect job engagement or turnover intention? A comparison study in China. *Sustainability* 12: 3630. [CrossRef]
- Nguyen, Minh Ha, Nguyen Vinh Luan, and Bui Thanh Khoa. 2021. Employer Attractiveness and Employee Performance: An Exploratory Study. *Journal of System and Management Sciences* 11: 97–123.
- Orlitzky, Marc. 2007. Recruitment strategy. In *The Oxford Handbook of Human Resource Management*. Edited by Peter Boxall, John Purcell and Patrick Wright. Oxford: University Press, pp. 273–99.
- Ouerdian, Emma Gara Bach, Nizar Mansour, Khadija Gaha, and Manel Gattoussi. 2021. Linking emotional intelligence to turnover intention: Lmx and affective organizational commitment as serial mediators. *Leadership and Organizational Development Journal* 42: 1206–21. [CrossRef]
- Pfeffer, Jeffrey. 1994. *Competitive Advantage through People*. Boston: Harvard Business School Press.
- Podsakoff, Philip M., Scott B. MacKenzie, Jeong-Yeon Lee, and Nathan P. Podsakoff. 2003. Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88: 879–903. [CrossRef]
- Polycarp, M. 2022. The effects of internal communications on staff performance in corporate organizations: A critical review. *American Journal of Public Relations* 1: 12–20. [CrossRef]
- Preacher, Kristopher, Derek Rucker, and Andrew Hayes. 2007. Addressing moderated mediation hypothesis: Theory, Methods and Prescription. *Multivariate Behavioral Research* 42: 185–227. [CrossRef]
- Randev, Kadumbri Kriti, and Jatinder Kumar Jha. 2019. Sustainable Human Resource Management: A Literature-based Introduction. *NHRD Network Journal* 212: 241–52. [CrossRef]
- Ranjan, Sushant, and Rama Shankar Yadav. 2018. Uncovering the Role of Internal CSR on Organizational Attractiveness and Turnover Intention: The Effect of Procedural Justice and Extraversion. *Asian Social Science* 14: 76–85. [CrossRef]
- Raveenther, Anuja. 2020. Impact of sustainable human resources management practices in organizational performance of banking sector in Trincomalee district in Sri Lanka. *International Journal of Advanced Engineering and Management Research* 5: 57–67.
- Reis, Germano Glufke, Beatriz Maria Braga, and Jordi Trullen. 2017. Workplace authenticity as na attribute of employer attractiveness. *Personnel Review* 46: 1962–76. [CrossRef]
- Ribeiro, Neuza, Daniel Gomes, Ana Rita Oliveira, and Ana Suzete Dias Semedo. 2021a. The impact of work-family conflict on employee engagement, performance and turnover intention. *International Journal of Organizational Analysis*. in press. [CrossRef]
- Ribeiro, Neuza, T. Nguyen, A. Duarte, T. Oliveira, and C. Faustino. 2021b. How managerial coaching promotes employee's affective commitment and individual performance. *International Journal of Productivity and Performance Management* 70: 2163–81. [CrossRef]
- Ribeiro, Neuza, Manish Gupta, Daniel Gomes, and Nelia Alexandre. 2020a. Impact of psychological capital (PsyCap) on affective commitment: Mediating role of affective well-being. *International Journal of Organizational Analysis*. [CrossRef]

- Ribeiro, Neuza, Patrícia Duarte, and Jessica Fidalgo. 2020b. Authentic leadership's Effect on costumer orientation and turnover intention among Portuguese hospitality employees: The mediating role of affective commitment. *International Journal of Contemporary Hospitality Management* 32: 2097–116. [CrossRef]
- Romão, Soraia, Neuza Ribeiro, Daniel Roque Gomes, and Sharda Singh. 2022. The Impact of Leaders' Coaching Skills on Employees' Happiness and Turnover Intention. *Administrative Sciences* 12: 84. [CrossRef]
- Roongrengsuke, Siriyupa, and Andreas Liefoghe. 2013. Attracting gold-collar workers: Comparing organizational attractiveness and work-related values across generations in China, India and Thailand. *Asia Pacific Business Review* 19: 337–55. [CrossRef]
- Slåtten, Terje, Gudbrand Lien, and Peer Jacob Svenkerud. 2019. The role of organizational attractiveness in an internal market-oriented culture (IMOC): A study of hospital frontline employees. *BMC Health Services Research* 19: 307. [CrossRef] [PubMed]
- Staples, D. Sandy, John S. Hlland, and Christopher A. Higgins. 1999. A self-efficacy theory explanation for the management of remote workers in virtual organizations. *Organization Science* 10: 758–76. [CrossRef]
- Story, Joana, Filipa Castanheira, and Silvia Hartig. 2016. Corporate social responsibility and organizational attractiveness: Implications for talent management. *Social Responsibility Journal* 12: 484–505. [CrossRef]
- Titang, Franklin. 2013. The Impact of Internal Communication on Employee Performance in an Organization. Available online: <https://ssrn.com/abstract=2865675> (accessed on 1 December 2022).
- Tkalac Verčič, Ana, Zvonimir Galić, and Krešimir Žnidar. 2021. The Relationship of Internal Communication Satisfaction with Employee Engagement and Employer Attractiveness: Testing the Joint Mediating Effect of the Social Exchange Quality Indicators. *International Journal of Business Communication*. [CrossRef]
- Ton, Zeynep, and Robert S. Huckman. 2008. Managing the impact of employee turnover on performance: The role of process conformance. *Organization Science* 19: 56–68. [CrossRef]
- Tortia, Ermanno C., Silvia Sacchetti, and Francisco J. López-Arceiz. 2022. A Human Growth Perspective on Sustainable HRM Practices, Worker Well-Being and Organizational Performance. *Sustainability* 14: 11064. [CrossRef]
- Tsaousoglou, Kleopatra, Dimitrios Koutoulas, and Theodoros Stavrinoudis. 2022. Personality and commitment as predictors of turnover intentions among Greek employees in the lodging industry. *European Journal of Tourism Research* 31: 3111. [CrossRef]
- Umrani, Waheed Ali, Nisar Ahmed Channa, Umair Ahmed, Jawad Syed, Munwar Hussain Pahi, and T. Ramayah. 2022. The laws of attraction: Role of green human resources, culture and environmental performance in the hospitality sector. *International Journal of Hospitality Management* 103: 103222. [CrossRef]
- Verghese, Anisus K. 2017. Internal communication: Practices and implications. *SCMS Journal of Indian Management* 14: 103–13.
- Welch, Mary, and Paul R. Jackson. 2007. Re-Thinking Internal Communication: A Stakeholder Approach. *Corporate Communications: An International Journal* 12: 177–98. [CrossRef]
- Wiefek, Jasmin, and Kathrin Heinitz. 2021. The Common Good Balance Sheet and Employees' Perceptions, Attitudes and Behaviors. *Sustainability* 13: 1592. [CrossRef]
- Wikhamn, Wajda. 2019. Innovation, sustainable HRM and customer satisfaction. *International Journal of Hospitality Management* 76: 102–10. [CrossRef]
- Yue, Cen April, Linjuan Rita Men, and Mary Ann Ferguson. 2020. Examining the Effects of Internal Communication and Emotacional Culture on Employees' Organizational Identification. *International Journal of Business Communication* 58: 1–27. [CrossRef]
- Xuan, Yu, Haihong Li, Ling Miao, Wen Jun, and Wenjing Xia. 2021. Measuring Sustainable Human Resource Management under the New Economic Era. Paper presented at 2021 International Conference on Economic Innovation and Low-Carbon Development (EILCD 2021), Qingdao, China, May 28–30.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

Article

The Influence of Empowerment on the Motivation of Portuguese Employees—A Study Based on a Structural Equation Model

Marlene Sousa ¹, Eulália Santos ², Tânia Santos ¹ and Márcio Oliveira ^{3,4,*}

¹ Polytechnic Institute of Leiria & CICS.NOVA—Interdisciplinary Center for Social Sciences, Faculty of Social and Human Sciences (FCSH/NOVA), 2411-901 Leiria, Portugal; marlene.sousa@ipleiria.pt (M.S.); tania.santos@ipleiria.pt (T.S.)

² Higher School of Education and Social Sciences, CI&DEI, Polytechnic of Leiria, 2411-901 Leiria, Portugal; eulalia.santos@ipleiria.pt

³ NECE—Research Center in Business Sciences, University of Beira Interior, 6201-001 Covilha, Portugal

⁴ School of Education and Social Sciences, Polytechnic of Leiria, 2411-901 Leiria, Portugal

* Correspondence: marcio.oliveira@ipleiria.pt

Abstract: Over the last few years, in a continuous and growing way, the motivation of employees has been studied and it is currently agreed that it is an important work factor that significantly influences productivity and individual performance in an organisational context. As an influential factor for this motivation, we can find psychological empowerment in the sense that it gives employees freedom and confidence. This study aimed to understand the role of psychological empowerment in employee motivation. Empowerment can be translated, in a business context, into the training and valorisation of collaborators with a sense of their commitment to better the individual and, consequently, global performance of the organisation. In this research, empowerment was considered a motivational factor in achieving organisational objectives. The methodology used was of a quantitative nature based on a questionnaire survey that aimed to analyse psychological empowerment and the motivation of 620 individuals working in Portuguese organisations in the industry and services sectors. The results obtained, which were based on a structural equation model, show that psychological empowerment at work positively influenced employee motivation, with the meaning and self-determination dimensions contributing the most to motivation. The results obtained in the study have the potential to benefit both employees and organisations, contributing to a more productive and healthy working environment.

Keywords: empowerment; motivation; meaning; self determination

Citation: Sousa, Marlene, Eulália Santos, Tânia Santos, and Márcio Oliveira. 2023. The Influence of Empowerment on the Motivation of Portuguese Employees—A Study Based on a Structural Equation Model. *Administrative Sciences* 13: 230. <https://doi.org/10.3390/admsci13110230>

Received: 11 September 2023

Revised: 11 October 2023

Accepted: 23 October 2023

Published: 27 October 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

We found a wide variety of studies on empowerment framed by psychological factors and the development of self-evaluation and personal self-worth. Traditionally, empowerment is also associated with the growing importance of women's role in society (de Sousa and Melo 2009).

In recent decades, empowerment has emerged as a new approach to managing organisations from the perspective that the leader must delegate power and decentralise decision making. Empowerment will bring change, teamwork and employee accountability. By knowing the organisation's strategy, employees will be more involved in the organisation's operational and strategic processes and will feel more committed to achieving the desired results (Rowlands 1997; Wilkinson 1998). In recent years, employee empowerment has taken on greater importance in various types of organisations, as management practices that promote empowerment encourage employees to generate positive changes in their role, which can promote effectiveness and better organisational performance (Matsuo 2019).

Nowadays, with intense competition in various markets, organisations need qualified employees who are motivated and committed to the organisation so that they can sustain superior performance and be an important success factor (Vu 2020).

Motivation is also playing an increasingly important role in various markets, as it can be a management tool in organisations and a competitive differentiator in companies (Oliveira et al. 2018). Motivated employees are more productive, perform better and contribute to the success of the organisation (Carreira et al. 2020).

In this article, we consider empowerment and motivation and show how empowering employees can be related to their motivation.

Although there is no consensus on a single definition of the concept of empowerment, the authors are unanimous on its importance for organisations since it promotes the effectiveness, productivity, satisfaction and motivation of employees (Vu 2020); increases their confidence, commitment and productivity (Nwachukwu 2016); promotes their satisfaction with their work and organisation (Kumar and Kumar 2017); and increases their intrinsic motivation and organisational commitment (Andika and Darmanto 2020).

Therefore, understanding how employee empowerment can influence their motivation is fundamental if organisations are to survive and thrive by taking advantage of their employees' potential so that learning, performance and competitiveness are sustainable. This study sought to contribute to enriching research and deepening the literature on this subject by presenting a new model.

Previous research on the subject only verified that empowerment influences employee motivation in general, but did not analyse which dimensions contribute most to this influence. This study aimed to fill this gap in the literature by showing which dimension of empowerment most influences employee motivation in order to better understand its theoretical and practical implications. Following the empirical theory, in particular, the contribution of Spreitzer (1995), the aim of this investigation was to test the influence of empowerment in employee motivation by assuming four dimensions of empowerment: meaning of work, competence at work, self-determination at work and personal impact at work.

The article is structured as follows: Section 2 discusses the arguments that lead to the formulation of hypotheses; Sections 3 and 4 present the methods and results, respectively; Section 5 provides a discussion of the results; and Section 6 discusses the main conclusions and considers the limitations of the research and suggestions for future research.

2. Literature Review

2.1. Empowering Employees

The concept of empowerment has been defined in the literature in different ways. Many authors (Kanjanakan et al. 2023; Meyerson and Dewettinck 2012; Randolph 1995; Vu 2020) stated that empowerment means giving employees freedom over certain task-related activities, which develops trust, motivation and participation in decision making while allowing for a "transfer of power" from the leader to the employee.

While some authors (Jacquiline 2014; Saif and Saleh 2013) considered that empowerment gives employees the authority to make decisions and deal with daily activities, leading them to be motivated, committed and satisfied in their work, others (Arnold et al. 2000; Kanjanakan et al. 2023; Ma et al. 2021; Spreitzer 1995) argued that the concept of empowerment goes beyond discretionary power and labour autonomy.

Empowerment recognises the power that people already possess in their wealth of valuable knowledge and internal motivation (Randolph 1995) and can be viewed from a structural or psychological perspective (Ma et al. 2021), which reflects an individual's feelings of self-control and self-efficacy and focusses on the relationship between leaders and employees (Arnold et al. 2000).

Spreitzer (1995) considers that empowerment is a multifaceted concept and its essence cannot be captured by just one dimension. This concept is defined more broadly as an increase in intrinsic motivation to carry out tasks and is manifested in four dimensions that

reflect the individual's orientation towards their role at work: (1) meaning of work (the value of a goal or work proposal, which is judged in relation to an individual's ideals or standards, competence, self-determination and impact), (2) competence (an individual's belief in their ability to carry out activities skilfully), (3) self-determination (an individual's sense of having a choice when initiating regulatory actions, reflecting autonomy in initiating and continuing the work and the process) and (4) impact (the degree to which an individual can influence strategic, administrative or operational outcomes at work) (Spreitzer and Doneson 2005).

On the other hand, Wooddell (2009) considered that there are four perspectives to empowerment: (1) common attitude (success in meeting targets, customer orientation and clarity of goals), (2) organisational support (authority in decision-making, taking responsibility for team effectiveness, risk-taking), (3) knowledge and learning (encouragement for change, confidence, communication with customers), and (4) fundamental recognition (awareness and knowledge of the reward system).

Although both theories are accepted and have many points in common, Spreitzer's (1995) theory is the most discussed.

2.2. *Motivating Employees*

Employee motivation has been studied over time, and there is a consensus that it is an important work factor that significantly influences employee productivity and performance at both the organisational and individual levels (Frey et al. 2013; Nadreeva et al. 2016).

Although everyone agrees on the importance of motivation at work, there is no agreed definition of the concept, as it is complex and difficult to realise (Chiavenato 2005).

Motivation can be considered the force that drives professionals to carry out their duties, leading them to perform their work correctly with pleasure and fulfilment (Oliveira et al. 2018).

Jufrizen and Sitorus (2021) considered that motivation is the driving force that makes a member of the organisation willing to do an activity that is their responsibility and fulfil their obligations.

In general, we can consider that motivation only develops once you have a goal to fulfil because it is this goal that gives the impetus and mobilises a person's energies and guides the intention to achieve something (Gagné et al. 2015). In other words, motivation can be considered an impulse that exists within a person to do or not do an action in order to achieve certain objectives of the organisation in which they work (Andreas 2022).

According to Ferreira et al. (2006), motivation is a function of the relationship between the intensity of work behaviour, objectives and working conditions. The authors (Ferreira et al. 2006) built an instrument to assess motivation at work (Multi-Moti Scale), which is based on the theory of motivation with the organisation of work by Hackman and Oldham (1980), the theory of learnt needs by McClelland (1975), the theory of goal setting by Locke and Latham (1990), and the theory of organisational involvement processes by Allen and Meyer (1996).

According to Hackman and Oldham (1980), the psychological states associated with the acquisition of knowledge, increased responsibilities and knowledge of results are decisive in how they affect motivation in the workplace, with five important characteristics to consider: the variety of functions, the identity and meaning of tasks, autonomy and feedback. Thus, Ferreira et al. (2006) considered "motivation with work organisation" as one of the variables in the construct.

According to McClelland (1975), there are three basic needs that motivate people to perform: the need for fulfilment, the need for power and the need for affiliation. Regarding how people's behaviour is affected by these needs or motives, Ferreira et al. (2006) considered "achievement and power motivation" as another variable for the construct.

A goal-setting theory by Locke and Latham (1990) shows that setting goals systematically increases motivation and performance and has a major impact on the perception of progress (people can quantify what they are doing), self-efficacy and self-evaluation.

According to the authors Locke and Latham (1990), setting goals seems to be the best way to motivate employees and improve their performance levels. Thus, Ferreira et al. (2006) considered performance motivation to be another variable in the motivation construct.

After analysing the theory of organisational processes by Allen and Meyer (1996), we realise that involvement is a determining factor in productivity and seems to be associated with motivation at work. Thus, Ferreira et al. (2006) considered “involvement” to be an important variable in the motivation construct.

We considered this Multi-Moti scale (Ferreira et al. 2006) to be quite complete and well-founded, with it being a good instrument for assessing motivation at work.

2.3. The Role of Employee Empowerment in Motivating Employees

According to Vu (2020), employee empowerment is an important success factor for companies, as it promotes employee participation in decision-making and the generation and implementation of good ideas, as well as serving as a guideline that promotes employee effectiveness, productivity, satisfaction and motivation. Also, Meng and Han (2014) considered that empowerment provides employees with the control, authority and discretion they need to work autonomously and confidently, increasing their levels of motivation and performance.

Kanjanakan et al. (2023) stated that empowerment helps to improve the performance of an individual and an organisation, leading to high levels of motivation among all employees.

Empowerment increases employee confidence, commitment and productivity (Nwachukwu 2016). By accepting more responsibility, employees feel motivated to increase their skills and capabilities, leading to greater commitment to the organisation (Afram et al. 2022; Vu 2020).

Committed and loyal employees can more easily achieve organisational goals, are more productive, have greater responsibility and job satisfaction, and are satisfied and highly motivated people (Sahoo et al. 2010). These empowered employees can make better decisions, which intensifies the organisation’s excellence (Tripathi et al. 2021).

Kumar and Kumar (2017) considered that empowering employees is a motivational strategy that promotes their satisfaction with their work and organisation. Also, Maynard et al. (2014) considered that empowerment can play a significant role in maximising employees’ potential by promoting employees’ intrinsic motivation (Zhang and Bartol 2010).

Since empowerment is a motivational concept of self-efficacy, it is considered that if employees adopt new roles they will have additional opportunities to achieve their potential and motivation for various issues and tasks, which can influence their psychological empowerment and, in turn, their motivation and organisational commitment (Joo and Shim 2010).

The study by Andika and Darmanto (2020) showed the significant effect that empowering employees has on their intrinsic motivation and organisational commitment. According to these authors, organisations should improve employees’ skills through empowerment and intrinsic motivation, as these have very positive implications for their performance and organisational commitment.

Other studies aimed at the nursing field (Gabra et al. 2019; Saleh et al. 2022) showed that nurses’ motivation to work is enhanced by their feeling of empowerment, with a strong positive relationship between these two variables.

The study by Carreira et al. (2020) showed that employee motivation can be improved through empowerment and task-enrichment practices.

Empowering employees brings advantages to organisations by encouraging them to have entrepreneurial attitudes and make decisions for themselves, and by provoking a sense of autonomy and control over their destinies, they foster their motivation and sense of independence, which translates into greater commitment and extra effort in the performance of their work (Ramesh and Kumar 2014).

As we can see, there are several authors who have addressed the role of employee empowerment in their motivation, which led us to deepen this relationship.

2.4. Conceptual Model and Hypotheses

Considering the relationship between employee empowerment and employee motivation studied by several authors (Andika and Darmanto 2020; Carreira et al. 2020; Joo and Shim 2010; Maynard et al. 2014; Ramesh and Kumar 2014; Sahoo et al. 2010; Vu 2020; Zhang and Bartol 2010), empowerment can be a powerful tool for motivating employees, making them more engaged, confident, and committed to their activities and goals. Thus, it is to be expected that the four dimensions of the empowerment construct considered by Spreitzer (1995) will positively influence employee motivation (Figure 1). This multidimensional approach is valuable for understanding motivation in the workplace in more depth, helping to better understand the factors that influence motivation, but it also provides valuable insights for creating more effective management strategies and practices.

For this study, we considered the following hypotheses:

Hypothesis 1. *The meaning of work has a positive effect on employee motivation.*

Hypothesis 2. *Competence at work has a positive effect on employee motivation.*

Hypothesis 3. *Self-determination at work has a positive effect on employee motivation.*

Hypothesis 4. *Personal impact at work has a positive effect on employee motivation.*

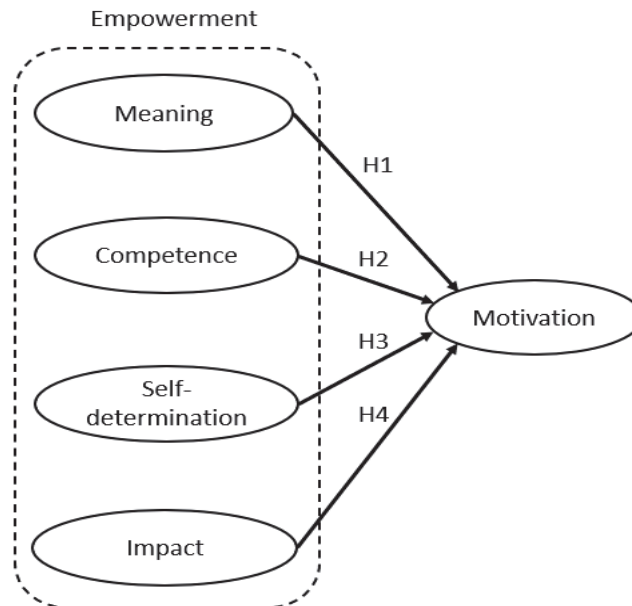


Figure 1. Conceptual model.

3. Methodology

3.1. Population and Sample

The target population for this study was employees from Portuguese organisations in the industry and services sectors. All the companies contacted were equally likely to take part in the study, as emails were sent to all companies in the industry and services sectors that were in operation at the time of the study (emails were obtained from the regional

industry and services associations). However, only the employees of the companies whose managers agreed to take part in the study and who sent the questionnaire link to their employees took part in the study. Thus, the data collection methodology adopted was non-probabilistic and based on the convenience sampling method. The selection criterion ensured that the participants were chosen because of characteristics that were aligned with the research objectives.

The sample consisted of 620 employees from Portuguese organisations in the industry and services sector, aged between 18 and 68, with an average age of 38 ($SD = 11.29$). Table 1 shows that the majority of employees were female ($n = 332$; 53.5%). With regard to educational qualifications, 12.7% ($n = 79$) had primary education, 12.6% ($n = 78$) had vocational education, 42.6% ($n = 264$) had secondary education and 32.1% ($n = 199$) had higher education. With regard to the length of service in the organisation, 39.0% ($n = 242$) had worked in the organisation for less than 5 years, 29.7% ($n = 184$) had worked in the organisation for between 5 and 15 years, and 31.3% ($n = 194$) had worked in the organisation for more than 15 years.

Table 1. Sample characterisation.

		<i>n</i>	%
Gender	Female	332	53.5
	Male	288	46.5
Educational qualifications	Primary education	79	12.7
	Vocational education	78	12.6
	Secondary education	264	42.6
	Higher education	199	32.1
Length of service in the organisation	Under 5 years	242	39.0
	From 5 to 15 years	184	29.7
	Over 15 years	194	31.3

3.2. Instruments

The instrument used for the data collection was a questionnaire survey that consisted of three parts. The first part analysed employees' levels of psychological empowerment and the second part analysed employees' levels of motivation. The third and final part was made up of socio-demographic data (gender, age, educational qualifications) and professional data (length of service in the organisation).

To operationalise empowerment, the 12 items (Table 1) of the psychological empowerment at work scale developed and validated by Spreitzer (1995) were used. This scale is made up of the following dimensions: meaning of work (items E1, E2 and E3), competence at work (items E4, E5 and E6), self-determination at work (items E7, E8 and E9) and personal impact at work (items E10, E11 and E12).

To operationalise motivation, we used the 28 items (Table 2) from the Multi-Moti scale, which was developed for the Portuguese population by Ferreira et al. (2006). The structure of this scale is tetrafactorial. Its dimensions assess motivation in terms of work organisation (items M1, M5, M9, M13, M17, M21 and M25), performance motivation (items M2, M6, M10, M14, M18, M22 and M26), achievement and power motivation (items M3, M7, M11, M15, M19, M23 and M27), and, finally, aspects of motivation related to organisational involvement (items M4, M8, M12, M16, M20, M24 and M28). Note that the statements corresponding to items M8, M20 and M28 are worded in the negative.

Both the empowerment and motivation scales used scores from a Likert agreement scale with 5 response options (1—*totally disagree* to 5—*totally agree*).

Table 2. Estimating the parameters of the measurement model—empowerment.

Factor/Items	M (SD)	Loadings
Meaning ($\alpha = 0.899$, CR = 0.900, AVE = 0.750)	3.95 (0.75)	
E1. The work I do is very important to me.	3.99 (0.83)	0.850
E2. My tasks are personally meaningful to me.	3.90 (0.85)	0.870
E3. The work I do is meaningful to me.	3.96 (0.79)	0.878
Competence ($\alpha = 0.867$, CR = 0.870, AVE = 0.691)	4.16 (0.69)	
E4. I'm confident about my ability to do my job.	4.16 (0.76)	0.873
E5. I am confident in my ability to fulfil my duties.	4.17 (0.79)	0.867
E6. I develop my skills to fulfil my job.	4.15 (0.79)	0.748
Self-determination ($\alpha = 0.896$, CR = 0.899, AVE = 0.749)	3.72 (0.87)	
E7. I have a lot of autonomy in defining how I should carry out my work.	3.84 (1.04)	0.613
E8. I can decide for myself how to carry out my work.	3.68 (1.01)	0.849
E9. I have enough independence and freedom in how I do my job.	3.63 (1.01)	0.868
Impact ($\alpha = 0.894$, CR = 0.899, AVE = 0.749)	3.50 (0.97)	
E10. The impact of what I do on my department is great.	3.72 (0.99)	0.764
E11. I have a lot of control over what happens in my department.	3.35 (1.11)	0.892
E12. I have a lot of influence over what happens in my department.	3.43 (1.10)	0.932

Note: All *loadings* were significant at $p < 0.001$. CR—composite reliability, AVE—average variance extracted. Source: own elaboration.

3.3. Data Collection and Ethical Procedures

When the questionnaire was initially constructed, the motivation scale was already in Portuguese in the work by Ferreira et al. (2006), but Spreitzer's (1995) psychological empowerment scale was translated from English into Portuguese by two bilingual translation professionals and then the two translations were compared to ensure that the translation was understandable. Although both the motivation and empowerment scales were already used in the literature, a pre-test was then carried out with a questionnaire consisting of both scales. The pre-test was carried out with the collaboration of 14 employees (7 from industry and 7 from the service sector) in order to assess the clarity of the questions. After the pre-test, minor adjustments were made to the questionnaire to make its questions more understandable.

The questionnaire was then drawn up on the Google Forms digital platform and then administered to employees in the industry and services sectors between February and May 2019. The choice of this tool has the advantage of ensuring the anonymity and confidentiality of the data, as well as speeding up the data collection process. To start the data collection process, it was necessary to find out the email addresses of different Portuguese companies in the industry and services sectors; therefore, the regional industry and services associations were contacted to obtain these email addresses. The heads of the organisations were then sent an email asking for permission to carry out the study. The heads of the organisations who agreed to take part in the study sent all their employees an email with the objectives of the study, the guarantee of anonymity and confidentiality, and the link to access the questionnaire, thus complying with all the ethical principles in force, and the participants responded voluntarily.

3.4. Analytical Procedures

The data were analysed using IBM SPSS Statistics version 28 and AMOS version 21. According to Kline (2015), initially, the existence of missing cases and outliers was analysed and the sensitivity of the items was studied using the asymmetry ($|Sk| \leq 3$) and flatness ($|Ku| \leq 7$) coefficients.

Descriptive measures were used to characterise the sample. The structural equations approach was used to validate the conceptual model being analysed. This approach was chosen due to its ability to test the causal relationships between constructs with several measurement items (Marôco 2014), which in this particular case, was between the dimensions of empowerment and motivation. The measurement model was analysed first

and then the structural model. The maximum likelihood estimation method was used to analyse the structural equation model.

4. Results

4.1. Measurement Model

With regard to the measurement model, the confirmatory factor analysis revealed that the model fitted to a sample of 620 individuals working in Portuguese companies showed good quality fit indices ($\chi^2 = 1319.746$, $df = 567$, $\chi^2/df = 2.328$, GFI = 0.898, CFI = 0.935, RMSEA = 0.046, PCLOSE = 0.969). This good quality was justified because the ratio of the chi-squared statistic to the degrees of freedom (χ^2/df) was less than 3 (Kline 2015), the GFI (goodness-of-fit index) was at the threshold of a good fit and the CFI (comparative fit index) had a value above 0.90, which indicates a good fit (Marôco 2014). The RMSEA (root-mean-square error of approximation) value is considered very good for values below 0.05 and the PCLOSE (comparative fit index) must be greater than or equal to 0.05 (Arbuckle 2014), which was also verified.

Table 2 shows that all the standardised loadings of the psychological empowerment scale have values greater than 0.5 (the minimum value was 0.613 and was obtained for item E7) and were also significant ($p < 0.001$), thus showing that each item produced important information for psychological empowerment.

The scale's factors had Cronbach's alpha and composite reliability values above 0.7 (ranging from 0.867 to 0.900), which indicates that the scale consistently and reproducibly measured the factors of interest in the sample under study (Hair et al. 2017). The AVE values for the four factors of the scale were also greater than or equal to 0.5 (minimum value 0.691 for the competence factor), which is an indicator of adequate convergent validity (Hair et al. 2017).

It should be noted that items 20, 22, 26 and 28 of the motivation scale were removed from the model because their loadings were less than 0.5; this fact was also found in the work of Ferreira et al. (2006) when they applied exploratory factor analysis. Table 3 shows that all the standardised loadings of the motivation scale were significant ($p < 0.001$) and had values greater than 0.5 (the minimum value was 0.556 and was obtained for item M3), thus showing that each item produced important information for the motivation construct.

Table 3. Estimating the parameters of the measurement model—motivation.

Factor/Items	M (SD)	Loadings
Work organisation ($\alpha = 0.877$, CR = 0.878, AVE = 0.508)	3.63 (0.66)	
M1. This organisation has satisfactory working conditions.	3.84 (0.84)	0.751
M5. I feel fulfilled in my role in the organisation.	3.74 (0.80)	0.735
M9. I feel satisfied with my pay.	3.42 (0.81)	0.632
M13. The feedback I receive at work contributes as a motivational factor.	3.81 (0.87)	0.718
M17. All the organisation's employees take part in decision-making processes.	3.39 (0.95)	0.689
M21. I feel that I work in an environment of co-operation between colleagues.	3.63 (0.84)	0.698
M25. The organisation enables the development of professional goals.	3.61 (0.89)	0.756
Performance ($\alpha = 0.853$, CR = 0.854, AVE = 0.541)	3.70 (0.69)	
M2. I find that periodic evaluations motivate me.	3.53 (0.84)	0.670
M6. I would like to be assessed on my performance on a regular basis.	3.73 (0.88)	0.802
M10. When performing tasks, it's important to show some emotion.	3.75 (0.79)	0.684
M14. I like to be assessed on the performance of tasks.	3.77 (0.81)	0.802
M18. I usually develop strategies to achieve my goals.	3.88 (0.76)	0.707
Realisation and power ($\alpha = 0.890$, CR = 0.874, AVE = 0.500)	3.88 (0.68)	
M3. Having career prospects is important for my motivation at work.	4.07 (0.89)	0.556
M7. I would like to fulfil roles with greater responsibility.	3.73 (0.83)	0.702
M11. I feel capable of managing a working group.	3.84 (0.84)	0.729
M15. I feel the need to grow more and more in my role.	4.00 (0.84)	0.779
M19. If there were prizes awarded to the best employees, I would perceive them as a professional motivating factor.	3.96 (0.88)	0.708

Table 3. Cont.

Factor/Items	M (SD)	Loadings
M23. One of my goals is to reach the highest position in the organisation.	3.55 (0.98)	0.724
M27. I feel motivated when my work is praised by my superior.	4.07 (0.83)	0.732
Involvement ($\alpha = 0.841$, CR = 0.841, AVE = 0.515)	3.85 (0.69)	
M4. I usually consider myself a highly motivated person.	3.97 (0.83)	0.725
M8. I find my work monotonous.	2.50 (1.09)	0.714
M12. I feel emotionally involved with the organisation.	3.80 (0.82)	0.726
M16. My knowledge is decisive in the way I work.	4.02 (0.87)	0.676
M24. I identify with my job.	3.84 (0.88)	0.745

Note: All loadings were significant at $p < 0.001$. CR—composite reliability, AVE—average variance extracted. Source: own elaboration.

Table 3 also shows that the scale’s factors had Cronbach’s alpha and composite reliability values above 0.7 (ranging from 0.841 to 0.890). It could therefore be concluded that this indicates that the motivation scale consistently and reproducibly measured the factors of interest in the sample under study (Hair et al. 2017). The AVE values for the four factors of the scale were also greater than or equal to 0.5 (minimum value 0.5 in the realisation and power factor), which is an indicator of adequate convergent validity (Hair et al. 2017).

For all the factors, the square root of the AVE parameter (in bold on the diagonal of the matrix in Table 4) was always higher than the inter-construct correlations, and thus, there is evidence of convergent and discriminant validity. It should also be noted that the correlations between the various constructs were statistically positive and significant ($p < 0.001$). The highest correlations occurred between the meaning dimension and the organisational involvement ($r = 0.545$) and work organisation ($r = 0.495$) motivation dimensions and could be classified as strong (Pallant 2016).

Table 4. Correlation matrix between the constructs.

	M	C	S-D	I	WO	MP	AP	OI
M	0.866							
C	0.393	0.831						
S-D	0.457	0.253	0.785					
I	0.321	0.256	0.424	0.866				
WO	0.495	0.212	0.474	0.326	0.712			
MP	0.420	0.304	0.268	0.187	0.264	0.735		
AP	0.304	0.329	0.262	0.309	0.198	0.357	0.707	
OI	0.545	0.314	0.378	0.350	0.404	0.405	0.321	0.718

Note: All correlations were significant at $p < 0.001$. M—meaning, C—competence, S-D—self-determination, I—impact, WO—work organisation, MP—motivational performance, AP—achievement and power, OI—organisational involvement. Source: own elaboration.

4.2. Structural Model

The fit indices of the structural model were considered to be of good quality ($\chi^2 = 1382.726$, $df = 581$, $\chi^2/df = 2.380$, GFI = 0.892, CFI = 0.931, RMSEA = 0.047, PCLOSE = 0.923), as the ratio of the chi-squared statistic to the degrees of freedom (χ^2/df) was less than 3 (Kline 2015), the GFI (goodness-of-fit index) was very close to the threshold of a good fit and the CFI (comparative fit index) had a value above 0.90, which indicates a good fit (Marôco 2014). The RMSEA (root-mean-square error of approximation) value is considered very good for values below 0.05 and the PCLOSE (comparative fit index) must be greater than or equal to 0.05 (Arbuckle 2014); this is also found for the model.

The four dimensions of psychological empowerment explained 76% of the variability in motivation. In Table 5, the empirical results of the hypothesis tests that defined the causal relationships between the variables show that the meaning of work positively and significantly influenced motivation ($\beta = 0.552$, $p < 0.001$), which empirically supported hypothesis 1. With regard to hypothesis 2, this was empirically supported, i.e., competence

at work positively and significantly influenced motivation ($\beta = 0.160, p < 0.001$). With regard to hypothesis 3, i.e., self-determination at work positively influences motivation, there was also sufficient statistical evidence to state that this was empirically supported ($\beta = 0.238, p < 0.001$). Finally, hypothesis 4 was also empirically supported, and thus, it can be said that personal impact at work positively influenced motivation ($\beta = 0.195, p < 0.001$).

In summary, all the dimensions of empowerment had a positive influence on motivation at work, with the dimensions of meaning at work and self-determination contributing the most to motivation.

Table 5. Results of the structural model analysis.

	Hypothesised Path	β	Z	Results
H1	Meaning → motivation	0.552	8.71 ***	Supported
H2	Competence → motivation	0.160	3.41 ***	Supported
H3	Self-determination → motivation	0.238	4.46 ***	Supported
H4	Impact → motivation	0.195	4.08 ***	Supported

*** $p < 0.001$. Source: own elaboration.

5. Discussion

The study carried out intended to test whether there is any empirical relationship between employee empowerment and employee motivation in Portuguese employees according to Spreitzer (1995), for whom there are four dimensions that influence the psychological empowerment of employees: meaning of work, competence at work, self-determination at work and personal impact at work.

The results show that employee motivation was positively influenced by empowerment and that the meaning of work, competence, self-determination and personal impact contribute positively to motivation; as advocated by Spreitzer (1995), these four dimensions influenced the psychological empowerment of employees. Specifically, this study revealed that the motivation of Portuguese employees was especially influenced by the following areas: meaning dimension, organisational involvement and work organisation.

The critical contribution of the proposed study was that it highlighted the dimensions of empowerment that most contributed to employee motivation, meaning and self-determination. In this sense, and following the work of Spreitzer (1995) and Spreitzer and Doneson (2005), employees whose value in terms of a work objective or work proposal was more evident were the employees who were more committed to the organisation and felt more motivated to pursue the organisation's objectives. On the other hand, employees with greater self-determination, in the sense that they feel more autonomy in defining and pursuing their work, were stronger in terms of empowerment and more motivated, corroborating the conclusions reached by Hackman and Oldham (1980) and by Ferreira et al. (2006).

The results obtained also corroborate the perspective of Andika and Darmanto (2020), Vu (2020), Kumar and Kumar (2017), and Zhang and Bartol (2010), who showed that empowerment contributes positively to employee motivation. The results also verify the perspective of Andika and Darmanto (2020) and Kanjanakan et al. (2023), who advocated that organisations and individuals with greater empowerment perform better through greater motivation.

6. Conclusions, Limitations and Avenues for Future Research

The proposed study was applied to Portuguese employees in industry and services and aimed to understand the role of psychological empowerment in employee motivation. With regard to the scientific contributions of this study, this investigation revealed that psychological empowerment at work positively influenced employee motivation, which meant that higher levels of empowerment were associated with higher levels of motivation. In particular, the results showed sufficient statistical evidence to affirm that the meaning, competence, self-determination and impact dimensions positively influenced motivation,

with the meaning and self-determination dimensions contributing the most to employee motivation.

In terms of practical implications, this study provides leaders with decision-making tools for managing people in their organisations. In order to have employees who are motivated and committed to the organisation, leaders must provide the conditions for them to feel that the importance of their work and their skills are valued and promote their self-determination and personal impact. This research shows that servant leadership must be committed to strengthening employees' psychological empowerment, ensuring that they feel integrated into the organisation's culture and increasing their organisational performance.

One limitation of this research was that it was a cross-sectional study, which revealed the behaviour of the population at a specific moment in time. For this reason, in future investigations, it would be interesting to complete this study with a longitudinal analysis of respondents in various states in order to show changes in behaviour over time. On the other hand, it would be useful to use additional methods to gauge the perspective of leaders.

Qualitative methodologies should also be integrated, in addition to quantitative ones in order to obtain additional, more in-depth contributions to the object of study.

Given that the actions of leaders are decisive for the implementation of strategies that affect the human resources of organisations, it would be interesting to integrate the actions of leaders that enhance the empowerment of employees, increasing the dimensions under analysis, specifically the meaning of work, competence, self-determination and personal impact, with special emphasis on the first two.

Author Contributions: Conceptualisation, M.S., E.S. and T.S.; methodology, E.S.; software, E.S.; validation, M.S. and T.S.; formal analysis, M.O.; investigation, M.S., E.S. and T.S.; data curation, E.S.; writing—original draft preparation, M.S., E.S., T.S. and M.O.; writing—review and editing, M.O.; visualisation, M.S., E.S., T.S. and M.O. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

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

Data Availability Statement: MDPI Research Data Policies at <https://www.mdpi.com/ethics>.

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

References

- Afram, Joseph, Alba Manresa, and Marta Mas Machuca. 2022. The impact of employee empowerment on organisational performance: The mediating role of employee engagement and organisational citizenship behaviour. *Intangible Capital* 18: 96–119. [CrossRef]
- Allen, Natalie J., and John P. Meyer. 1996. Affective, continuance, and normative commitment to the organisation: An examination of construct validity. *Journal of Vocational Behavior* 49: 252–76. [CrossRef]
- Andika, Rudi, and Susetyo Darmanto. 2020. The effect of employee empowerment and intrinsic motivation on organisational commitment and employee performance. *Jurnal Aplikasi Manajemen* 18: 241–51. [CrossRef]
- Andreas, Deden. 2022. Employee performance: The effect of motivation and job satisfaction. *Produktif: Jurnal Kepegawaian Dan Organisasi* 1: 28–35.
- Arbuckle, James L. 2014. *IBM® Amos TM 23 User's Guide*. Chicago: Amos Development Corporation.
- Arnold, Josh A., Sharon Arad, Jonathan A. Rhoades, and Fritz Drasgow. 2000. The empowering leadership questionnaire: The construction and validation of a new scale for measuring leader behaviours. *Journal of Organizational Behavior* 21: 249–69. [CrossRef]
- Carreira, Sofia, José Ricardo Andrade, and Eulália Santos. 2020. Critical factors of work motivation: A study in the metal-mechanic sector. *Revista Lusófona de Economia e Gestão Da Organizações* 10: 9–31.
- Chiavenato, I. 2005. *Organisational Behaviour: The Dynamics of Success in Organisations*. Sao Paulo: Manole Publishing House.
- de Sousa, Rosa Maria Borges Cardoso, and Marlene Catarina de Oliveira Lopes Melo. 2009. Mulheres Na Gerência Em Tecnologia Da Informação: Análise De Expressões De Empoderamento. *REGE Revista De Gestão* 16: 1–16. [CrossRef]

- Ferreira, Aristides Isidoro, Carole Diogo, Mafalda Ferreira, and Ana Catarina Valente. 2006. Construction and validation of a multi-factorial work motivation scale (Multi-Moti). *Organisational Behaviour and Management* 12: 187–98.
- Frey, Marco, Fabio Iraldo, and Francesco Testa. 2013. The determinants of innovation in green supply chains: Evidence from an Italian sectoral study. *R&D Management* 43: 352–64.
- Gabra, Shereen Faiyez, Hala Ramzy Yousef, and Sahar Ahmed Abood. 2019. Relationship between empowerment and motivation among staff nurses in Minia University Hospital. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* 8: 57–64.
- Gagné, Marylène, Jacques Forest, Maarten Vansteenkiste, Laurence Crevier-Braud, Anja Van den Broeck, Ann Kristin Aspeli, Jenny Bellerose, Charles Benabou, Emanuela Chemolli, Stefan Tomas Güntert, and et al. 2015. The Multidimensional Work Motivation Scale: Validation evidence in seven languages and nine countries. *European Journal of Work and Organisational Psychology* 24: 178–96. [CrossRef]
- Hackman, J. Richard, and Greg R. Oldham. 1980. *Work Redesign*. Boston: Addison-Wesley Publishing Company. [CrossRef]
- Hair, Joseph F., Jr., Barry J. Babin, and Nina Krey. 2017. Covariance-based structural equation modelling in the Journal of Advertising: Review and recommendations. *Journal of Advertising* 46: 163–77. [CrossRef]
- Jacquiline, Furechi N. 2014. Employee empowerment and job satisfaction. *Research Journal's Journal of Human Resource* 2: 1–12.
- Joo, Baek-Kyoo, and Ji Hyun Shim. 2010. Psychological empowerment and organisational commitment: The moderating effect of organisational learning culture. *Human Resource Development International* 13: 425–41. [CrossRef]
- Jufrizen, Jufrizen, and Tiara Safani Sitorus. 2021. Pengaruh Motivasi Kerja dan Kepuasan Kerja Terhadap Kinerja Dengan Disiplin Kerja Sebagai Variabel Intervening. *Seminar Nasional Teknologi Edukasi Sosial Dan Humaniora* 1: 844–59.
- Kanjanakan, Pattamol, Pola Q. Wang, and Peter B. Kim. 2023. The empowering, the empowered, and the empowerment disparity: A multilevel analysis of the integrated model of employee empowerment. *Tourism Management* 94: 104635. [CrossRef]
- Kline, Rex B. 2015. *Principles and Practice of Structural Equation Modelling*. New York: Guilford Publications.
- Kumar, P. Jaya, and A. Ananda Kumar. 2017. Employee empowerment—An empirical study. *Global Journal of Management and Business Research* 17: 59–64.
- Locke, Edwin A., and Gary P. Latham. 1990. *A Theory of Goal Setting & Task Performance*. Hoboken: Prentice-Hall, Inc.
- Ma, Emily, Yun Zhang, Feng Zeng Xu, Danni Wang, and Misun (Sunny) Kim. 2021. Feeling empowered and doing good? A psychological mechanism of empowerment, self-esteem, perceived trust, and OCBs. *Tourism Management* 87: 104356. [CrossRef]
- Marôco, João. 2014. *Structural Equation Analysis: Theoretical Foundations, Software & Applications*, 2nd ed. Pêro Pinheiro: ReportNumber.
- Matsuo, Makoto. 2019. Empowerment through self-improvement skills: The role of learning goals and personal growth initiative. *Journal of Vocational Behaviour* 115: 103311. [CrossRef]
- Maynard, M. Travis, Margaret M. Luciano, Lauren D'Innocenzo, John E. Mathieu, and Matthew D. Dean. 2014. Modelling time-lagged reciprocal psychological empowerment–performance relationships. *Journal of Applied Psychology* 99: 1244. [CrossRef]
- McClelland, David C. 1975. *Power: The Inner Experience*. New York: Irvington.
- Meng, Bo, and Heesup Han. 2014. The effects of empowerment on employee psychological outcomes in upscale hotels. *Journal of Hospitality Marketing & Management* 23: 218–37.
- Meyerson, Gaudreau, and Blanchard Dewettinck. 2012. Effect of empowerment on employee performance. *Advanced Research in Economic and Management Sciences* 2: 40–46.
- Nadreeva, L., J. Gaynutdinova, and G. Rakhimova. 2016. Productivity and motivation of employees in the services sector. Paper presented at 27th International Business Information Management Association Conference-Innovation Management and Education Excellence Vision 2020: From Regional Development Sustainability to Global Economic Growth (IBIMA), Vienna, Austria, May 3–4; pp. 1211–19.
- Nwachukwu, Chijioke. 2016. The Impact of Performance Management and Employee Empowerment on Organisational Culture of Selected Banks in Nigeria. *Ekonomika A Management* 2: 1–9.
- Oliveira, M., E. Santos, S. Carreira, and J. R. Andrade. 2018. The importance of motivation in knowledge management in organisations: A study in a Portuguese company. *The Importance of Motivation in Knowledge Management in Organisations: A Study in a Portuguese Company* 1: 16–30.
- Pallant, Julie. 2016. *A Step by Step Guide to Data Analysis Using IBM SPSS*, 6th ed. New York: McG-Raw-Hill Education.
- Ramesh, R., and Kshitij Kumar. 2014. Role of employee empowerment in organisational development. *International Journal of Scientific Research and Management (IJSRM)* 2: 1241–45.
- Randolph, W. Alan. 1995. Navigating the journey to empowerment. *Organisational Dynamics* 23: 19–32. [CrossRef]
- Rowlands, Jo. 1997. *Questioning Empowerment: Working whit Women in Honduras*. Oxford: Oxfam, p. 180.
- Sahoo, Chandan Kumar, Neeraja Behera, and Santosh Kumar Tripathy. 2010. Employee empowerment and individual commitment: An analysis from integrative review of research. *Employment Relations Record* 10: 40–56.
- Saif, Naser Ibrahim, and Afnan Sharif Saleh. 2013. Psychological empowerment and job satisfaction in Jordanian hospitals. *International Journal of Humanities and Social Science* 3: 250–57.
- Saleh, Mahmoud O., Nidal F. Eshah, and Ahmad H. Rayan. 2022. Empowerment predicting nurses' work motivation and occupational mental health. *SAGE Open Nursing* 8: 23779608221076812. [CrossRef]
- Spreitzer, Gretchen M. 1995. Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal* 38: 1442–65. [CrossRef]

- Spreitzer, Gretchen M., and David Doneson. 2005. Musings on the past and future of employee empowerment. *Handbook of Organisational Development* 4: 5–10.
- Tripathi, Praseon Mani, Shalini Srivastava, Lata Bajpai Singh, Vartika Kapoor, and Umesh Solanki. 2021. A JD-R perspective for enhancing engagement through empowerment: A study on Indian hotel industry. *Journal of Hospitality and Tourism Management* 46: 12–25. [CrossRef]
- Vu, Hieu Minh. 2020. Employee empowerment and empowering leadership: A literature review. *Technium: Romanian Journal of Applied Sciences and Technology* 2: 20–28. [CrossRef]
- Wilkinson, Adrian. 1998. Empowerment: Theory and practice. *Personnel Review* 27: 4056. [CrossRef]
- Wooddell, Victor. 2009. Employee empowerment, action research and organisational change: A case study. *Organisation Management Journal* 6: 13–20.
- Zhang, Xiaomeng, and Kathryn M. Bartol. 2010. Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal* 53: 107–28. [CrossRef]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

Article

Predicting the Relationship between Green Transformational Leadership, Green Human Resource Management Practices, and Employees' Green Behavior

Afriyadi Cahyadi ^{1,2,*}, Diah Natalisa ^{2,3}, József Poór ^{1,4}, Badia Perizade ² and Katalin Szabó ¹

¹ Doctoral School of Economics and Regional Sciences, Hungarian University of Agriculture and Life Sciences, H-2100 Gödöllő, Hungary

² Fakultas Ekonomi, Universitas Sriwijaya, Jalan Palembang Prabumulih KM 32, Indralaya, Ogan Ilir 30862, Indonesia

³ Ministry of Administrative and Bureaucratic Reform, Jakarta 12190, Indonesia

⁴ Department of Management, Faculty of Economics and Informatics, J. Selye University, UI. Hradná 21, 94501 Komárno, Slovakia

* Correspondence: cahyadi.afriyadi@phd.uni-mate.hu or afriyadicahyadi@fe.unsri.ac.id

Abstract: Building on theories of Corporate Sustainability, Triple Bottom Line, and Natural Resource-Based View, this study aims to predict the positive relationship between green transformational leadership, green human resource management practices, and employees' green behavior. It applies a quantitative approach to analyze 252 data collected from the customers who are prospective employees of small and medium enterprises in Budapest. An online questionnaire was sent to 252 samples with the Snowball sampling method for about a month in Hungary. Based on a structural equation modeling analysis, green transformational leadership and green human resource management practices positively influence employees' green behavior. Green human resource management practices mediate the relationship between green transformational leadership and employees' green behavior. Small and medium enterprises should consider solving the green behavioral problems of their employees by promoting the green concept in leadership and human resource management practices. Such initiatives contribute to sustainability in small and medium enterprises.

Keywords: green transformational leadership; green human resource management practices; employees' green behavior; small and medium enterprises; corporate sustainability; triple bottom line; natural resource-based view

Citation: Cahyadi, Afriyadi, Diah Natalisa, József Poór, Badia Perizade, and Katalin Szabó. 2023. Predicting the Relationship between Green Transformational Leadership, Green Human Resource Management Practices, and Employees' Green Behavior. *Administrative Sciences* 13: 5. <https://doi.org/10.3390/admsci13010005>

Received: 14 September 2022

Revised: 13 December 2022

Accepted: 14 December 2022

Published: 22 December 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

There is a long and continuous debate about who is more important for companies, customers or employees (Fata et al. 2022). In the environmental context, customers will react to practices conducted by business leaders and managers that lead to environmental damages (Shampa and Jobaid 2017). Customers tend to buy products with the trusted green performance offered by companies (Doszhanov and Ahmad 2015). Many customers have petitioned and boycotted manufacturers when they find products causing environmental problems (Chen and Chai 2010). Indeed, customers hope for green practices in businesses in leadership, human resource management practices, and employees' behavior.

Furthermore, customers have supported companies to preserve the environment through environmentally friendly products and innovations (Alamsyah et al. 2021). These efforts are related to corporate social responsibility to improve business strategies and values (Costa and Fonseca 2022; Tosun et al. 2022). Many recent studies have revealed that these efforts are green transformational leadership (GTL), green human resource management (GHRM) practices, and employees' green behavior (EGB). At the same time, recent researchers use the theories of Corporate Sustainability, Triple Bottom Line, and Natural Resource-Based to explain the three green concepts.

Scholars have recently elucidated the role of GTL in enhancing environmentally responsible employee behavior (Du and Yan 2022). Some studies have revealed that GHRM practices solve environmental problems (Tanova and Bayighomog 2022) and support green businesses (Haldorai et al. 2022). Then, EGB becomes a construct in organizational behavior discipline (Katz et al. 2022) that can anticipate negative behaviors from employees in companies (Meyers and Rutjens 2022).

Nonetheless, studies investigating the mediating role of GHRM practices in the relationship between GTL and EGB are scarce. Several studies function as sources to predict the relationships. GTL positively affects GHRM practices (Singh et al. 2020; Arshad 2021; Huelgas and Arellano 2021). GHRM practices positively affect EGB (Karmoker et al. 2021; Harasudha and Subramanian 2020; Ha and Uyen 2021; Gill et al. 2021; Fawehinmi et al. 2020; Dumont et al. 2017; Ercantan and Eyupoglu 2020). GTL indirectly determines EGB (Jian et al. 2020). Environmental-transformational leadership positively influences employees' pro-environmental behavior, and GHRM moderates this relationship (Omarova and Jo 2022).

Small and medium enterprises (SMEs) have a vital role in the economy of many countries. They are global contributors to greenhouse gases (Fahad et al. 2022). Of course, they respond to the customers' support for business efforts to preserve the environment (Sun et al. 2022). Current studies have confirmed that the orientation of SMEs toward green product development can improve business performance (Hirunyava et al. 2022). However, the extant literature focuses on large businesses in the environmental context (Yu et al. 2022; Rehman et al. 2022). Moreover, customers' awareness and expectations in this context have started for large companies (Alshaabani et al. 2021) rather than SMEs.

The European Commission has stated that 98 percent of the European economy is SMEs (Oláh et al. 2019). Hungary, a Central-Eastern European country with a population of 9,689,000 (Medve 2022), is an important center for the automotive, mechatronics, logistics, and environmental industries (Irimiás and Mitev 2020). It has a strong economy (Virág n.d.). Based on the aggregation of the MNB Sustainability Index indicators, the country's score is slightly higher than the score of the Visegrad group and only a point below the EU average score (Hausmann and Szalai 2021).

In Hungary, private businesses are dominant for SMEs (Bajnóczki et al. 2021). SMEs in Budapest, the capital city of Hungary, operate with a wide range of products. As SMEs are proponents of innovation (Katona 2022) and drivers of new product development (Kindermann et al. 2022), the awareness and expectations of SME customers in Hungary about GTL, GHRM practices, and EGB are essential for research.

This study intends to examine the positive effects of GTL and GHRM practices on EGB in SMEs based on their customers who are prospective employees' perspectives. Furthermore, it is to predict the mediating role of GHRM practices in the positive relationship between GTL and EGB. Based on a quantitative analysis conducted on the collected data, the results of this study indicate that GTL and GHRM practices are antecedents of EGB, and GHRM practices are a mediator in the positive relationship between GTL and EGB. The leaders and human resource managers in SMEs could adopt GTL and GHRM practices to build EGB. The research framework in this study contributes to the advancement of the causal relationship between leadership, HRM practices, and employees' behavior in the context of sustainability.

After describing the study background in this section, the authors then explain the theories of Corporate Sustainability, Triple Bottom Line, and Natural Resource-Based View to elaborate on the demand for GTL, GHRM practices, and EGB. The explanations are followed by the relationship between GTL, GHRM practices, and EGB. The third section, methodology, consists of research design, variables and measures, instruments, sampling and data collection, and statistical analysis. The later sections present the results and discussion that end with the conclusion section.

2. Literature Review

2.1. Theories of Corporate Sustainability, Triple Bottom Line, and Natural Resource-Based View

Current researchers have described the theory of Corporate Sustainability (CS) to address social and environmental problems (Nwoba et al. 2021). Dyllick and Hockerts (2002, p. 131) define CS as “meeting the needs of a firm’s direct and indirect stakeholders, without compromising its ability to meet the needs of future stakeholders as well.” This theory explains the ethics, economy, society, and environment (Kücükgül et al. 2022; Lee et al. 2018; and Jamal et al. 2021) that drive innovation (Lozano et al. 2015; Rezaee 2017) and long-term value creation in businesses (Hawn et al. 2018). It develops from the Triple Bottom Line (TBL) theory (Ahmed et al. 2021; Nunhes et al. 2021; Zhang et al. 2020).

In 1994, John Elkington coined the term TBL (Elkington 2018). The late 1990s saw this term take off (Elkington 2004). The TBL theory refers to the environmental, social, and financial aspects of businesses (Isil and Hernke 2017; Alsawafi et al. 2021; Liute and Giacomo 2022). This theory refers to an organizational environment that facilitates sustainability (Heim et al. 2022). It is also the concept of profit, planet, and people (Masud et al. 2019) that articulates the sustainability perspective (Satar 2022) in economic goals (Wu et al. 2018). The number of studies conducted on this subject has increased in recent years following the declaration of restrictions on electronics and waste by the European Union (Tseng et al. 2020). There are three major criticisms of TBL: TBL’s measurement, TBL as a non-systemic approach, and TBL as a compliance/ranking mechanism (Sridhar and Jones 2013).

Hart introduced the concept of the Natural Resource-Based View in 1995. It is the composition of pollution prevention, product stewardship, and sustainable development (Hart 1995). Researchers have explained that it can provide pollution prevention, product management, and sustainable development policies for businesses (Farrukh et al. 2021). This environmental concept creates innovation that supports companies to reach competitive advantages and benefits for the natural environment (Andersen 2021).

2.2. Green Transformational Leadership and Employees’ Green Behavior in Small and Medium Enterprises

Chen and Chang (2013, p. 109) define GTL as “behaviors of leaders who motivate followers to achieve environmental goals and inspire followers to perform beyond expected levels of environmental performance.” Then, scholars often refer to GTL as environmental-transformational leadership, green transformational leadership style, and environmental-specific transformational leadership. GTL raises leaders’ concerns about environmental issues (Mansoor et al. 2021; Khan and Khan 2022; Singh et al. 2020; Li et al. 2020; Özgül and Zehir 2021).

Green transformational leaders influence employees through their green plans, visions, goals, beliefs, and ideas (Chen and Chang 2013). GTL directly affects EGB (Al-Swidi et al. 2021). The EGB concept emerged from the reflections of scholars on environmental issues in the 1960s (Omarova and Jo 2022). Ones and Dilchert (2012, p. 87) define EGB as “scalable actions and behaviors that employees engage in that are linked with and contribute to or detract from environmental sustainability.” Therefore, scholars often explain EGB as employee pro-environmental behavior, employee work-green behavior, EGB at the workplace, and green employee behavior.

EGB contributes to sustainability in businesses (Fadel et al. 2021; Ha and Uyen 2021; Harasudha and Subramanian 2020). It refers to a set of individual behaviors that are environmentally friendly. EGB includes activities such as saving energy, using resources efficiently, avoiding waste, saving water (Adriana et al. 2020), prioritizing environmental interests, initiating programs and policies, lobbying and activism, and encouraging others (Faeq et al. 2021) that reduce the negative environmental impacts of the organization.

Robertson and Barling (2013) have explained EGB in printing activities, compostable items, recyclable materials, reusable utensils, lighting, programs, and practices. Business leaders can create green plans, visions, goals, actions, beliefs, and ideas to realize green printing activities, compostable items, recyclable materials, reusable utensils, lighting,

programs, and green practices. However, as these indicators have been tested for large businesses, not all of them are suitable for SMEs. SME leaders might have limited conceptual skills and resources.

Hypothesis 1 (H1). *Green transformational leadership positively influences employees' green behavior.*

2.3. Green Transformational Leadership and Green Human Resource Management Practices in Small and Medium Enterprises

Efforts to understand GHRM practices have been started since the early 2000s (Muster and Schrader 2011). Renwick et al. (2012, p. 1) began to define GHRM practices as “the HRM aspects of environmental management.” Many researchers have described GHRM practices as activities, systems (Tanova and Bayighomog 2022), policies, approaches (Islam et al. 2019; Darvishmotevali and Altinay 2022), programs, processes (Arulrajah et al. 2015; Yusoff et al. 2018), phenomenon, action, design (Mousa and Othman 2020; Pham et al. 2019; Tang et al. 2018). These practices integrate human resource management practices with sustainable environmental issues among employees (Mwita 2019).

GHRM practices aim to develop environmental sensitivity in employees and make them aware of how their behavior affects the environment (Gilal et al. 2019; Malik et al. 2020; Irani and Kilic 2022). Current researchers have explained that the more similar the studies, the higher the company's need for GHRM practices (Masri and Jaaron 2017).

The relationship between GTL and GHRM practices has been demonstrated in the studies of Singh et al. (2020); Arshad (2021); Huelgas and Arellano (2021). From the explanation of Saeed et al. (2019) on measures of GHRM practices that include green recruitment and selection, green training, green performance management, green rewards and compensation, green empowerment, and green knowledge, the authors adopt four measures. Green rewards and compensation and green knowledge in GHRM practices are two measures that do not apply to SMEs.

Hypothesis 2 (H2). *Green transformational leadership positively influences green human resource management practices.*

2.4. Green Human Resource Management Practices and Employees' Green Behavior in Small and Medium Enterprises

Awareness of environmental issues represents social and economic well-being at both the organizational and individual levels (Ahmad 2015; Karatepe et al. 2022). The relationship between GHRM practices and EGB in this study refers to some previous studies. First, the study of Jian et al. (2020) has explained that GHRM practices determine EGB. However, environmental goal clarity has moderated the relationships. Then, the relationship between GHRM practices and EGB has been described in the studies of Karmoker et al. (2021); Harasudha and Subramanian (2020); Ha and Uyen (2021); Gill et al. (2021); Fawehinmi et al. (2020); Dumont et al. (2017); Ercantan and Eyupoglu (2020).

Hypothesis 3 (H3). *Green human resource management practices positively influence employees' green behavior.*

GTL and GHRM practices determine EGB. Since GTL affects GHRM practices, and GHRM practices affect EGB, GHRM practices mediate the relationship between GTL and EGB. Hence, environmental-transformational leadership influences employees' pro-environmental behavior, and GHRM moderates this relationship (Omarova and Jo 2022). Figure 1 demonstrates the causal relationship between GTL, GHRM practices, and EGB, based on the hypotheses.

Hypothesis 4 (H4). *Green human resource management practices mediate the positive relationship between green transformational leadership and employee green behavior.*

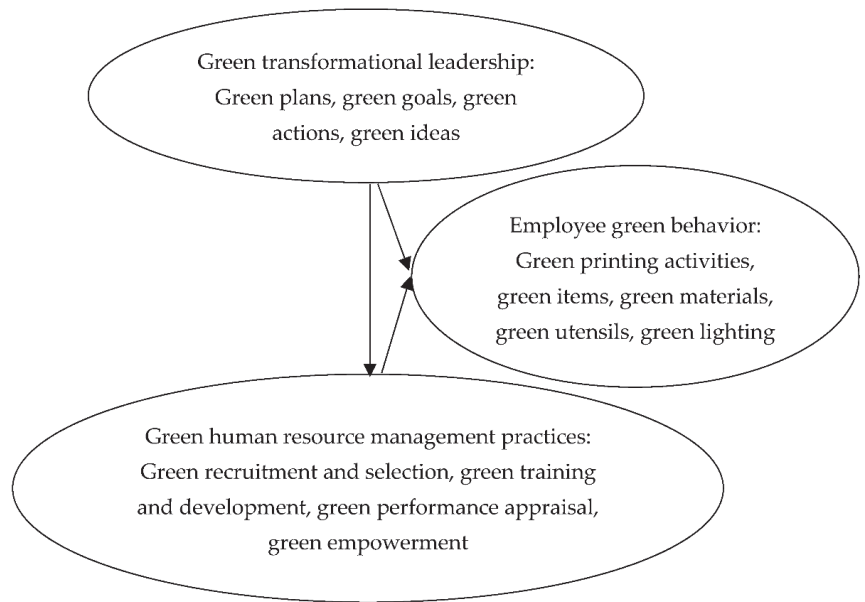


Figure 1. Research framework.

3. Methods

3.1. Design

This study analyzes the data with a quantitative approach to obtain descriptive results. A structural equation modeling analysis tests the relationship between the independent, mediating, and dependent variables. To support the process of data analysis, this study uses Microsoft Excel, Statistical Program for Social Sciences (SPSS), and Moment Structure Analysis (AMOS).

3.2. Measures

First, to be appropriate to SMEs, the authors screen items suitable for SMEs. This study adopts four of six items for GTL in the study of Chen and Chang (2013). They are about green plans, goals, actions, and ideas. Then, four of six items for GHRM practices in the study of Saeed et al. (2019), namely green recruitment and selection, training, performance management, and empowerment, are employed in the study. Finally, items about green printing activities, items, materials, utensils, and lighting are used in this study. These five items are part of seven items in the study of Robertson and Barling (2013).

3.3. Samples and Procedures

As most customers expect green practices in business leadership, human resource management practices, and employee behavior, this study utilizes customers who have the potential or interest to work as SME employees as samples. The authors guide them using an English online questionnaire, the snowball sampling method, and the “Facebook” and “WhatsApp” programs on their mobile phones. In the questionnaire form, the authors include a statement that all information would be kept confidential and that the study is voluntary. The total number of respondents obtained in this study is 252.

This study represents a cross-sectional study. The data samples were collected from early July to August 2022. The respondents took about 5 min to fill out all the items in the questionnaire that applied anonymity during the period. Most of them were doctoral students, males aged 30 to 39 years from cities outside Budapest. They visited mini markets in Budapest regularly.

As the survey focuses on customer as well as prospective employee responses, all items in the questionnaire are formatted according to technical needs. The sample items for GTL, GHRM practices, and EGB are as follows: the leaders of SMEs in Budapest should have environmental plans, the human resource managers of SMEs in Budapest should have environmentally conscious employees, the employees of the SMEs in Budapest should print working papers on both sides during work. The multiple-choice method with seven Likert rating scales, from strongly disagree (1) to strongly agree (7), is provided for respondents to engage with all items.

3.4. Data Analysis

The collected data are put into the Microsoft Excel program to create a data set, the transferred to the SPSS and AMOS. The authors can easily relate each of the variables (latent and manifest variables) through the arrows provided in AMOS. In the early stage of analysis, this study tests Common Method Bias (CMB). It is to determine the variation of answers from respondents caused by the instrument compared to the actual tendency of the respondents. The output of the CMB test in this study shows a value of 0.4 (<0.5), so the data did not have CMB.

This study describes a confirmatory factor analysis (CFA) to obtain validity and reliability of all items. Moreover, it tests the Goodness of Fit (GoF) and provides a figure of structural equation modeling. Finally, there is the hypothesis analysis.

4. Results

4.1. Confirmatory Factor Analysis

Based on Table 1, all estimated values range from 0.947 to 1.125. These values are more than 0.7 and well above the standard error values, which are from 0.068 to 0.107. So, all items are constructively valid. All critical ratio values are between 10.342 and 13.880, and all probability values are 0.000. These values are well above 2.96. Therefore, all relationships between the indicators and variables are positive and significant.

Table 1. Standardized regression weights.

	Correlation	Estimate	Standard Error	Critical Ratio	Probability
Green transformational leadership	Green plans	1.000			
	Green goals	1.058	0.093	11.367	0.000
	Green actions	1.025	0.094	10.877	0.000
	Green ideas	0.985	0.095	10.342	0.000
Green human resource management practices	Green recruitment and selection	1.000			
	Green training and development	1.074	0.101	10.620	0.000
	Green performance appraisal	1.125	0.107	10.490	0.000
	Green empowerment	1.116	0.100	11.147	0.000
Employee green behavior	Green items	1.000			
	Green printing activities	0.961	0.071	13.491	0.000
	Green materials	0.947	0.071	13.333	0.000
	Green utensils	0.962	0.072	13.354	0.000
	Green lighting	0.950	0.068	13.880	0.000

Table 2 exhibits that the sample co-variance values for all items range between 1.570 for the green goals (X2) and 1.960 for the green performance appraisal (Y1.3). All values

are higher than the values below and to the left of them. For example, X4 = 1.758 is higher than all values in the lower column (0.935, 0.966). So, all items are valid in discriminant.

Table 2. Sample covariance matrix.

Items	Items													
	X4	X3	X2	X1	Y2.5	Y2.4	Y2.3	Y2.2	Y2.1	Y1.4	Y1.3	Y1.2	Y1.1	
X4	1.758													
X3	0.935	1.700												
X2	0.966	1.005	1.570											
X1	0.913	0.950	0.981	1.865										
Y2.5	0.770	0.802	0.828	0.782	1.683									
Y2.4	0.780	0.812	0.838	0.792	1.038	1.810								
Y2.3	0.768	0.799	0.825	0.780	1.022	1.035	1.775							
Y2.2	0.779	0.811	0.837	0.791	1.037	1.050	1.034	1.817						
Y2.1	0.811	0.844	0.872	0.824	1.080	1.093	1.076	1.092	1.697					
Y1.4	0.737	0.767	0.792	0.749	0.911	0.922	0.908	0.922	0.959	1.670				
Y1.3	0.743	0.774	0.799	0.755	0.919	0.930	0.916	0.929	0.967	1.083	1.960			
Y1.2	0.709	0.738	0.762	0.720	0.877	0.887	0.874	0.887	0.923	1.034	1.042	1.833		
Y1.1	0.661	0.688	0.710	0.671	0.816	0.826	0.814	0.826	0.859	0.963	0.971	0.926	1.804	

Table 3 shows that all factor loading values vary from 0.6911 to 0.818 and are more than 0.7. Therefore, all items are convergently valid. The average extracted values ran from 0.4065 to 0.4626 (<0.5). These values are less than 0.5 with composite reliability values of more than 0.6, so they are still adequate for the convergent validity (Fornell and Larcker 1981; Lam 2012). While the Cronbach alpha values vary from 0.833 to 0.883, the composite reliability values range from 0.732 to 0.811. Therefore, all items are reliable as they are higher than 0.7.

Table 3. Composite reliability, average extracted variance, and Cronbach alpha.

Variable	Correlation	Factor Loading	Composite Reliability	Average Extracted Variance	Cronbach Alpha
	Indicator				
Green transformational leadership	Green plans	0.705	0.745	0.4231	0.836
	Green goals	0.813			
	Green actions	0.757			
	Green ideas	0.691			
Green human resource management practices	Green recruitment and selection	0.737	0.732	0.4065	0.833
	Green training and development	0.747			
	Green performance appraisal	0.802			
	Green empowerment	0.818			
Employee green behavior	Green printing activities	0.760	0.811	0.4626	0.883
	Green recruitment and selection	0.758			
	Green training and development	0.762			
	Green performance appraisal	0.781			
	Green lighting	0.780			

4.2. Goodness of Fit and Structural Equation Modeling

The GoF analysis results confirm that the model of this study fits the SEM hypothesis testing procedure. The CMIN value is 93.842, and the degrees of freedom (df) value is 62; as a result, the CMIN/df value is 1.514 (<2). The following are the values of RMSEA: 0.045 (<0.08), IFI: 0.982 (>0.9), NFI: 0.949 (>0.9), and GFI: 0.946 (>0.9).

Figure 2 shows the SEM results from AMOS. The model includes 252 recursive samples. It shows the relationship between the three variables and between the indicators and the variables. GTL, the independent variable, positively affects the two dependent variables (GHRM practices and EGB). There are four indicators of GTL (X1, X2, X3, and X4), four of GHRM practices (Y1.1, Y1.2, Y1.3, and Y1.4), and five of EGB (Y2.1, Y2.2, Y2.3, and Y2.4).

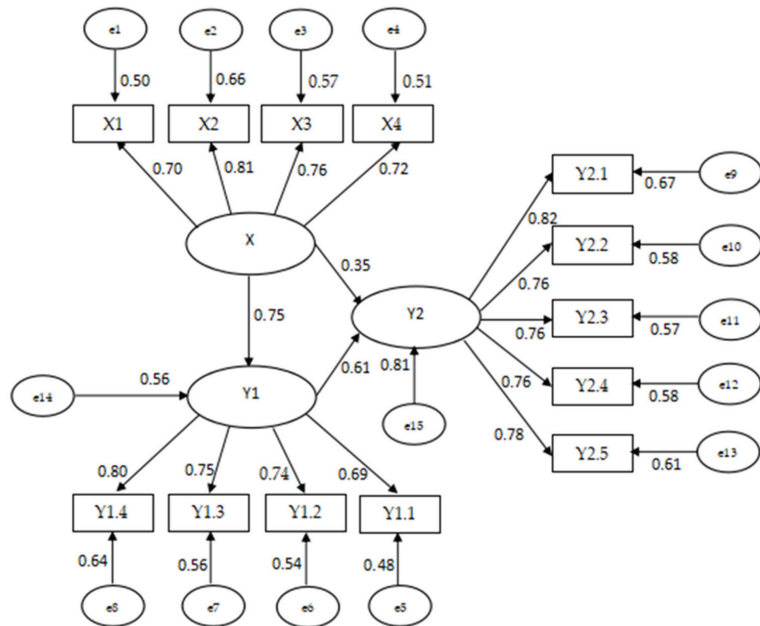


Figure 2. Structural model.

4.3. Hypotheses

Based on Table 4, all probability values of the four hypotheses are 0.000. All relationship values between variables range from 0.35 to 0.75. Thus, all relationships between GTL, GHRM practices, and EGB are positive and significant. GHRM practices mediate the relationship between GTL and EGB. However, there is no full mediation from GHRM practices because of the relationship between GTL and EGB.

Table 4. Hypotheses.

Direct Effect and Value	Indirect Effect and Value	Total Effect	Critical Ratio	Probability	Decision
Hypothesis 1 = 0.35.	Hypothesis 4 = 0.46.	0.81	Hypothesis 1 = 3.996.	0.000	Hypothesis 1 is accepted, and hypothesis 4 is also accepted.
Hypothesis 2 = 0.61.		0.61	Hypothesis 2 = 8.320.	0.000	Hypothesis 2 is accepted.
Hypothesis 3 = 0.75.		0.75	Hypothesis 3 = 6.456.	0.000	Hypothesis 3 is accepted.

5. Discussion

The results of this study show that SME customers, who are prospective employees, are aware of and expect the implementation of GTL, GHRM practices, and EGB in SMEs. Their awareness and expectations prove the need to implement GTL, GHRM practices, and EGB practices in SMEs to be sustainable. They realize the roles of SME leaders, managers, and employees in arising sustainability.

The SME customers support that SME leaders should have green plans, goals, actions, and ideas. They encourage SME managers to conduct green recruitment and selection, training and development, performance appraisal, and empowerment. They also support the SME employees to apply green printing activities, items, materials, equipment, and lighting.

Based on their perspectives, SME leaders influence their managers and employees through green plans, goals, actions, and ideas. SME human resource managers affect their employees through green recruitment and selection, training and development, performance appraisal, and empowerment. In general, the leaders conduct human resource management practices. Therefore, they need to implement GTL and GHRM practices to create EGB.

The better the implementation of GTL or GHRM practices from leaders and managers in SMEs, the better the EGB from SME employees. Of course, SMEs cannot escape the awareness and expectations of customers towards GTL, GHRM practices, and EGB. The indirect relationship between GTL and EGB mediated by GHRM practices is stronger than the relationship between GTL and EGB. All accepted hypotheses indicate that the framework of this study was consistent with the frameworks of previous studies. The need to implement the three variables in large companies and SMEs are balanced.

5.1. Theoretical Implications

GTL positively affects EGB. Employees will not be able to have green behavior independently. They need directions from green transformational leaders. As the leaders facilitate these things, employees will raise their green behavior. Thus, the leaders and the employees will innovate and create value for businesses. They can also support a balance between environmental, social, and financial aspects of business, called sustainability, which would save profit, the planet, and people. The positive relationship between GTL and EGB supports the study of Al-Swidi et al. (2021), which confirms the positive relationship between green leadership behavior and green employee behavior. However, the positive relationship between GTL and EGB does not support the previous study of Jian et al. (2020), which explains that GTL and GHRM practices indirectly determine EGB.

GTL positively affects GHRM practices. The leaders' green plans, goals, actions, and ideas determine green recruitment and selection, training and development, performance appraisal, and empowerment from the human resource managers. This positive relationship is consistent with the studies of Singh et al. (2020); Arshad (2021); and Huelgas and Arellano (2021) that explain the positive relationship between GTL and GHRM practices. HRM managers need directions and guidance from the leaders embodied in green plans, goals, actions, and ideas. On the contrary, the relationship disproves the studies of Awan et al. (2022) and Chen and Yan (2022) that explain that GTL is not a predictor of GHRM practices.

GHRM practices positively affect EGB. Green recruitment and selection, training and development, performance appraisal, and empowerment determine the employees' behavior in printing activities, selecting compostable items, recyclable materials, reusable utensils, and environmental approaches. This positive relationship is in line with the previous studies of Jian et al. (2020), Karmoker et al. (2021), Harasudha and Subramanian (2020), Ha and Uyen (2021), Gill et al. (2021), Fawehinmi et al. (2020), Dumont et al. (2017), Ercantan and Eyupoglu (2020) that explain GHRM practices are positively related to EGB.

The relationship between GTL, GHRM practices, and EGB found in this study is in line with the previous study of Omarova and Jo (2022). They confirm that GHRM practices

moderate the positive relationship between environmental-transformational leadership and employee pro-environmental behavior.

In conclusion, the green concept in this study starts from the leaders to the managers and then to the employees. This process is generally in line with the general management concept within companies. That managers are the link between leaders and employees is shown by the mediating role of GHRM practices in the positive relationship between GTL and EGB.

5.2. Practical Implications

SME customers, as external stakeholders, realize the need of implementing GTL, GHRM practices, and EGB. They expect that when business leaders can implement GTL, GHRM practices will increase EGB. SMEs in Budapest respond to the customers' expectations. As not all SMEs employ formal human resources management practices, SME leaders may conduct green recruitment and selection, training and development, performance appraisal, and empowerment to create green behavior of SME employees.

SME leaders in Budapest understand the demand for green plans, goals, actions, and ideas. SME human resource managers in the city also agree on the importance of recruitment and selection, training and development, performance appraisal, and green empowerment. The leaders and managers support their employees with the implementation of green printing, compostable items, recyclable materials, reusable equipment, and lighting. The leaders, managers, and employees created long-term relationships with their customers. GTL, GHRM practices, and EGB in the SMEs can attract and retain the customers.

Therefore, GTL, GHRM practices, and EGB can prevent environmental damages and the negative impacts of consumerism on the environment. All three can also support the creation of products with trusted green performance, product innovation, and corporate social responsibility to improve business strategies and values.

The importance of GTL, GHRM practices, and EGB for innovation and product development in Hungary is aligned with the studies of Katona (2022) and Kindermann et al. (2022) that explained that SMEs dominate product innovation and development. The importance of these three for the Hungarian economy found here is consistent with the explanation of Oláh et al. (2019); Virág (n.d.); Hausmann and Szalai (2021); Bajnóczki et al. (2021) in their studies which define SMEs as a significant sector.

6. Conclusions

The results of this study prove the positive relationships between GTL, GHRM practices, and EGB. By adopting GTL, GHRM practices, and EGB, SME leaders, managers, and employees realize sustainability in their enterprises which is a challenge in today's businesses. This study reveals that, from customers' perspectives, SMEs should consider solving green problems by conducting GTL, GHRM practices, and EGB. They are great values of customer-oriented productions and work processes in SMEs.

This study finds that between GTL, GHRM practices, and EGB in SMEs is that direct and indirect positive relationships. GTL, directly and indirectly, affects EGB in SMEs. When SME leaders apply their leadership with a green approach, this will determine GHRM practices and EGB.

When the leaders implement green plans, goals, actions, and ideas, GHRM practices and EGB in SMEs will exist. Furthermore, EGB in SMEs need green recruitment and selection, training and development, performance appraisal, and empowerment applied by SME managers. The three variables are not only for large companies but also for SMEs.

The results of this study contribute to the development and inclusion of sustainability in SMEs. Future study can develop research by collecting data in different locations of SMEs. They can also develop a comparative study between SMEs and large businesses by adopting the framework of this study.

Limitations

The data collection period in this study is just about one month. Respondents' assessment is for SMEs in a city in Hungary. Future research can collect more data in a longer period and not only for assessing GTL, GHRM practices, and EGB in SMEs in a single location. The questionnaire is an English version, so only those respondents who understand English could participate. Only three variables are studied in the model without moderation. Future studies can test the framework of this study by adding moderating variables.

This study analyzes the causal relationships between GTL, GHRM practices, and EGB from SME customers who were prospective employees. Future studies can develop combined questionnaire items for employees in the contexts of SMEs and the environment.

Author Contributions: Conceptualization, A.C., D.N., J.P., B.P. and K.S.; methodology, A.C. and J.P.; software, A.C.; validation, A.C.; formal analysis, A.C.; investigation, A.C.; resources, A.C.; data curation, A.C.; writing—original draft preparation, A.C.; writing—review and editing, A.C., D.N., J.P., B.P. and K.S.; visualization, A.C.; supervision, J.P. and K.S. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical review and approval were waived for this study since the authors used anonymous data that were not traceable to individuals at any time.

Informed Consent Statement: This was waived for this study because the authors used anonymous data that were not traceable to individuals at any time.

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

References

- Adriana, Luh Titisari Dewi, Keke Tamara Fahira, Maulida Nailissa'adah, and Hikmah El Maula. 2020. A Review the important of green human resource management practices toward employee green behaviour in organization. *Journal of International Conference Proceedings* 3: 124–35. [CrossRef]
- Ahmad, Shoeb. 2015. Green human resource management: Policies and practices. *Cogent Business & Management* 2: 1030817. [CrossRef]
- Ahmed, Mushtaq, Muhammad Shujaat Mubarik, and Muhammad Shahbaz. 2021. Factors affecting the outcome of corporate sustainability policy: A review paper. *Environmental Science and Pollution Research* 28: 10335–56. [CrossRef]
- Alamsyah, Doni Purnama, Norfaridatul Akmaliah Othman, Muhammed Hariri Bakri, Yogi Udjaja, and Rudy Aryanto. 2021. Green awareness through environmental knowledge and perceived quality. *Management Science Letters* 11: 271–80. [CrossRef]
- Alsawafi, Ahmed, Fred Lemke, and Ying Yang. 2021. The impacts of internal quality management relations on the triple bottom line: A dynamic capability perspective. *International Journal of Production Economics* 232: 107927. [CrossRef]
- Alshaabani, Ayman, Farheen Naz, and Ildikó Rudnák. 2021. Impact of green human resources practices on green work engagement in the renewable energy departments. *International Business Research* 14: 44–58. [CrossRef]
- Al-Swidi, Abdullah Kaid, Hamid Mahmood Gelaidan, and Redhwan Mohammed Saleh. 2021. The joint impact of green human resource management, leadership and organizational culture on employees' green behaviour and organisational environmental performance. *Journal of Cleaner Production* 316: 128112. [CrossRef]
- Andersen, Jim. 2021. A relational natural-resource-based view on product innovation: The influence of green product innovation and green suppliers on differentiation advantage in small manufacturing firms. *Technovation* 104: 102254. [CrossRef]
- Arshad, Maria. 2021. The impact of green transformational leadership on environmental performance: Mediating effect of green human resource management and green innovation. *Journal of Organization and Business* 1: 114–29.
- Arulrajah, A. Anton, H. H. D. N. P. Opatha, and N. N. J. Nawaratne. 2015. Green human resource management practices: A review. *Sri Lankan Journal of Human Resource Management* 5: 1–16. [CrossRef]
- Awan, Fazal Hussain, Liu Dunnan, Khalid Jamil, and Rana Faizan Gul. 2022. Stimulating environmental performance via green human resource management, green transformational leadership, and green innovation: A mediation-moderation model. *Environmental Science and Pollution Research*, 1–19. [CrossRef] [PubMed]
- Bajnóczi, Csongor, Zoltán Illés, and Péter Szendrő. 2021. The perspective of SMEs on the challenges of the circular economy in the 21st century Hungary. *Progress in Agricultural Engineering Sciences* 17: 101–32. [CrossRef]
- Chen, Tan Booi, and Lau Teck Chai. 2010. Attitude towards the environment and green products: Consumers' perspective. *Management Science and Engineering* 4: 27–39.
- Chen, Yu-Shan, and Ching-Hsun Chang. 2013. The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. *Journal of Organizational Behavior* 34: 176–94. [CrossRef]

- Chen, Yu-Shan, and Xin Yan. 2022. The small and medium enterprises' green human resource management and green transformational leadership: A sustainable moderated-mediation practice. *Corporate Social Responsibility and Environmental Management*, 1–16. [CrossRef]
- Costa, Joana, and José Pedro Fonseca. 2022. The impact of corporate social responsibility and innovative strategies on financial performance. *Risks* 10: 103. [CrossRef]
- Darvishmotevali, Mahlagha, and Levent Altınay. 2022. Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. *Tourism Management* 88: 104401. [CrossRef]
- Doszhanov, Aibek, and Zainal Ariffin Ahmad. 2015. Customers' intention to use green products: The impact of green brand dimensions and green perceived value. *SHS Web of Conferences* 18: 1–15. [CrossRef]
- Du, Yuechao, and Minghao Yan. 2022. Green transformational leadership and employees' taking charge behavior: The mediating role of personal initiative and the moderating role of green organizational identity. *International Journal of Environmental Research and Public Health* 19: 4172. [CrossRef]
- Dumont, Jenny, Jie Shen, and Xin Deng. 2017. Effects of green HRM practices on employee workplace green behavior: The role of psychological green climate and employee values. *Human Resource Management* 56: 613–27. [CrossRef]
- Dyllick, Thomas, and Kai Hockerts. 2002. Beyond the business case for corporate sustainability. *Business Strategy and the Environment* 11: 130–41. [CrossRef]
- Elkington, John. 2004. Enter the Triple Bottom Line. In *The Triple Bottom Line: Does It all Add Up? Assessing the Sustainability of Business and CSR*. Edited by A. Henriques and J. Richardson. London: Routledge, pp. 1–16. [CrossRef]
- Elkington, John. 2018. 25 years ago I coined the phrase "Triple Bottom Line." Here's why it's time to rethink it'. *Harvard Business Review*. June 25. Available online: <https://hbr.org/2018/06/25-years-ago-i-coined-the-phrase-triple-bottom-line-heres-why-im-giving-up-on-it> (accessed on 14 November 2022).
- Ercantan, Ozlem, and Serife Eyupoglu. 2020. How do green human resource management practices encourage employees to engage in green behavior? Perceptions of university students as prospective employees. *Sustainability* 14: 1718. [CrossRef]
- Fadel, Khariya Abed, Asmaa Abdul Wahid Malik, and Ali Abd Al Razaq Alaboody. 2021. The role of abusive supervision in reducing the employee green behavior: A survey of the opinions of sample of affiliates in the technical institute of AL-Diwaniyah. *Webology* 18: 1169–85. [CrossRef]
- Faeq, Dalia Khalid, Daroon Faraidoon Abdulla, Bayad Jamal Ali, and Shwana Mohammed Akoi. 2021. Impact of job resources on employee green behavior. An empirical investigation among employees work in the tourist companies in Erbil- City Kurdistan Region of Iraq. *The Scientific Journal of Cihan University—Sulaimaniya* 5: 115–26. [CrossRef]
- Fahad, Shah, Faisal Alnori, Fang Su, and Jian Deng. 2022. Adoption of green innovation practices in SMEs sector: Evidence from an emerging economy. *Economic Research. Ekonomika Istraživanja* 35: 5486–501. [CrossRef]
- Farrukh, Amma, Sanjay Mathrani, and Aymen Sajjad. 2021. A natural resource and institutional theory-based view of green-lean-six sigma drivers 1 for environmental management. *Business Strategy and the Environment* 31: 1074–90. [CrossRef]
- Fata, Zainabu P., Joanna Claire Miranda, and Mohammad Saeed. 2022. Exploring role of organizational culture and leadership in customer relationship management in banks. *Splint International Journal of Professionals* 9: 81–87. [CrossRef]
- Fawehinmi, Olawole, M. Y. Yusliza, Wan Zulkifli Wan Kasim, Zaleha Mohamad, and Muhammad Abi Sofian Abdul Halim. 2020. *Exploring the Interplay of Green Human Resource Management, Employee Green Behavior, and Personal Moral Norms*. New York: SAGE Open, pp. 1–18. [CrossRef]
- Fornell, Claes, and David F. Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39–50. [CrossRef]
- Gilal, Faheem Gul, Zubaida Ashraf, Naeem Gul Gilal, Rukhsana Gul Gilal, and Nisar Ahmed Channa. 2019. Promoting environmental performance through green human resource management practices in higher education institutions: A moderated mediation model. *Corporate Social Responsibility and Environmental Management* 26: 1579–90. [CrossRef]
- Gill, Atif Ali, Balqees Ahmad, and Shiza Kazmi. 2021. The effect of green human resource management on environmental performance: The mediating role of employee eco-friendly behavior. *Management Science Letters* 11: 1725–36. [CrossRef]
- Ha, Nguyen Thi Le, and Pham Truong Bao Uyen. 2021. The effect of green human resource management on employee green behaviors in a developing country, Vietnam. *International Journal of Information, Business and Management* 13: 107–24.
- Haldorai, Kavitha, Woo Gon Kim, and R. L. Fernando Garcia. 2022. Top management green commitment and green intellectual capital as enablers of hotel environmental performance: The mediating role of green human resource management. *Tourism Management* 88: 1–11. [CrossRef]
- Harasudha, H. Hari, and S. Subramanian. 2020. Exploring the relationship between green human resource management on employee green behavior: A mediation analysis. *Studies in Indian Place Names (UGC CARE Journal)* 40: 337–44.
- Hart, Stuart L. 1995. A Natural-Resource-Based View of the firm. *Academy of Management Review* 20: 986–1014. [CrossRef]
- Hausmann, Róbert, and Ákos Szalai. 2021. New measurement system for sustainability—MNB's sustainability report and index. *Prosperitas* 8: 1–16. [CrossRef]
- Hawn, Olga, Aaron K. Chatterji, and Will Mitchell. 2018. Do investors actually value sustainability? New evidence from investor reactions to the Dow Jones Sustainability Index (DJSI). *Strategic Management Journal* 39: 949–76. [CrossRef]
- Heim, Irina, Anne Crowley Vigneau, and Yelena Kalyuzhnova. 2022. Environmental and socio-economic policies in oil and gas regions: Triple bottom line approach. *Regional Studies* 57: 1–16. [CrossRef]

- Hirunyava, Ladda, Apinya Wisessing, Sittichai Thammasane, and Duangsamorn Rungsawanpho. 2022. Performance analysis of the small and medium enterprises based on green product management. *Journal of Positive School Psychology* 6: 3004–18.
- Huelgas, Suzie M., and Victor A. Arellano. 2021. Green transformational leadership, green human resource management and green innovation: Key to environmental performance of selected port management offices of Philippine ports authority. *IOER International Multidisciplinary Research Journal* 3: 48–58. [CrossRef]
- Irani, Foad, and Hasan Kilic. 2022. An assessment of implementing green HRM practices on environmental performance: The moderating role of green process innovation. *Journal of Global Hospitality and Tourism* 1: 16–30. [CrossRef]
- Irimiás, Anna, and Ariel Mitev. 2020. Change management, digital maturity, and green development: Are successful firms leveraging on sustainability? *Sustainability* 12: 4019. [CrossRef]
- Isil, Ozgur, and Michael T. Hernke. 2017. The triple bottom line: A critical review from a transdisciplinary perspective. *Business Strategy and the Environment* 26: 1235–51. [CrossRef]
- Islam, Md Asadul, Abigail Hunt, Amer Hamzah Jantan, Haslinda Hashim, and Choo Wei Chong. 2019. Exploring challenges and solutions in applying green human resource management practices for the sustainable workplace in the ready-made garment industry in Bangladesh. *Business Strategy and Development* 3: 332–43. [CrossRef]
- Jamal, Tauseef, Muhammad Zahid, José Moleiro Martins, Mário Nuno Mata, Haseeb Ur Rahman, and Pedro Neves Mata. 2021. Perceived green human resource management practices and corporate sustainability: Multigroup analysis and major industries perspectives. *Sustainability* 13: 3045. [CrossRef]
- Jian, Peng, Yin Kui, Hou Nan, Zou Yanchun, and Nie Qi. 2020. How to facilitate employee green behavior: The joint role of green transformational leadership and green human resource management practice. *Acta Psychologica Sinica* 52: 1105–20. [CrossRef]
- Karatepe, Osman M., Hungchen Hsieh, and Mohammed Aboramadan. 2022. The effects of green human resource management and perceived organizational support for the environment on green and non-green hotel employee outcomes. *International Journal of Hospitality Management* 103: 103202. [CrossRef]
- Karmoker, Kajol, Farhana Amin Kona, Amanta Hasnat Oyshi, and Kazi Snigdha Yasmin. 2021. Effects of green human resource management on employee green behavior: Moderating role of employee environment knowledge. *International Journal of Sustainable Development & World Policy* 10: 64–80. [CrossRef]
- Katona, Ádám. 2022. Customer involvement—A systematic literature review of the definition, measurement, and innovation outcomes. Vevői Bevonás—Definíciók, Mérési Módszerek És Innovációs Eredmények Szisztematikus Szakirodalmi Áttekintése. *Vezetéstudomány/Budapest Management Review* LIII: 59–69. [CrossRef]
- Katz, Ian M., Rachel S. Rauvola, Cort W. Rudolph, and Hannes Zacher. 2022. Employee green behavior: A meta-analysis. *Corporate Social Responsibility and Environmental Management*, 1–12. [CrossRef]
- Khan, Ali Nawaz, and Naseer Abbas Khan. 2022. The nexuses between transformational leadership and employee green organizational citizenship behaviour: Role of environmental attitude and green dedication. *Business Strategy and the Environment* 31: 921–33. [CrossRef]
- Kindermann, Bastian, Corinna Vera Hedwig Schmidt, Oliver Burger, and Tessa Christina Flatten. 2022. Why teams matter in customer involvement—The moderating effects of team social cohesion and team autonomy. *Journal of Business Research* 146: 70–83. [CrossRef]
- Küçükgül, Egemen, Pontus Cerin, and Yang Liu. 2022. Enhancing the value of corporate sustainability: An approach for aligning multiple SDGs guides on reporting. *Journal of Cleaner Production* 333: 130005. [CrossRef]
- Lam, Long W. 2012. Impact of competitiveness on salespeople's commitment and performance. *Journal of Business Research* 65: 1328–34. [CrossRef]
- Lee, Stacy H. N., Jung Ha-Brookshire, and Pui-Sze Chow. 2018. The moral responsibility of corporate sustainability as perceived by fashion retail employees: A USA-China cross-cultural comparison study. *Business Strategy and the Environment* 27: 1462–75. [CrossRef]
- Li, Wenjing, Tahseen Ahmed Bhutto, Wang Xuhui, Qamaruddin Maitlo, Abaid Ullah Zafar, and Niaz Ahmed Bhutto. 2020. Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production* 255: 120229. [CrossRef]
- Liute, Adriana, and Maria Rosa De Giacomo. 2022. The environmental performance of UK-based B Corp companies: An analysis based on the triple bottom line approach. *Business Strategy and the Environment* 31: 810–27. [CrossRef]
- Lozano, Rodrigo, Angela Carpenter, and Donald Huisinigh. 2015. A review of 'theories of the firm' and their contributions to corporate sustainability. *Journal of Cleaner Production* 106: 430–42. [CrossRef]
- Malik, Saqib Yaqoob, Yukun Cao, Yasir Hayat Mughal, Ghulam Muhammad Kundi, Mudassar Hayat Mughal, and T. Ramayah. 2020. Pathways towards sustainability in organizations: Empirical evidence on the role of green human resource management practices and green intellectual capital. *Sustainability* 12: 3228. [CrossRef]
- Mansoor, Adil, Muhammad Farrukh, Jong-Keon Lee, and Sarwat Jahan. 2021. Stimulation of employees' green creativity through green transformational leadership and management initiatives. *Sustainability* 13: 7844. [CrossRef]
- Masri, Hiba A., and Ayham A. M. Jaaron. 2017. Assessing green human resources management practices in Palestinian manufacturing context: An empirical study. *Journal of Cleaner Production* 143: 474–89. [CrossRef]

- Masud, Md. Abdul Kaium, Md. Harun Ur Rashid, Tehmina Khan, Seong Mi Bae, and Jong Dae Kim. 2019. Organizational strategy and corporate social responsibility: The mediating effect of triple bottom line. *International Journal of Environmental Research and Public Health* 16: 4559. [CrossRef] [PubMed]
- Medve, Flóra. 2022. Population of Hungary 1989–2022. Available online: <https://www.statista.com/statistics/1127762/population-of-hungary/> (accessed on 9 September 2022).
- Meyers, Maria Christina, and Demi Rutjens. 2022. Applying a positive (organizational) psychology lens to the study of employee green behavior: A systematic review and research agenda. *Frontiers in Psychology* 13: 840796. [CrossRef]
- Mousa, Sharifa K., and Mohammed Othman. 2020. The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework. *Journal of Cleaner Production* 243: 118595. [CrossRef]
- Muster, Viola, and Ulf Schrader. 2011. Green work-life balance: A new perspective for green HRM. *Zeitschrift für Personalforschung, German Journal of Research in Human Resource Management* 25: 140–56. [CrossRef]
- Mwita, Kelvin M. 2019. Conceptual review of green human resource management practices. *East African Journal of Social and Applied Sciences* 1: 13–20.
- Nunhes, Thais Vieira, Enzo Viviani Garcia, Maximilian Espuny, Vitor Homem de Mello Santos, Raine Isaksson, and Otávio José de Oliveira. 2021. Where to go with corporate sustainability? Opening paths for sustainable businesses through the collaboration between universities, governments, and organizations. *Sustainability* 13: 1429. [CrossRef]
- Nwoba, Arinze Christian, Nathaniel Boso, and Matthew J. Robson. 2021. Corporate sustainability strategies in institutional adversity: Antecedent, outcome, and contingency effects. *Business Strategy and the Environment* 30: 787–807. [CrossRef]
- Oláh, Judit, Sándor Kovács, Zuzana Virglerova, Zoltán Lakner, Maria Kovacova, and József Popp. 2019. Analysis and comparison of economic and financial risk sources in SMEs of the Visegrad group and Serbia. *Sustainability* 11: 1853. [CrossRef]
- Omarova, Laura, and Sung-Jun Jo. 2022. Employee pro-environmental behavior: The impact of environmental transformational leadership and GHRM. *Sustainability* 14: 2046. [CrossRef]
- Ones, Deniz S., and Stephan Dilchert. 2012. Chapter Five, Employee Green Behaviors. In *Managing Human Resources for Environmental Sustainability*, 1st ed. Edited by Susan E. Jackson, Deniz S. Ones and Stephan Dilchert. New York: Jossey-Bass, pp. 85–116.
- Özgül, Burcu, and Cemal Zehir. 2021. The influence of green-transformational leadership style on corporate sustainability: A systematic literature review and propositions for future studies. *Istanbul Management Journal* 90: 1–30. [CrossRef]
- Pham, Nhat Tan, Zuzana Tučková, and Charbel José Chiappetta Jabbour. 2019. Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management* 72: 386–99. [CrossRef]
- Rehman, Shafique Ur, Stefano Bresciani Dorra Yahiaoui, and Elisa Giacosa. 2022. Environmental sustainability orientation and corporate social responsibility influence on environmental performance of small and medium enterprises: The mediating effect of green capability. *Corporate Social Responsibility and Environmental Management* 29: 1954–67. [CrossRef]
- Renwick, Douglas W. S., Tom Redman, and Stuart Maguire. 2012. Green Human Resource Management: A Review and Research Agenda. *International Journal of Management Reviews* 15: 1–14. [CrossRef]
- Rezaee, Zabihollah. 2017. Corporate sustainability: Theoretical and integrated strategic imperative and pragmatic approach. *The Journal of Business Inquiry* 16: 60–87. Available online: <http://www.uvu.edu/woodbury/jbi/articles> (accessed on 14 July 2022).
- Robertson, Jennifer L., and Julian Barling. 2013. Greening organizations through leaders' influence on employees' pro-environmental behaviors. *Journal of Organizational Behavior* 34: 176–94. [CrossRef]
- Saeed, Bilal Bin, Bilal Afsar, Shakir Hafeez, Imran Khan, Muhammad Tahir, and Muhammad Asim Afridi. 2019. Promoting employee's pro environmental behavior through green human resource management practices. *Corporate Social Responsibility and Environmental Management* 26: 424–38. [CrossRef]
- Satar, Mir Shahid. 2022. Sustainability and triple bottom line planning in social enterprises: Developing the guidelines for social entrepreneurs. *International Journal of Sustainable Development and Planning* 17: 813–21. [CrossRef]
- Shampa, Tanima Saha, and Md. Imrul Jobaid. 2017. Factors influencing customers' expectation towards green banking practices in Bangladesh. *European Journal of Business and Management* 9: 140–52.
- Singh, Sanjay Kumar, Manlio Del Giudice, Roberto Chierici, and Domenico Graziano. 2020. Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting & Social Change* 150: 119762. [CrossRef]
- Sridhar, Kaushik, and Grant Jones. 2013. The three fundamental criticisms of the Triple Bottom Line approach: An empirical study to link sustainability reports in companies based in the Asia-Pacific region and TBL shortcomings. *Asian Journal of Business Ethics* 2: 101–111. [CrossRef]
- Sun, Xiaomei, Ahmad El Askary, Muhammad Saeed Meo, Noor ul Ain Zafar, and Babar Hussain. 2022. Green transformational leadership and environmental performance in small and medium enterprises. *Economic Research-Ekonomska Istraživanja* 35: 5273–91. [CrossRef]
- Tang, Guiyao, Yang Chen, Yuan Jiang, Pascal Paille, and Jin Jia. 2018. Green human resource management practices: Scale development and validity. *Asia Pacific Journal of Human Resources* 56: 31–55. [CrossRef]
- Tanova, Cem, and Steven W. Bayighomog. 2022. Green human resource management in service industries: The construct, antecedents, consequences, and outlook. *The Service Industries Journal* 42: 412–52. [CrossRef]

- Tosun, Cevat, M. Omar Parvez, Yasin Bilim, and Larry Yu. 2022. Effects of green transformational leadership on green performance of employees via the mediating role of corporate social responsibility: Reflection from North Cyprus. *International Journal of Hospitality Management* 103: 103218. [CrossRef]
- Tseng, Ming-Lang Tseng, Chia-Hao Chang, Chun-Wei Remen Lin, Kuo-Jui Wu, Qing Chen, Li Xia, and Bing Xue. 2020. Future trends and guidance for the triple bottom line and sustainability: A data driven bibliometric analysis. *Environmental Science and Pollution Research* 27: 33543–67. [CrossRef]
- Virág, Annamária. n.d. *Eco-Innovation Observatory Country Profile 2018–2019: Hungary*. Luxembourg City: The Publications Office of the European Union, pp. 1–24.
- Wu, Kuo-Jui, Yafang Zhu, Ming-Lang Tseng, Ming K. Lim, and Bing Xue. 2018. Developing a hierarchical structure of the co-benefits of the triple bottom line under uncertainty. *Journal of Cleaner Production* 195: 908–18. [CrossRef]
- Yu, Feifei, Dong Jiang, and Teng Wang. 2022. The impact of green innovation on manufacturing small and medium enterprises corporate social responsibility fulfillment: The moderating role of regional environmental regulation. *Corporate Social Responsibility and Environmental Management* 29: 712–27. [CrossRef]
- Yusoff, Yusmani Mohd, Mehran Nejati, Daisy Mui Hung Kee, and Azlan Amran. 2018. Linking green human resource management practices to environmental performance in hotel industry. *Global Business Review* 21: 1–18. [CrossRef]
- Zhang, Qi, Lawrence Loh, and Weiwei Wu. 2020. How do environmental, social and governance initiatives affect innovative performance for corporate sustainability? *Sustainability* 12: 3380. [CrossRef]

Article

Examining the Mediating Role of Work Engagement in the Relationship between Corporate Social Responsibility and Turnover Intention: Evidence from Nigeria

Olubanke Tolulope Bayode¹ and Ana Patrícia Duarte^{2,*}¹ Iscte Instituto Universitário de Lisboa, 1649-026 Lisboa, Portugal² Business Research Unit, Iscte Instituto Universitário de Lisboa, 1649-026 Lisboa, Portugal

* Correspondence: patricia.duarte@iscte-iul.pt

Abstract: The subject of corporate social responsibility (CSR) has drawn the attention of many scholars and practitioners in the administrative sciences field. However, few studies have been carried out on Nigerian employees' perspectives on CSR and on how CSR affects their attitudes and behaviors at work. The present study sought to contribute to narrowing this gap by examining how CSR perceptions, work engagement, and turnover intention are related in a sample of Nigerian workers. More specifically, this study had triple aims: first, describe employees' perceptions of their employers' involvement in different CSR domains; second, examine how CSR perceptions were related to employees' levels of work engagement and turnover intention; third, analyze work engagement intervention as a mediator in the relationship between CSR perceptions and turnover intention. The sample included 118 employees from different organizations who voluntarily participated in an online survey. The findings revealed that respondents consider that their employer organizations have relatively high involvement in CSR activities, especially activities towards customers, employees, and stockholders. Findings also revealed that employees' perceptions of CSR are related to diminishing levels of turnover intention, via increased work engagement. Therefore, organizations can invest in CSR activities to foster positive employee outcomes in Nigeria.

Keywords: corporate social responsibility; work engagement; turnover intention; Nigeria

Citation: Bayode, Olubanke Tolulope, and Ana Patrícia Duarte. 2022.

Examining the Mediating Role of Work Engagement in the Relationship between Corporate Social Responsibility and Turnover Intention: Evidence from Nigeria.

Administrative Sciences 12: 150.

<https://doi.org/10.3390/admsci12040150>

Received: 30 September 2022

Accepted: 27 October 2022

Published: 29 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Corporate social responsibility (CSR) involves addressing social, environmental, and economic issues concurrently in business activities (Aguinis and Glavas 2012; Duarte et al. 2010) to maximize the creation of shared value for society while mitigating potential negative impacts (European Commission 2011; Turker 2009). Organizations' adherence to socially responsible business practices, their antecedents, and outcomes have been examined from different levels of analysis (Aguinis and Glavas 2012; Onkila and Sarna 2022; Wang et al. 2020), with the literature providing evidence of positive outcomes regarding several stakeholders. Overall, business successes have been traceable to organizations that target CSR (Lee et al. 2013; Zhang and Ahmad 2022).

As one of the primary stakeholders of any organization, employees' perceptions and responses to CSR have been capturing the attention of researchers (Onkila and Sarna 2022; Wang et al. 2020) on what has been called a micro-level CSR or employee-centered perspective (El Akremi et al. 2018; Gond et al. 2017). As a result, the literature has been providing cumulative evidence of a significant link between CSR and diverse job-related attitudes and behaviors, such as job satisfaction, affective organizational commitment, or individual performance (Duarte et al. 2019; Freire et al. 2022; Onkila and Sarna 2022; Pérez et al. 2018; Santini et al. 2021; Scholten et al. 2022; Wisse et al. 2018). In addition, a link between employees' CSR perception and outcomes, such as work engagement and turnover intention, has been drawn (Albasu and Nyameh 2017; Ali et al. 2021; Chaudhary 2017; Glavas and

Piderit 2009; Nejati et al. 2021; Virador and Chen 2022). Ideally, employee perception of meaningful CSR engagement births intrinsic reward on the employee, and that promotes work engagement and decreased turnover intention.

Although a handful of work in the literature exists regarding CSR influence on employees' attitudes and behaviors (Onkila and Sarna 2022; Wang et al. 2020), continual research findings remain necessary in broadening the extant knowledge. This is especially important as research shows that, apart from the fact that CSR practices are far from being global, developed countries get more attention on the subject than developing ones (Gharlegghi et al. 2018; Pisani et al. 2017). Moreover, few studies have been carried out on the African context, particularly on employees' perspectives on CSR and how CSR perceptions affect their attitudes and behaviors (Onyishi et al. 2020). Hence, the present study sought to contribute to narrowing this gap by examining how CSR perceptions, work engagement, and turnover intention are related in a sample of workers from the most populous African nation—Nigeria. To the best of the authors' knowledge, this is the first study to address the relationship between the variables in the unique Nigerian context. More specifically, this study's aims were: (i) to unveil the awareness of employees regarding their employer organizations' involvement in different CSR domains; (ii) to analyze how CSR perceptions were related to employees' levels of work engagement and turnover intention; and (iii) to examine work engagement intervention as a mediator in the relationship between CSR perceptions and turnover intention. The study's main findings indicate that most organizations where participants work are perceived to be substantially engaged in CSR activities, with workers' perceptions of increased investment in CSR activities being significantly related to lower levels of turnover intention via increased work engagement.

2. Literature Review and Hypotheses Development

2.1. CSR

There is no universally accepted definition of CSR. It denotes responsible corporate behavior towards those having one form of stake or another in a business, whether the organization in question is private or public, large or small. European Commission (2011) defines CSR as management's consideration of the impact of its operational decisions on stakeholders. This denotes concerns that may range from social to economic to environment (European Commission 2001). In McWilliams and Siegel (2001), CSR was defined as actions that appear to further some social good, beyond the interests of the firm and that which is required by law. Ferreira and Real de Oliveira (2014) defined CSR as policies and practices in which organizations engage with a view to creating a positive social or environmental impact on stakeholders. They further posit that it is a voluntary approach that proves to have a link with human resources management. Though a voluntary approach, it is accepted that CSR is context-specific (Duarte et al. 2010), and it considers the expectations of stakeholders (Glavas 2016).

Several theories have been used to explain the basis of why organizations engage in CSR, including the stakeholder theory (Freeman 1984). This posits that businesses engage in CSR in order to manage the perception of stakeholders who could exert adverse impacts on the organization (Ugwunwanyi and Ekene 2016). Some of these adverse impacts include the variables selected for this study, such as (reduced) work engagement and (increased) turnover intention. Relevant stakeholders under the conception of the stakeholder theory include, but are not limited to, the community, the environment, the employee, the supplier, the customer, and the shareholder (Carroll and Buchholtz 2003). The scope of CSR is, thus, very comprehensive, and its dimensions are numerous (Dahlsrud 2008). For instance, Turker (2009) proposed four CSR dimensions: CSR to social and non-social stakeholders, CSR to employees, CSR to customers, and CSR to government. Duarte et al. (2010) identified three dimensions encompassing socially responsible practices towards employees, the community, and the environment, and in the economic arena. More recently, El Akremi et al. (2018) proposed the existence of six specific dimensions, namely community-oriented CSR, environment-oriented CSR, employee-oriented CSR, supplier-

oriented CSR, customer-oriented CSR, and shareholder-oriented CSR. Given its larger scope, this was the model adopted in the present study. The first research aim was to unveil the awareness of Nigerian employees regarding their employer organizations' involvement in the latter six CSR domains.

The importance and relationship between overall CSR and its dimensions are deducible from the concept of CSR. Thus, businesses generally operate to realize profit in accordance with a predetermined vision and mission. However, in the process of maximizing profits, certain persons and resources annexed or utilized in the process are either impacted positively or negatively (Ugwunwanyi and Ekene 2016). These include, but are by no means limited to, suppliers in the company's value chain, utilization of human resources, harnessing of the environment and its resources, amongst others (Ugwunwanyi and Ekene 2016). The impact of business operations on these resources and the idea of rendering social services as a way of paying back explain the concept of CSR (Ugwunwanyi and Ekene 2016). In view of the foregoing, giving back respectively to these persons and resources annexed or utilized by businesses in the process of maximizing profits account for the various dimensions of overall CSR obligations that may be performed.

CSR can have several consequences on the organization based on their stakeholders' perceptions and reactions to organizations' stands in the CSR realm. Regarding what concerns employees, the literature reveals that it has been related to attitudinal variables, such as organizational commitment (Santini et al. 2021; Shaikh et al. 2022; Turker 2009) or job satisfaction (Duarte et al. 2019; Pérez et al. 2018; Scholten et al. 2022) as well as work behaviors, including individual performance (Scholten et al. 2022; Story and Neves 2015) or organizational citizenship behaviors (Freire et al. 2022; Manimegalai and Baral 2018; Onyishi et al. 2020; Ouakouak et al. 2020). As mentioned above, this study utilizes employees' perceptions to analyze the relationship between CSR and employees' attitudes (i.e., work engagement) and behaviors (i.e., turnover intention) using Nigeria as a case study. Employees' perception over management's engagement in meaningful CSR is important, as it infers the moral judgment of the management's discretionary responsibility which influences employees' work attitudes and behavior (Aguinis and Glavas 2012). Employees, just as other stakeholders, would normally expect management or the employer to conduct its affairs ethically or act in a right or transparent way beyond a legal minimum of social responsibility. A 2008 study on the world's 250 largest businesses by KPMG revealed ethical consideration as the lead reason for CSR, the view that it is in the company's best interest to contribute to people, society, and ecosystems (as cited by Ugwunwanyi and Ekene 2016). Focusing on turnover intention and work engagement, the second research aim for the current study was to analyze how CSR perceptions were related to these constructs. The next sections provide support for the proposed relationships.

2.2. CSR and Turnover Intention

Turnover is the rate at which employees leave an organization or the rate at which organizations lose employees, with excessive turnover rate being a costly problem (Lee et al. 2008; Nejati et al. 2021). Leading costs associated with turnover include indirect costs, such as loss of productivity or service quality, and direct costs of replacement and training (Mobley et al. 1979; Ribeiro et al. 2020; Tracey and Hinkin 2010; Virador and Chen 2022).

Turnover intention is the nursing of intention to voluntarily leave an organization (Ribeiro et al. 2020; Rosse and Hulin 1985). Whether an employee leaves the organization or continues to nurse turnover intention is a situation that has triggers (Rubenstein et al. 2018). From the existing literature, it is noted that engaging in CSR generally allows the employee to perceive an employer as trustworthy, and this improves employee's commitment to the organization and, thereby, the desire to remain a member (Farooq et al. 2019; Onyishi et al. 2020; Shaikh et al. 2022). CSR perceptions seems also to have a negative influence on turnover intention because they increase organizational reputation and pride, which operate as mediating factors that reduce turnover intent once felt by the employees (Castro-González et al. 2021). In Arikan et al. (2016), organizational reputation was found

to be a mediating factor between CSR and variables related to decreased turnover intention, namely job satisfaction and organizational commitment. The failure to act in accordance with employees' expectations of being responsible corporate citizens can lead to high turnover (Gharleghi et al. 2018; Onyishi et al. 2020; Virador and Chen 2022).

The extant literature thus suggests that companies that carry out CSR practices generally create positive perceptions of themselves to employees. These internal stakeholders hold the organization with pride and repute, which triggers positive results for employees. One of these positive results is the continued intention to remain a member of the company. Consistent with the foregoing research, the following hypothesis was proposed:

H1. *Employees' perceptions of their organization's involvement in CSR activities are negatively related to their turnover intention.*

2.3. CSR and Work Engagement

Work engagement refers to the emotional, cognitive, and physical behavior an employee presents when carrying out an organizational function (Kahn 1990). Schaufeli et al. (2006) defined work engagement as "a positive work-related state of fulfillment that is characterized by vigor, dedication, and absorption" (p. 1). Vigor is characterized by high levels of energy, mental resilience, and willingness to invest effort during work, allowing persistence in the face of difficulties. Dedication is described as the sense of meaning, pride, challenge, enthusiasm, and inspiration that comes from work, and involves strong identification with one's work (González-Romá et al. 2006). Finally, absorption refers to a state of deep involvement and concentration at work, which is reflected in a rapid passage of time and difficulty in distancing oneself from work (Schaufeli and Bakker 2004).

Employees' degree of engagement at work tends to be a response to the resources received from the organization (Saks 2006). These may include several organizational practices, such as the ones in the social responsibility domain (e.g., fostering work–family balance, offering training and development opportunities, and practicing fair wages). Accordingly, one of the ways to reinforce employee engagement is through CSR, as has been tested in a number of nations (Ali et al. 2021; Manimegalai and Baral 2018; Pisani et al. 2017; Gharleghi et al. 2018). The level at which an organization is committed to CSR can affect the way employees perceive management's sincerity of purpose not only externally but internally, as well as the support received from the company. Several authors reported a positive and statistically significant relationship between CSR and work engagement (Ali et al. 2021; Gao et al. 2018; Glavas 2016; Glavas and Piderit 2009; Gürlek and Tuna 2019; Manimegalai and Baral 2018). Rupp et al. (2018) found a positive relationship between the two constructs in a cross-cultural study. Ferreira and Real de Oliveira (2014) showed that employees whose organizations expose them to internal CSR are more engaged than employees whose companies do not address CSR activities. Jia et al. (2019) showed how CSR influences work engagement by increasing both pride in the organization and perceived organizational support. In view of these considerations, the following hypothesis was proposed:

H2. *Employees' perceptions of their organization's involvement in CSR activities are positively related to work engagement.*

2.4. CSR, Work Engagement, and Turnover Intention

Social exchange theory is especially relevant to this study as it illustrates the basis for some of the consequences of the presence or absence of CSR activities on work engagement and turnover intention. As a theory, social exchange originates from the social sciences to explain a cost–benefit analysis between parties in an economic relationship (Blau 1964). According to this theory with an economic analysis credited to Blau (1964), it is the exchange of commensurate costs and rewards that sustain a relationship. When one is higher than the other, the unfavored party may not be encouraged to sustain the relationship (Emerson 1976). It can, therefore, be contended, with respect to this study, that an increase

or decrease in CSR activities may positively or negatively affect employee work engagement and turnover intention as the consequential trade-off explained by the assumptions of the proponents of social exchange theory.

The relevance of this theory to this study is further strengthened, given the fact that the relationships to which the social exchange theory is well-known to apply include employment relationships. In the employment or work context, these exchanges occur between the primary parties, which are the employer and employees. Costs that an employer or business may trade-off include, but are not limited to, economic rewards and financial incentives as well as socio-emotional rewards, which may be considered as CSR. It may be intrinsically or emotionally rewarding for employees to perceive their employer as meaningfully engaging in CSR, thus affecting their engagement or turnover intention. Employees who perceive their organizations as acting in a socially responsible way, providing support, trust, and other tangible and intangible benefits develop a feeling of obligation to “repay” these by exhibiting desirable and appropriate work attitudes (e.g., enhanced work engagement) and behaviors (e.g., decreased turnover intention).

In addition to proposing employees’ perceptions of CSR activities as significantly linked to both work engagement and turnover intention, the current study proposes that work engagement might serve as a mediating variable of the relationship between CSR perceptions and turnover intentions. Prior literature indicates that work engagement has been linked to diminished turnover intention (Schaufeli et al. 2006). When vigor, absorption, and dedication are lacking in an employee, it is reasonable to assume that that employee may be nursing an intention or option of leaving the organization (Schaufeli et al. 2006). Halbesleben (2010) found empirical support for this in the meta-analytic research on work engagement and several outcomes including turnover intention. Also interesting for the current study are previous indications that work engagement intervenes in the relationship between employees’ CSR perceptions and their turnover intentions. Evidence of this was provided by Chaudhary (2017) and Lin and Liu’s (2017) research. Accordingly, it seems that perception of CSR activities implemented by their employer organizations leads employees to feel more engaged at work, which results in a lower desire to abandon the organization. Based on the above findings, the following hypotheses were proposed:

H3. *Work engagement is negatively related to turnover intentions.*

H4. *Work engagement mediates the relationship between employees’ perceptions of their organization’s involvement in CSR activities and their turnover intention.*

3. Methods

3.1. Procedures and Sample

The method of this research was quantitative and survey-based. Data collection was facilitated by Qualtrics Survey Solutions, an online survey software/service. The survey was distributed within the researchers’ network with the help of email, social media channels (WhatsApp, Instagram, and Facebook) as well as professional and business social networking sites (e.g., LinkedIn) to maximize the number of participations. The ethical guidelines of Portugal’s Order of Psychologists were followed in the study. Data anonymity and confidentiality were assured. The participation was entirely voluntary, and participants could stop the survey without providing explanations.

The population targeted for purposes of this survey were Nigerian employees who have spent at least 12 months with their organization. It was irrelevant whether they were employees in the private or public sector, or worked with national or multi-national, or large or small size organizations. There were 195 respondents who opened the survey, but only 118 participants completed the questionnaire (60% response rate). G*Power software was used to calculate the sample size based on statistical power (Faul et al. 2009) and to certify the collected sample’s adequacy. A sample size of 107 was recommended to achieve a statistical power of 0.95 in the model-testing phase. Since the present study’s modest sample size exceeded this number, it was deemed sufficiently large to test the model.

The respondents for the survey were entirely Nigerian workers who have completed education at the tertiary level. In this regard, approximately 34.48% held a Bachelor’s degree, while 19.83% held an equivalent of Bachelor’s degree. Approximately 22.41% held Associate or professional degrees, 20.69% had a Master’s degree, while 2.59% had Doctorate degree. Most respondents held a permanent employment contract (84.6%), while the remainder were in other forms of employment, such as casual employment (4.27%), fixed term contract (8.55%), and others (2.56%). A larger percentage of the respondents for the survey (60%) appear to be employees of large-size organizations with a staff strength of 499 and above, and 58.97% of the entire respondents either held a managerial or supervisory role.

Respondents from the healthcare sector were in the majority at 40.87%, followed by professional services, information and communication technology, and manufacturing at 16.09%, 14.78%, and 4.35%, respectively, while other sectors’ share was 0.1–2%. The survey was also dominated by employees in the public sector (53%). While 33.04% of the respondents worked for multinationals, the larger percentage (67%) were local employees either in private or public service.

3.2. Instrument and Measures

The constructs were measured with validated scales selected from the relevant literature. Informed consent was provided on the first page, followed by the selected constructs measurements. A set of questions about socio-professional characteristics were presented at the end of the survey.

3.2.1. Perception of CSR

Employees’ perceptions of CSR were assessed using El Akremi et al.’s (2018) scale. The said scale measures individuals’ perceptions of organizations’ engagement in six CSR dimensions, namely local community-oriented CSR (e.g., “Our company invests in humanitarian projects in poor countries”); natural-environment-oriented CSR (e.g., “Our company takes action to reduce pollution related to its activities (e.g., choice of materials, eco-design, and dematerialization”); employee-oriented CSR (e.g., “Our company implements policies that improve the wellbeing of its employees at work”); supplier-oriented CSR (e.g., “Our company would not continue to deal with a supplier (or subcontractor) who failed to respect labor laws”); customer-oriented CSR (e.g., “Our company ensures that its products and/or services are accessible for all its customers”); and shareholder-oriented CSR (e.g., “Our company makes sure that shareholders exert effective influence over strategic decisions”). Seven items were measured each for F1–F3, while F4 and F5 had five items each, with F6 having four items, resulting in a total of 35 items represented (Table 1). The respondents indicated their level of agreement with each item on a six-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). All items had Cronbach’s alpha of 0.85 or above. The overall CSR indicator had a Cronbach’s alpha of 0.97.

Table 1. Employees’ awareness of their organizations’ involvement in CSR activities.

CSR Activities ¹	Mean	SD
Our company checks the quality of goods and/or services provided to customers.	5.08	1.36
... ensures that its products and/or services are accessible to all its customers.	4.91	1.42
... respects its commitments to customers.	4.88	1.57
... promotes the safety and health of its employees.	4.81	1.49
... avoids all forms of discrimination (age, sex, handicap, ethnic or religious origin) in its recruitment and promotion policies.	4.79	1.56
... supports equal opportunities at work (e.g., gender equality policies).	4.77	1.54
... is helpful to customers and advises them about its products and/or services.	4.75	1.49
... takes action to ensure that shareholders’ investments are profitable and perennial in the long term.	4.64	1.38
... ensures that communication with shareholders is transparent and accurate.	4.64	1.48

Table 1. Cont.

CSR Activities ¹	Mean	SD
... encourages employees' diversity in the workplace.	4.56	1.61
... invests in innovations which are to the advantage of customers.	4.50	1.59
... would not continue to deal with a supplier (or subcontractor) who failed to respect labor laws.	4.48	1.64
... implements policies that improve the well-being of its employees at work.	4.47	1.49
... respects the financial interests of all its shareholders.	4.44	1.53
... makes sure that its suppliers (and subcontractors) respect justice rules in their workplaces.	4.42	1.50
... encourages its members to adopt eco-friendly behavior (sort trash, save water and electricity) to protect the natural environment.	4.33	1.59
... endeavors to ensure that all its suppliers (and subcontractors), wherever they may be, respect and apply current labor laws.	4.28	1.56
... cares that labor laws are applied by all its suppliers (and subcontractors) wherever they may be.	4.25	1.56
... assists populations and local residents in case of natural disasters and/or accidents.	4.19	1.77
... helps its employees in case of hardship (e.g., medical care, social assistance).	4.19	1.57
... makes investments to improve the ecological quality of its products and services.	4.18	1.58
... invests in clean technologies and renewable energies.	4.18	1.54
... respects and promotes the protection of biodiversity (i.e., the variety and diversity of species).	4.16	1.50
... takes action to reduce pollution-related to its activities (e.g., choice of materials, eco-design, and dematerialization).	4.09	1.69
... supports its employees' work and life balance (e.g., flextime, part-time work, flexible working arrangements).	4.06	1.68
... makes sure that shareholders exert effective influence over strategic decisions.	4.06	1.55
... helps its suppliers (and subcontractors) to improve the working conditions of their workers (e.g., safe working environment, etc.).	4.02	1.61
... contributes toward saving resources and energy (e.g., recycling, waste management).	3.99	1.69
... contributes to improving the well-being of populations in the areas where it operates by providing help for schools, sporting events, etc.	3.97	1.66
... provides financial support for humanitarian causes and charities.	3.96	1.64
... measures the impact of its activities on the natural environment (e.g., carbon audit, reduction of greenhouse gas emissions, global warming).	3.92	1.70
... invests in the health of populations of developing countries (e.g., vaccination, fight against AIDS).	3.91	1.80
... helps NGOs and similar associations such as UNICEF, the Red Cross, and emergency medical services for the poor.	3.86	1.69
... gives financial assistance to the poor and deprived in the areas where it operates.	3.86	1.64
... invests in humanitarian projects in poor countries.	3.49	1.81

Note: ¹ Items are presented in descending order of the mean values.

3.2.2. Work Engagement

The assessment of employees' levels of work engagement was conducted using the shortened version of the Utrecht WE Scale (UWES-9) by Schaufeli and Bakker (2004). This scale is composed of nine items (e.g., "Time flies when I am working"; Cronbach's alpha of 0.88) with a response scale ranging from 1 (never) to 7 (always).

3.2.3. Turnover Intention

The assessment on intention to leave the organization was based on 5 items from Bozeman and Perrewé (2001). A sample item is "I will probably look for a new job in the near future". The respondents indicated their level of agreement with each item on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The set of items had a Cronbach's alpha of 0.74.

3.3. Common Method Bias

Common method bias results from collecting data from the same source at a single moment for all variables (Bozionelos and Simmering 2022; Podsakoff et al. 2012). In the present study, the risk of potential bias was reduced by using different rating scales. In addition, Harman's single factor test was performed for common method bias on data (Podsakoff et al. 2012). The results indicate that the first factor accounts for 32.68% of the total variance explained (69.93%; $KMO = 0.838$, *Bartlett's test* = 3812.92, $p < 0.001$), showing that the data are robust to significant common method bias errors.

4. Results

All analyses were conducted using IBM SPSS Statistics Version 26 software and PROCESS Macro (Hayes 2018).

4.1. Employees' Awareness Regarding Their Employer Organizations' Involvement in Different CSR Domains

Workers' perceptions of their companies' involvement in the set of CSR activities assessed in this study are provided in Table 1. The descriptive statistics show that for most Nigerian employees, there is some awareness of the CSR activities that their organizations are involved in one way or the other, since the mean values are near or above the mid-point of the response scale.

For the 35 items, from which the six dimensions of CSR were coded on a scale of 1–6, the item with the highest mean score was whether the participants' employer organizations check the quality of goods and/or services provided to customers ($M = 5.08$; $SD = 1.36$). In fact, the three items with higher mean values are related with CSR activities directed at customers (i.e., ensuring that its products and/or services are accessible for all its customers; respecting its commitments to customers).

As for the item with the least score, it was the item related to whether the participants' employer organizations invest in humanitarian projects in poor countries ($M = 3.49$; $SD = 1.81$). The other two items with lower averages are also related with organizations' involvement in socially responsible practices towards community (i.e., helping NGOs and similar associations for the poor; giving financial assistance to the poor and deprived in the areas where it operates).

Furthermore, looking at CSR and its different dimensions (Table 2), it was observed that the overall CSR perception is relatively high, with a mean score of 4.35 ($SD = 1.13$), and that some dimensions are more salient than others. The mean score for customer-oriented CSR was 4.82 ($SD = 1.24$). Given that the items included in this dimension were in the top three of the most salient activities (Table 1), it is not surprising that this is the dimension that Nigerian employees perceived as being addressed more by organizations. The mean score for community-oriented CSR was lower, i.e., 3.89 ($SD = 1.34$), which again is not surprising given the lower awareness of its set of items. The results of *t* tests for paired samples reveals that the six dimensions' mean values are statistically different (all $p < 0.05$), except employee-oriented and stockholder-oriented CSR ($t(117) = 1.17$, n.s.). Accordingly, participants consider that their organizations are involved mostly in community-oriented CSR practices, then employee- and stockholders-oriented practices, and in third place, supplier-oriented practices, followed by environmental-CSR practices being the dimension with lower perceived investment from organizations community-oriented CSR, as mentioned before.

Table 2. Descriptive statistics, correlations, and Cronbach's alpha values.

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1. Overall CSR	4.35	1.13	(0.95)								
2. Community-oriented CSR	3.89	1.34	0.87 **	(0.89)							
3. Environment-oriented CSR	4.12	1.30	0.93 **	0.83 **	(0.91)						
4. Employee-oriented CSR	4.52	1.20	0.91 **	0.75 **	0.83 **	(0.88)					
5. Supplier-oriented-CSR	4.29	1.24	0.89 **	0.77 **	0.78 **	0.75 **	(0.85)				
6. Customer-oriented CSR	4.82	1.24	0.86 **	0.61 **	0.73 **	0.74 **	0.74 **	(0.85)			
7. Shareholder-oriented CSR	4.44	1.23	0.92 **	0.72 **	0.81 **	0.83 **	0.77 **	0.82 **	(0.89)		
8. Work Engagement	5.17	1.08	0.52 **	0.44 **	0.42 **	0.53 **	0.45 **	0.46 **	0.52 **	(0.88)	
9. Turnover Intention	2.80	0.99	-0.20 *	-0.16	-0.23 *	-0.26 **	-0.17	-0.09	-0.20 *	-0.42 **	(0.74)

Notes: * $p < 0.05$; ** $p < 0.01$; Cronbach's alphas in parenthesis.

4.2. Relationship between CSR, Work Engagement, and Turnover Intention

Regarding the relationship among the variables of interest, this study proposed that employees' perceptions of their employer organizations' involvement in CSR activities have a negative relationship with their turnover intention (H1), but a positive one with work engagement (H2). In addition, it was proposed that work engagement is negatively related to turnover intention (H3) and mediates the relationship between this latter variable and CSR perceptions (H4). This simple mediation model was examined using model 4 from PROCESS Macro for SPSS (Hayes 2018). An overall indicator of CSR resulting from the average of the 35 items were used.

Before testing the hypotheses, the variables' descriptive statistics and Pearson's correlations coefficients were observed (Table 2). Average work engagement levels are high and turnover intention levels tend to be low, although some variation exists in the sample ($SDs = 1.08$ and 0.99 , respectively). The results indicate that there is a negative correlation between employees' perceptions of overall CSR involvement with turnover intention ($r = -0.20$, $p < 0.05$), indicating that higher levels of CSR perceptions are related to lower levels of intention to quit the organization. The results also indicate that there is a positive and moderate correlation with work engagement ($r = 0.52$, $p < 0.01$), indicating that higher levels of CSR perceptions are related to stronger levels of work engagement. Work engagement and turnover intention's levels are also significantly related ($r = -0.42$, $p < 0.01$). As the correlation is negative, higher levels of one variable correspond with lower levels of the other.

Next, the values of variance inflation factor (1.375) and tolerance (0.727) were checked, with results indicating that multicollinearity is not an issue in the present data (Daoud 2017).

Mediation analysis was then performed, and total, direct, and indirect effects were interpreted. The first hypothesis focused on the expected negative relationship between employees' perceptions of CSR activities and their turnover intention. The results confirm that CSR perceptions significantly predicts employees' intentions to quit the organization ($B = -0.18$; 95% confidence interval $[CI] = (-0.34, -0.02)$), thus supporting H1. The higher the employees' perceptions of their organization's involvement in CSR activities, the lower their desire to leave them.

The results also indicate that CSR perceptions significantly predicts employees' work engagement ($B = 0.50$; 95% $CI = (0.35, 0.65)$), as proposed by H2. Accordingly, the stronger the perceptions of CSR activities, the higher the energy, absorption, and dedication at work.

As for H3, findings support the claim that work engagement is negatively related to employees' intention to leave the organization ($B = -0.39$; 95% $CI = (-0.57, -0.21)$). Hence, the higher the levels of work engagement, the lower the desire to quit the organization.

Finally, regarding H4, the results indicate that employees' perceptions of CSR activities' indirect effect is statistically significant, which provides evidence of a mediation effect ($B = -0.20$; 95% $CI = (-0.32, -0.10)$). To determine if the mediation effect was full or partial, the total and direct effects of CSR perceptions on turnover intention were compared. As mentioned above, the CSR perceptions' total effect on PEBs was significant ($B = -0.18$; 95% $CI = (-0.34, -0.02)$), suggesting that organizations' involvement in CSR practices directly contributes to employees' desire to remain in the organization. This involvement's direct effect, however, is not statistically significant ($B = 0.02$; 95% $CI = (-0.16, 0.19)$), confirming that this relationship is fully mediated by work engagement. The results, therefore, indicate that employee's perceptions of organizations' involvement in CSR activities enhances employees' work engagement. This engagement, subsequently, generates a lower willingness to leave the organization. The model explains 17% of the unique variance of turnover intention ($F [2,115] = 12.05$, $p < 0.01$). Figure 1 depicts the research model supported by results.

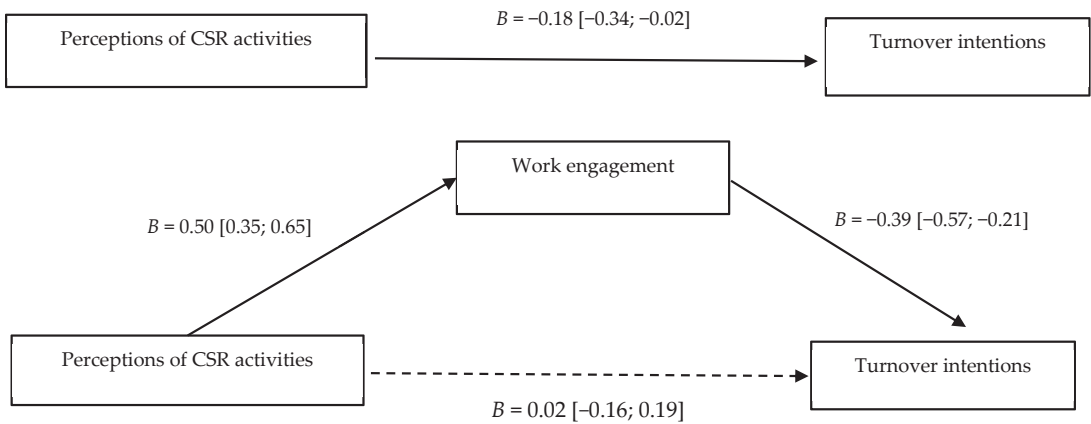


Figure 1. Research model supported by results. Notes: B = non-standardized coefficients; confidence intervals in parenthesis.

5. Discussion and Conclusions

5.1. Main Findings

The purpose of this study was to ascertain employees' awareness of how much organizations have been involved in CSR in the Nigerian context and its influence on both work engagement and turnover intention. By focusing its attention on the Nigerian case, the present study contributes to advance knowledge regarding CSR and its outcomes in an overlooked African context (Gharleghi et al. 2018; Onyishi et al. 2020; Pisani et al. 2017).

The findings indicate that most organizations where participants work are perceived to be substantially engaged in CSR activities. A similar positive appreciation of organizations' CSR activities by employees in Nigeria was reported by Onyishi et al. (2020). Considering Nigeria's unusual business environment, including poor infrastructures and policies that support business, the cited authors argue that any attempt to engage in CSR activities can easily be seen by employees. Therefore, results regarding CSR should be interpreted with reasonable prudence. With respect to the various dimensions of CSR analyzed here, customer-oriented CSR had the highest average, followed by employee-oriented CSR, with environment-oriented CSR and community oriented-CSR having the lower averages. The differences between dimensions, although relatively small, are statistically significant and, therefore, can be interpreted as signaling organizations' priorities in CSR strategies. The literature reviewed for the present study did not provide results directly comparable to the current ones (e.g., Onyishi et al. 2020 reported only results for overall CSR). Nevertheless, a study by Amaeshi et al. (2006) based on interviews with business leaders from the financial services sector presents a distinct CSR focus, with emphasis being put on "community involvement, less on socially responsible employee relations and almost none existent in relation to socially responsible products and processes" (p. 10). These differences might be attributable to informers' status (employees vs. business leaders) or business sectors under analysis (mainly healthcare vs. financial services), amongst other motives, but support the idea that CSR is context-specific, and stakeholders might have different perceptions of organizational activities. Further studies are needed to obtain a more comprehensive picture of CSR activities in the country.

Regarding the relationship between employees' perceptions of organizations' activities in the CSR realm and their levels of turnover intention and work engagement, findings are aligned with what has been reported in other countries. As employees' perceptions of their employer organizations' involvement in CSR increase, their levels of turnover intention decrease (Castro-González et al. 2021; Farooq et al. 2019; Lin and Liu 2017; Nejati et al. 2021; Ouakouak et al. 2020; Virador and Chen 2022), and work engagement gets stronger (Ali et al. 2021; Ferreira and Real de Oliveira 2014; Gao et al. 2018; Glavas and Piderit 2009;

Gürlek and Tuna 2019; Jia et al. 2019; Manimegalai and Baral 2018; Rupp et al. 2018), thus supporting the present study's first two hypotheses. Findings also provide support for the last two hypotheses, as work engagement is negatively related to turnover intentions and, more interestingly, it seems to fully mediate the relationship between CSR perceptions and turnover intention. Accordingly, Nigerian employees' perceptions of organizations' involvement in CSR activities enhance their levels of work engagement, thereby promoting lower willingness to quit the organization (Chaudhary 2017; Lin and Liu 2017). While the level of organizational involvement in CSR activities might vary across contexts, its significant relationship with employees' attitudes and behaviors seems to be transversal. Empirical evidence from Nigeria reported here thus shows that engaging in CSR activities qualifies as one strategic way of engaging the workforce and reducing negative turnover cognitions. CSR is, thus, beyond the conception of merely giving back to the society, as such involvement affects an employees' emotional connection with the organization, which can either spur their engagement or influence the thoughts of staying or leaving the workplace.

5.2. Theoretical Contributions and Implications for Management

The main findings of this study have interesting theoretical and practical implications. From a theoretical perspective, the present study contributes to a deeper understanding of Nigerian employees' awareness of their employer organizations' involvement in different CSR dimensions, as well as how CSR perceptions can decrease their intention to leave the organization via increased work engagement. The existing literature has reported a significant relationship between CSR and diverse job attitudes and behaviors (e.g., Freire et al. 2022; Turker 2009; Wang et al. 2020), but few studies have been done in the Nigerian (Onyishi et al. 2020) or other African countries' contexts (Duarte et al. 2019). To the best of authors' knowledge, this is the first research study examining the relationship between CSR, work engagement, and turnover intention with Nigerian workers. On the basis of the results, it can be concluded that CSR activities are relevant for Nigerian employees' relationship with their employer organizations, helping them to improve their desire to stay as well as their energy, absorption, and dedication at the workplace. Thus, micro-level CSR outcomes seem to be transversal to different geographical contexts.

From a practical perspective, the study's findings indicate that organizations should invest in CSR activities relevant to their stakeholders. Some of these activities are listed in Table 1, based on El Akremi et al.'s (2018) research, but other activities more tailored to the region or community where businesses operate should be considered. Considering that communication practices are a relevant way of stimulating strong and fruitful relationships between organizations and their workforce (Gomes et al. 2021), it is important also to implement transparent and effective communication programs to increase stakeholders' awareness of organizational practices. Regarding what concerns employees, this will avoid losing key members in organizations and foster a more engaged workforce. The mentioned communication programs are also key to increasing workers' participation on CSR activities (Collier and Esteban 2007) and fostering their desire to serve as CSR ambassadors in daily work routines. Considering that employee-oriented CSR activities have the strongest correlation with the two employees' outcomes analyzed here—work engagement and turnover intention—organizations can also adopt more contemporary approaches to personnel management, namely socially responsible human resource management (Barrena-Martinez et al. 2018; Omidi and Dal Zotto 2022) or sustainable human resource management (Aust et al. 2020; Macke and Genari 2019) strategies to promote positive outcomes.

5.3. Limitations and Future Research

As in all research, these results need to be interpreted considering the study's limitations. One of these limitations is convenience sampling, which, among other factors, limits the generalizability of the findings. Although the modest sample size was deemed adequate

to proceed with data analysis, a larger and more representative sample of Nigerian workers would increase results robustness.

In addition, the data were collected at a single moment in time and through the same source (i.e., the respondents rated the predictor, mediating, and criterion variables), which can increase the potential risk of inflated relationships between the variables under study. Various precautions were taken in the questionnaire's construction to prevent common source bias, including ensuring anonymity, confidentiality, existence of no right or wrong answers, and using different response scales (Bozionelos and Simmering 2022; Podsakoff et al. 2012). Harman's single factor test was also performed, and the results suggest that common method bias is not a serious threat to the validity of the present findings. Even so, future studies could avoid cross-sectional designs and collect data at different points in time. Given the correlational design of the study, the results do not allow for any firm conclusions regarding causal relationships, and, thus, other possible causal directions between variables can be assumed to exist.

As future research, it will be interesting to investigate CSR in specific business sectors, as the results reported here are different from previous studies on the Nigerian case (e.g., Amaeshi et al. 2006), as well as conduct research in other African countries. New variables related to the professional context, such as job satisfaction, well-being, and individual performance, can be examined to obtain a deeper understanding of CSR outcomes. Additionally, moderator variables can be considered, namely in terms of employees' characteristics, as not all employees may react equally strongly to CSR practices. Characteristics such as age can be considered, as African countries have a larger number of young workers than do developed countries, and previous research has pointed out generational differences (Wisse et al. 2018). The avenues for research on CSR are plentiful and the current study hopes to have contributed to advancing existent knowledge regarding how employees, as major stakeholders of any organization, react to organizational efforts in that realm.

Author Contributions: Conceptualization, O.T.B. and A.P.D.; Methodology, O.T.B. and A.P.D.; Data collection, O.T.B.; Formal analysis, A.P.D.; Funding acquisition, A.P.D.; Supervision, A.P.D.; Writing—original draft, O.T.B. and A.P.D.; Writing—review & editing, O.T.B. and A.P.D. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by Portugal's Fundação para a Ciência e Tecnologia [Grant UID/03125/2020 and contract DL 57/2016/CP1359/CT0004].

Institutional Review Board Statement: The study was conducted according to the guidelines of the Declaration of Helsinki. The study also followed the ethical standards guidelines of Portugal's Order of Psychologists and of the researchers' institution.

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

Data Availability Statement: The data will be made available on a reasonable request by contacting the corresponding author.

Acknowledgments: The authors wish to thank the participants without whom this study would not have been possible.

Conflicts of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

- Aguinis, Herman, and Ante Glavas. 2012. What we know and don't know about corporate social responsibility: A review and research agenda. *Journal of Management* 38: 932–68. [CrossRef]
- Albasu, Joseph, and Jerome Nyameh. 2017. Relevance of stakeholder theory, organizational identity theory and social exchange theory to corporate social responsibility and employees performance in the commercial banks in Nigeria. *International Journal of Business, Economics and Management* 4: 95–105.

- Ali, Muhammad, Talat Islam, Khalid Mahmood, Fouzia Ali, and Basharat Raza. 2021. Corporate Social Responsibility and Work Engagement: Mediating Roles of Compassion and Psychological Ownership. *Asia-Pacific Social Science Review* 21: 196–213.
- Amaeshi, Kenneth, Bongo Adi, Chris Ogbegie, and Olufemi Amao. 2006. Corporate social responsibility in Nigeria: Western mimicry or indigenous influences? *Journal of Corporate Citizenship* 24: 83–99. [CrossRef]
- Arikan, Esra, Deniz Kantur, Ceyda Maden, and Emine-Eser Telci. 2016. Investigating the mediating role of corporate reputation on the relationship between corporate social responsibility and multiple stakeholder outcomes. *Quality & Quantity* 50: 129–49.
- Aust, Ina, Brian Matthews, and Michael Muller-Camen. 2020. Common Good HRM: A paradigm shift in Sustainable HRM? *Human Resource Management Review* 30: 100705. [CrossRef]
- Barrena-Martinez, Jesus, Macarena López-Fernandéz, and Pedro Romero-Fernandez. 2018. Drivers and barriers in socially responsible human resource management. *Sustainability* 10: 1532. [CrossRef]
- Blau, Peter. 1964. *Exchange and Power in Social Life*. New York: John Wiley & Sons.
- Bozeman, Dennis, and Pamela Perrewé. 2001. The Effect of item content overlap on Organizational Commitment Questionnaire-turnover cognitions relationships. *Journal of Applied Psychology* 86: 161–73. [CrossRef] [PubMed]
- Bozionelos, Nikos, and Marcia Simmering. 2022. Methodological threat or myth? Evaluating the current state of evidence on common method variance in human resource management research. *Human Resource Management Journal* 32: 194–215. [CrossRef]
- Carroll, Archie, and Ann Buchholtz. 2003. *Business and society: Ethics and Stakeholder Management*, 5th ed. Cincinnati: Thomson South-Western.
- Castro-González, Sandra, Belén Bande, and Guadalupe Vila-Vázquez. 2021. How can companies decrease salesperson turnover intention? The Corporate Social Responsibility intervention. *Sustainability* 13: 750. [CrossRef]
- Chaudhary, Richa. 2017. CSR and turnover intentions: Examining the underlying psychological mechanisms. *Social Responsibility Journal* 13: 643–60. [CrossRef]
- Collier, Jane, and Rafael Esteban. 2007. Corporate social responsibility and employee commitment. *Business Ethics: A European Review* 16: 19–33. [CrossRef]
- Dahlsrud, Alexander. 2008. How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management* 15: 1–13. [CrossRef]
- Daoud, Jamal. 2017. Multicollinearity and Regression Analysis. *Journal of Physics* 949: 1–7. [CrossRef]
- Duarte, Ana Patrícia, Carla Mouro, and José Neves. 2010. Corporate social responsibility: Mapping its social meaning. *Management Research* 8: 101–22.
- Duarte, Ana Patrícia, José Neves, Daniel Gomes, and Gabriel Moisés. 2019. Corporate social responsibility, job satisfaction, and customer orientation in Angola. *World Review of Entrepreneurship, Management and Sustainable Development* 15: 93–109. [CrossRef]
- El Akremi, Assaad, Jean-Pascal Gond, Valérie Swaen, Kevin de Roeck, and Jacques Igalens. 2018. How do employees perceive Corporate Responsibility? Development and validation of a multidimensional corporate stakeholder responsibility scale. *Journal of Management* 44: 619–57. [CrossRef]
- Emerson, Eric. 1976. The social exchange theory. *Annual Review of Sociology* 2: 335–62. [CrossRef]
- European Commission. 2001. *Green Paper: Promoting a European Framework for Corporate Social Responsibility*. Brussels: EU Commission.
- European Commission. 2011. *A Renewed EU Strategy 2011–14 for Corporate Social Responsibility*. Brussels: European Commission.
- Farooq, Mariam, Omer Farooq, and Walid Cheffi. 2019. How do employees respond to the CSR initiatives of their organizations: Empirical evidence from developing countries. *Sustainability* 11: 2646. [CrossRef]
- Faul, Franz, Edgar Erdfelder, Axel Buchner, and Albert-Georg Lang. 2009. Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods* 41: 1149–60. [CrossRef]
- Ferreira, Pedro, and Elizabeth Real de Oliveira. 2014. Does Corporate Social Responsibility impact on employee engagement? *Journal of Workplace Learning* 26: 232–48. [CrossRef]
- Freeman, R. Edward. 1984. *Strategic Management: A Stakeholder Approach*. Boston: Pitman.
- Freire, Carla, Joana Gonçalves, and Maria Rita Carvalho. 2022. Corporate Social Responsibility: The Impact of Employees' Perceptions on Organizational Citizenship Behavior through Organizational Identification. *Administrative Sciences* 12: 120. [CrossRef]
- Gao, Yongqiang, Dan Zhang, and Yuanyuan Huo. 2018. Corporate social responsibility and work engagement: Testing a moderated mediation model. *Journal of Business and Psychology* 33: 661–73. [CrossRef]
- Gharleghi, Behrooz, Asghar Jahanshahi, and Khaled Nawaser. 2018. The Outcomes of Corporate Social Responsibility to Employees: Empirical Evidence from a Developing. *Sustainability* 10: 698. [CrossRef]
- Glavas, Ante, and Sandy Piderit. 2009. How does doing good matter? Effects of corporate citizenship on employees. *The Journal of Corporate Citizenship* 36: 51–70. [CrossRef]
- Glavas, Ante. 2016. Corporate Social Responsibility and Employee Engagement: Enabling employees to employ more of their whole selves at work. *Frontiers in Psychology* 7: 796. [CrossRef]
- Gomes, Daniel Roque, Patricia Lourenço, and Neuza Ribeiro. 2021. When COVID-19 Is the Invader and Internal Communication Is the Hero: Understanding the Influence of Internal Communication on Individual Performance and Evaluating the Mediating Role of Perceived Support. *Administrative Sciences* 11: 136. [CrossRef]
- Gond, Jean-Pascal, Assaad El Akremi, Valérie Swaen, and Nishat Babu. 2017. The psychological microfoundations of corporate social responsibility: A person-centric systematic review. *Journal of Organizational Behavior* 38: 225–46. [CrossRef]

- González-Romá, Vicente, Wilmar Schaufeli, Arnold Bakker, and Susana Lloret. 2006. Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior* 68: 165–74. [CrossRef]
- Gürlek, Mert, and Muharrem Tuna. 2019. Corporate social responsibility and work engagement: Evidence from the hotel industry. *Tourism Management Perspectives* 31: 195–208. [CrossRef]
- Halbesleben, Jonathon. 2010. A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In *Work Engagement: A Handbook of Essential Theory and Research*. Edited by Arnold Bakker and Michael P. Leiter. Hove: Psychology Press, pp. 102–17.
- Hayes, Andrew. 2018. *Introduction to Mediation, Moderation and Conditional Process Analysis*, 2nd ed. New York: Guilford Press.
- Jia, Yu, Jinglu Yan, Tianyuan Liu, and Jun Huang. 2019. How does internal and external CSR affect employees' work engagement? Exploring multiple mediation mechanisms and boundary conditions. *International Journal of Environmental Research and Public Health* 16: 2476. [CrossRef] [PubMed]
- Kahn, William. 1990. Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal* 33: 692–724. [CrossRef]
- Lee, Eun, Seong-Yeon Park, and Hyun Lee. 2013. Employee perception of CSR activities: Its antecedents and consequences. *Journal of Business Research* 66: 1716–24. [CrossRef]
- Lee, Tae, Barry Geerhart, Ingo Weller, and Charlie Trevor. 2008. Understanding voluntary turnover: Path-specific job satisfaction effects and the importance of unsolicited job offers. *Academy of Management Journal* 51: 651–71. [CrossRef]
- Lin, Chieh-Peng, and Min-Ling Liu. 2017. Examining the effects of corporate social responsibility and ethical leadership on turnover intention. *Personnel Review* 46: 526–50. [CrossRef]
- Macke, Janaina, and Denise Genari. 2019. Systematic literature review on sustainable human resource management. *Journal of Cleaner Production* 208: 806–15. [CrossRef]
- Manimegalai, Santhosh, and Rupashree Baral. 2018. Examining the mediating role of organizational trust in the relationship between CSR practices and job outcomes. *Social Responsibility Journal* 14: 433–47. [CrossRef]
- McWilliams, Abigail, and Donald Siegel. 2001. Corporate Social Responsibility: A theory of the firm perspective. *Academy of Management Review* 26: 117–27. [CrossRef]
- Mobley, William, Rodger Griffeth, Herbert Hand, and Bruce Meglino. 1979. Review and conceptual analysis of the employee turnover process. *Psychological Bulletin* 86: 493. [CrossRef]
- Nejati, Mehran, Brown Michael, Azadeh Shafaei, and Pi-Shen Seet. 2021. Employees' perceptions of corporate social responsibility and ethical leadership: Are they uniquely related to turnover intention? *Social Responsibility Journal* 17: 181–97. [CrossRef]
- Omidi, Afshin, and Cinzia Dal Zotto. 2022. Socially Responsible Human Resource Management: A Systematic Literature Review and Research Agenda. *Sustainability* 14: 2116. [CrossRef]
- Onkila, Tiina, and Bravesh Sarna. 2022. A systematic literature review on employee relations with CSR: State of art and future research agenda. *Corporate Social Responsibility and Environmental Management* 29: 435–47. [CrossRef]
- Onyishi, Ike, Kenneth Amaeshi, Fabian Ugwu, and Ibeawuchi Enwereuzor. 2020. Going the extra mile because my organization does: How does corporate social responsibility influence organizational citizenship in Nigeria? *Management and Organization Review* 16: 169–97. [CrossRef]
- Ouakouak, Mohammed, Bindu Arya, and Michel Zaitouni. 2020. Corporate social responsibility and intention to quit: Mediating role of organizational citizenship behavior. *International Journal of Productivity and Performance Management* 69: 447–65. [CrossRef]
- Pérez, Sérgio, Samuel Fernández-Salineró, and Gabriela Topa. 2018. Sustainability in Organizations: Perceptions of Corporate Social Responsibility and Spanish Employees' Attitudes and Behaviors. *Sustainability* 10: 3423. [CrossRef]
- Pisani, Nicollò, Arno Kourula, Ans Kolk, and Renske Meijer. 2017. How global is international CSR research? Insights and recommendations from a systematic review. *Journal of World Business* 52: 591–614. [CrossRef]
- Podsakoff, Philip, Scott MacKenzie, and Nathan Podsakoff. 2012. Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology* 63: 539–69. [CrossRef]
- Ribeiro, Neuza, Patricia Duarte, and Jessica Fidalgo. 2020. Authentic leadership's effect on customer orientation and turnover intention among Portuguese hospitality employees: The mediating role of affective commitment. *International Journal of Contemporary Hospitality Management* 32: 2097–116. [CrossRef]
- Rosse, Joseph, and Charles Hulin. 1985. Adaptation to work: An analysis of employee health, withdrawal, and change. *Organizational Behavior and Human Decision Processes* 36: 324–47. [CrossRef]
- Rubenstein, Alex, Marion Eberly, Thomas Lee, and Terence Mitchell. 2018. Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology* 71: 23–65. [CrossRef]
- Rupp, Deborah, Ruodan Shao, Daniel Skarlicki, Elizabeth Paddock, Tae-Yeol Kim, and Thierry Nadisic. 2018. Corporate social responsibility and employee engagement: The moderating role of CSR-specific relative autonomy and individualism. *Journal of Organizational Behavior* 39: 559–79. [CrossRef]
- Saks, Alan. 2006. Antecedents, and consequences of employee engagement. *Journal of Managerial Psychology* 21: 600–19. [CrossRef]
- Santini, Fernando, Wagner Ladeira, Marlon Dalmoro, and Celso Matos. 2021. Antecedents and consequences of corporate social responsibility: A meta-analysis. *Journal of Social Marketing* 11: 278–305. [CrossRef]

- Schaufeli, Wilmar, and Arnold Bakker. 2004. Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior* 25: 293–315. [CrossRef]
- Schaufeli, Wilmar, Arnold Bakker, and Marisa Salanova. 2006. The measurement of work engagement with a short questionnaire across national study. *Educational and Psychological Measurement* 66: 701–16. [CrossRef]
- Scholten, Marc, Manuela Correia, Teresa Esteves, and Sónia Gonçalves. 2022. No Place for Pointless Jobs: How Social Responsibility Impacts Job Performance. *Sustainability* 14: 12031. [CrossRef]
- Shaikh, Erum, Mohsen Brahmi, Pham Chieng Thang, Waqas Watto, Ta Thy Nguyet Trang, and Nguyen Thi Loan. 2022. Should I Stay or Should I Go? Explaining the Turnover Intentions with Corporate Social Responsibility (CSR), Organizational Identification and Organizational Commitment. *Sustainability* 14: 6030. [CrossRef]
- Story, Joana, and Pedro Neves. 2015. When corporate social responsibility (CSR) increases performance: Exploring the role of intrinsic and extrinsic CSR attribution. *Business Ethics: A European Review* 24: 111–24. [CrossRef]
- Tracey, Bruce, and Timothy Hinkin. 2010. Contextual Factors and Cost Profiles Associated with Employee Turnover. *Cornell Hospitality Quarterly* 49: 12–27. [CrossRef]
- Turker, Duygu. 2009. How corporate social responsibility influences organizational commitment. *Journal of Business Ethics* 89: 189–204. [CrossRef]
- Ugwunwanyi, Ananaba, and Chukwula Ekene. 2016. Corporate Social Responsibility and its implementation in Nigeria: Problems and prospects. *Global Journal of Human Resource Management* 4: 60–69.
- Virador, Leomar, and Li-Fei Chen. 2022. Does an (in) congruent corporate social responsibility strategy affect employees' turnover intention? A configurational analysis in an emerging country. *Business Ethics, the Environment & Responsibility*. Available online: <https://onlinelibrary.wiley.com/doi/full/10.1111/beer.12475> (accessed on 12 September 2022).
- Wang, Yanling, Shan Xu, and Yanxia Wang. 2020. The consequences of employees' perceived corporate social responsibility: A meta-analysis. *Business Ethics: A European Review* 29: 471–96. [CrossRef]
- Wisse, Barbara, Rob van Eijbergen, Eric Rietzschel, and Susanne Scheibe. 2018. Catering to the needs of an aging workforce: The role of employee age in the relationship between corporate social responsibility and employee satisfaction. *Journal of Business Ethics* 147: 875–88. [CrossRef]
- Zhang, Qingyu, and Sohail Ahmad. 2022. Linking Corporate Social Responsibility, Consumer Identification and Purchasing Intention. *Sustainability* 14: 12552. [CrossRef]

Article

Satisfaction with Internal Communication and Hospitality Employees' Turnover Intention: Exploring the Mediating Role of Organizational Support and Job Satisfaction

Ana Patrícia Duarte ^{1,*} and Vítor Hugo Silva ^{2,3}

¹ Business Research Unit (BRU-IUL), Instituto Universitário de Lisboa (ISCTE-IUL), 1649-026 Lisbon, Portugal

² ISCTE-IUL, Centro de Estudos sobre a Mudança Socioeconómica e Território (DINÂMIA'CET), 1649-026 Lisbon, Portugal; vitor_hugo_silva@iscte-iul.pt

³ HEI-Lab—Digital Human-Environment Interaction Lab, Universidade Lusófona, 1749-024 Lisbon, Portugal

* Correspondence: patricia.duarte@iscte-iul.pt

Abstract: Managing employee turnover is a key function in human resource management (HRM) that has become especially relevant given current staff shortages. The travel and tourism industry has been strongly affected, with many organizations having difficulty attracting and retaining workers. Portugal, as a prominent player in tourism, is no exception, and the workforce shortage crisis has been discussed in various forums and has attracted media attention. The present study examined hotel employees' turnover intention and its relationship with their job satisfaction and positive perceptions of internal communication and organizational support. The proposed theoretical model included that internal communication contributes to the quality of employee–organization relationships by increasing perceived organizational support and job satisfaction, which in turn serve as sequential mediators of hotel workers' diminished intent to leave their employer. Multiple regression analyses were performed using data collected from 12 hotels (number = 370 workers). The results support the model as they confirm that a statistically significant negative relationship exists between employees' satisfaction with internal communication and their turnover intention. These variables are both directly and indirectly connected through perceived organizational support and job satisfaction. Implications for HRM are discussed including the importance of refining internal organizational communication to strengthen employee–organization ties.

Keywords: hospitality; hotel employee; human resource management; internal communication; job satisfaction; organizational communication; perceived organizational support; travel and tourism; turnover intention; voluntary employee turnover

Citation: Duarte, Ana Patrícia, and Vítor Hugo Silva. 2023. Satisfaction with Internal Communication and Hospitality Employees' Turnover Intention: Exploring the Mediating Role of Organizational Support and Job Satisfaction. *Administrative Sciences* 13: 216. <https://doi.org/10.3390/admsci13100216>

Received: 10 September 2023

Revised: 25 September 2023

Accepted: 26 September 2023

Published: 1 October 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The right balance between staff entries and exits is critical to smooth organizational functioning and business success (Feeley et al. 2010; Mohsin et al. 2023; Porter and Rigby 2021). Turnover must be managed by organizations to ensure a workforce that can cope with production and service provision fluctuations, to dismiss less competent employees, or to bring “new blood, energy, and ideas to an organization” (Feeley et al. 2010, p. 169). However, turnover's potentially detrimental effects are well known and feared. These negative impacts include, among others, lower efficiency, the cost of hiring and training new employees, and decreased service quality and customer satisfaction (Hinkin and Tracey 2000; Hom et al. 2017; McCartney et al. 2022; McElroy et al. 2001). In particular, employee exits can result in the loss of individuals who are productive and critical to crucial operations. Managing employee turnover is thus a key function and concern in human resource management (HRM).

The current labor shortage in developed countries makes turnover management even more critical, especially in industries more heavily affected by the unavailability of workers

(Han 2022; World Travel and Tourism Council (WTTC 2021)). The travel and tourism industry is a case in point as its organizations report having difficulty attracting and retaining staff. This industry is known for having a high turnover rate (Davidson and Wang 2011; Ineson et al. 2013), and chronic staff shortages make maintaining the necessary workforce an almost herculean task for managers. The WTTC predicted that staff shortfalls in 2021 would range from 9% to 18% based on data from the United States, United Kingdom, France, Spain, Italy, and Portugal. This trend could hamper the industry's post-pandemic recovery and future expansion, which would have a major economic impact as travel and tourism are among the largest sectors globally, accounting for 1 in 10 jobs around the world (WTTC 2018).

Portugal is a southern European country listed in the top 20 by the Travel and Tourism Development Index 2021 (World Economic Forum 2022). Staff shortages have been discussed in various forums and attracted media attention. As in other countries, some workers found alternative job opportunities during the coronavirus disease-19 pandemic and remain unavailable to work in the industry. The media has predicted a shortfall of around 50,000 employees based on the WTTC's (2021) estimates for Portugal (i.e., 53,000 workers). This figure represents a shortage of nearly 12% of the workforce in an industry that in 2017 was responsible for 9% of this country's total employment (i.e., 401,500 jobs) (WTTC 2018) and 15.8% of the gross domestic product in 2022 (Tourism of Portugal Institute 2023). Portugal has become a prominent player in tourism, winning varied destination awards in the last decade (e.g., Europe's Leading Tourism Destination 2022; Tourism of Portugal Institute 2022), so this shortfall is a tremendous challenge for its travel and tourism organizations.

The present study was motivated by these concerns to focus on the hospitality sector in order to analyze hotel employees' turnover intention and its relationship with these workers' satisfaction with internal communication, organizational support, and their current job. The latter two variables are well-established predictors of withdrawal cognitions and actual voluntary turnover (e.g., Han 2022; Hom et al. 2017), but internal organizational communication's role has received less attention (Ćorić et al. 2020; Gomes et al. 2023). More specifically, the current research aimed to test a theoretical model proposing that workers' satisfaction with internal communication can be crucial to preventing voluntary turnover because the former variable can increase employees' perception of organizational support. Their contentment with their workplace then diminishes their willingness to leave their present job. The literature provides theoretical support for this sequential mediating effect, but the proposed model had not previously been subjected to empirical research. Testing the model allows us not only to replicate previous findings in the context of the Portuguese hospitality but also to advance knowledge about the ability of variables to predict employees' turnover intention. This study's results support the posited chain of effects.

The findings should also help HRM professionals and hotel managers understand how satisfactory internal communication reduces employees' withdrawal intentions. By improving this communication, hotels can boost perceived organizational support among their workers, which generates higher satisfaction with their workplace and reduces desires to leave for another job. Internal communication can thus be an important strategy for organizations seeking to cultivate strong employee–organization relationships and, ultimately, employee retention.

The remainder of this paper is structured as follows. The next section presents a review of the pertinent literature and theoretical framework underlying the research model, as well as the hypotheses' development. In the third and fourth sections, the methodology is described, including sample, procedures, and measures, after which the statistical analyses and results are presented. The final section discusses the findings' theoretical and practical implications.

2. Literature Review

2.1. Satisfaction with Internal Communication and Turnover Intention

Internal communication refers to managed interactions between stakeholders within organizations (Welch and Jackson 2007), including all communication of ideas and information that occurs within companies. Effective internal communication can shape employee–organization relationships in diverse ways. Employees' involvement in their firm has been identified as one of internal communication's functions (Westphalen 1998), and desirable outcomes are associated with high-quality communication. For example, stronger employee engagement (Karanges et al. 2015; Lee et al. 2022; Soupata 2005; Špoljarić and Verčič 2021; Verčič and Vokić 2018), better individual performance (Ortega et al. 2023), increased happiness at work (Ravina-Ripoll et al. 2022), and reduced burnout symptoms (Atouba and Lammers 2020).

Workers' satisfaction with various aspects of communication is a significant factor in the positive outcomes achieved through internal communication strategies (Downs and Hazen 1977). The cited authors suggest that these aspects include improving corporate information, organizational integration, communication climate, personal feedback, media quality, and supervisor, subordinate, and coworker communication. Satisfaction with internal communication thus reflects employees' satisfaction with relationships and information flow variables within their company (Downs and Hazen 1977).

Positive perceptions of internal communication have been linked to reduced voluntary turnover. The latter construct can be defined as the "voluntary cessation of membership in an organization [...] by an individual who receives monetary compensation for participation in that organization" (Hom and Griffeth 1995, p. 5). A gap has been detected between intention and behavior, but turnover is still best predicted by employee turnover intention (Hom et al. 2017; Rubenstein et al. 2018)—the central variable examined by the present study. This intention refers to workers' desire to leave their employer (Rosse and Hulin 1985).

The literature indicates that employees who are more satisfied with internal communication report lower turnover intention. More specifically, Tsai et al.'s (2009) study showed that satisfaction with internal communication is negatively related to service industry workers' turnover intention. Carrière and Bourque (2009) found a similar relationship in land ambulance service contexts. Company communication was identified by Milman (2003) as one of the most important reasons behind amusement park and attraction industry employees' intention to stay in their job.

Internal communication, in general, facilitates the development of respect, trust, and understanding between organizations' members (Argenti 2003; Verčič et al. 2012). In addition, communication within companies fosters coordination and cooperation processes (Kochan et al. 2019), so it can contribute to effective task integration, stronger work relationships, and a sense of belonging. Multiple studies have also highlighted the importance of human interactions in the workplace to building loyalty and a desire to stay (Ineson et al. 2013; Moncarz et al. 2009; Ng et al. 2006). The above research was integrated into the current research's first hypothesis:

H1. *Employees' satisfaction with internal communication is negatively related to their turnover intention.*

2.2. Satisfaction with Internal Communication, Perceived Organizational Support, and Turnover Intention

Little is known about the processes underlying how internal communication shapes employee–organization relationships and, more specifically, employees' turnover intentions. One process may involve perceived organizational support (Eisenberger et al. 1986). Argenti (2003) posits that improved communication within organizations, for instance, between managers and their workers, will make the latter feel more supported by their firm. The flow of information needs to include company culture, values, policies, and goals, as well as feedback on performance, so that the overall workplace climate ensures employees can fit better into their organization and cope with job demands and role expectations. This support increases workers' job efficacy. If communication is limited, unclear, and

unsatisfactory, employees may feel isolated and unsupported by their organization (Yoon and Thye 2002). These perceptions are especially significant in periods of change and tension in their work environment (Argenti 2003; Gomes et al. 2021; Liu-Lastres et al. 2023).

Perceived organizational support theory (Eisenberger et al. 1986) defines this construct as workers' perception that their company values their contributions and cares about their well-being. Various studies have compiled empirical evidence of a positive relationship between different internal communication features and perceived organizational support. For instance, Allen (1992, 1995) found that good communication at diverse levels is positively related to employees' feelings of being supported and cared for by their firm in both higher education and consultancy settings. Building on Allen's (1992, 1995) research, Neves and Eisenberger (2012) confirmed that good communication has similar effects in social services organizations. Vieira-dos-Santos and Gonçalves (2018) also verified that this impact grows stronger when universities use internal marketing to foster stronger perceptions of support received from these institutions. More recently, Verčič et al. (2021) found that satisfaction with internal communication leads to enhanced engagement and employer attractiveness through increased perceived organizational support.

Perceived organizational support affects employees' emotional bond to their employer (Rhoades and Eisenberger 2002) and satisfaction with their work environment (Eisenberger et al. 1997; Yoon and Thye 2002). This support reinforces staff members' sense of personal importance, comfort, and confidence (Eisenberger et al. 2020). In addition, original research and meta-analyses have found that perceived organizational support is positively related to individual performance levels and organizational citizenship behaviors. It is also negatively related to withdrawal cognitions (e.g., turnover intention) and behaviors (e.g., absenteeism) (Han 2022; Rhoades and Eisenberger 2002; Rubenstein et al. 2018; Stofberg et al. 2022). The negative connection between perceived organizational support and turnover intention has been verified by various studies (Akgunduz and Sanli 2017; Allen et al. 2003; Duarte et al. 2015; Huang et al. 2019; Huning et al. 2020; McCartney et al. 2022). Finally, Eisenberger et al. (1986) suggest that staff members with stronger perceived organizational support are less likely to search for and accept jobs in other companies.

The reviewed literature indicates that employees' satisfaction with internal communication fosters perceived organizational support, which in turn is related to decreased turnover intention. Prior research thus sustains the argument that this support mediates the relationship between workers' satisfaction with internal communication and their turnover intention. The present study's second hypothesis was developed to reflect the above findings:

H2. *The relationship between employees' satisfaction with internal communication and turnover intention is mediated by perceived organizational support.*

2.3. Satisfaction with Internal Communication, Job Satisfaction, and Turnover Intention

Job satisfaction can also be part of the psychosocial processes that produce internal communication's impact on employee–organization connections and the subsequent positive effect on turnover intention reduction. This satisfaction has been defined as “the degree to which a person reports satisfaction with intrinsic and extrinsic features of [. . . his or her] job” (Warr et al. 1979, p. 133). Job satisfaction also consists of a “positive (or negative) evaluative opinion of [. . .] one's job or work situation” (Weiss 2002, p. 175), which is based on workers' assessment of their workplace environment. This term can additionally be defined as the extent to which people like (i.e., experience satisfaction with) or dislike (i.e., voice dissatisfaction with) their jobs (Spector 1997). The latter conceptualization suggests that job satisfaction is a generalized or global affective reaction that individuals have to their job.

A review of the literature revealed that a clear relationship exists between internal communication and job satisfaction, with researchers reporting a positive link between these variables (e.g., Bakanauskienė et al. 2010; Carrière and Bourque 2009; Kong et al. 2018; Lee et al. 2022; Mehra and Nickerson 2019; Nikolić et al. 2013; Pincus 1986; Steele and Plenty 2015; Verčič et al.

2021). Milman (2003), Lee and Way (2010), and Tanković et al. (2022) specifically confirmed that workplace communication is significantly related to hotel employees' job satisfaction. Overall, this satisfaction has been found to be higher when internal communication includes information sharing, transparency, climate building, constructive feedback, and appropriate disclosure. These results indicate that, in addition to technical or instrumental aspects (Price and Mueller 1981), communication's relational features play a vital role in enhancing job satisfaction (Giri and Kumar 2010; Tanković et al. 2022), so quality relationships are crucial to job satisfaction (Kong et al. 2018; Qiu et al. 2015).

This kind of satisfaction is, in turn, related to staff members' increased customer orientation (Al Samman and Mohamed 2021; Duarte et al. 2019), customer-oriented organizational citizenship behavior (Tang et al. 2023), individual performance (Giri and Kumar 2010; Pincus 1986; Wright and Cropanzano 2000), and organizational citizenship behavior (Bowling 2010; Foote and Tang 2008), among other outcomes. Hom et al.'s (2017) narrative literature review covered 100 years of research on turnover, revealing that job satisfaction occupies a central place in turnover prediction as reduced turnover intention has been linked with stronger job satisfaction (Allen et al. 2003; Chen et al. 2011; Ferreira et al. 2017; Mobley 1977; Rubenstein et al. 2018). McCartney et al. (2022) found this effect in hotel workers in Macao. Based on the above studies, the current research's third hypothesis proposed that job satisfaction mediates the association between workers' positive perception of internal communication and their desire to leave their organization voluntarily:

H3. *The relationship between employees' satisfaction with internal communication and turnover intention is mediated by their job satisfaction.*

2.4. Satisfaction with Internal Communication, Perceived Organizational Support, Job Satisfaction, and Turnover Intention

This study's theoretical model included that both perceived organizational support and job satisfaction can increase if workers' subjective assessment of the communication flows within their organization is positive. These interconnections in turn can help explain these employees' weaker desire to quit their jobs. A positive relationship between perceived organizational support and job satisfaction has been confirmed by various researchers (Ahmed and Nawaz 2015; Allen et al. 2003; Rhoades and Eisenberger 2002; To and Huang 2022), so a sequential mediation effect was added to the present study's model. That is, hotel workers' satisfaction with internal communication should reinforce their perception of organizational support, thereby resulting in greater satisfaction at work, which then reduces turnover intention.

Figure 1 displays the theoretical model with the predicted chain of effects. Previous research has examined some interactions between these variables, but the literature provides no clear evidence of studies that have examined the full proposed model. For example, Price and Mueller (1981) demonstrated that nurses' perception of instrumental communication is significantly related to their job satisfaction and thus to their withdrawal cognitions and behaviors. Allen et al. (2003) also showed that perceived organizational support leads to decreased turnover intention and actual turnover behavior through increased job satisfaction, based on two samples of salespeople and insurance agents, respectively. Ghani et al. (2022), in turn, observed that job satisfaction and the resulting reduced turnover intention are contingent on hotels' effective internal communication.

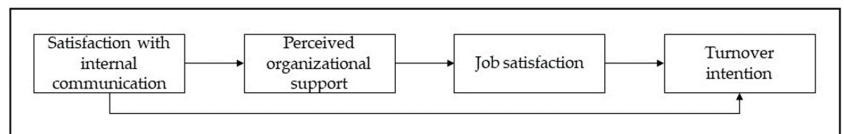


Figure 1. Theoretical model.

The present study sought to add to the literature by analyzing the chain of effects between the four aforementioned variables in the context of Portuguese hospitality. The above findings were integrated into the final hypothesis:

H4. *The relationship between satisfaction with internal communication and turnover intention is sequentially mediated by perceived organizational support and job satisfaction.*

3. Method

3.1. Procedure and Sample

A non-probability sample was drawn from employees of hotels located in Lisbon and Madeira, Portugal's two main tourism areas, and used to conduct empirical research to test the proposed model. A list was made of 3- to 5-star hotels operating in both areas, and emails were sent to these establishments asking them to participate in the study. A brief explanation was given of the project's aims and the data collection procedure. Of the 106 hotels contacted, 12 confirmed their willingness to take part in the research.

The data were gathered with a paper-and-pencil survey distributed in person in the hotels' reception area by a research assistant. The Declaration of Helsinki's principles were followed, including giving a guarantee of the answers' anonymity and confidentiality to the participants, who voluntarily agreed to take part in the survey. The informed consent form also provided information about the research aims and participation criteria (i.e., working for the hotel in question for at least one year). An envelope was provided to each participant, in which the completed questionnaire could be sealed.

After incomplete surveys were discarded, a sample of 370 participants remained. Most respondents were Portuguese (93.2%) or citizens of Portuguese-speaking countries (Brazil: 3.5%; São Tomé and Príncipe: 0.6%; Cape Verde: 0.5%; Angola: 0.3%). The participants were between 18 and 64 years old (mean = 35.18; standard deviation [SD] = 8.74), and slightly more than half were female (55.9%). When asked about education, 17.6% reported having up to 9 years of schooling and 40.2% between 10 and 12 years of schooling, while 42.2% had attended university.

The job tenure responses produced a mean of 6.52 years (SD = 5.60; minimum 1, maximum 24). Around a third of the participants had a managerial position (35.4%). Most respondents had a permanent formal employment contract with their hotel (61.1%), while the remainder had a fixed-term employment contract (35.4%) or they were in internship programs (3.5%). Most participants had jobs dealing with food and beverages (22.2%), reception (20.2%), and cleaning services (14.3%).

3.2. Measures

The survey was structured into three main sections: informed consent, measurement scales assessing the selected variables, and socioprofessional information. All items were taken from the relevant literature as described in the subsections below.

3.2.1. Predictor Variable: Satisfaction with Internal Communication

The participants' perception of internal communication in their hotels was evaluated using 12 items from the Communication Satisfaction Questionnaire developed by Downs and Hazen (1977). Five items assessed employees' opinion of their hotel's communication climate (e.g., "Extent to which I receive in time the information needed to do my job"). Five items covered corporate information (e.g., "Information about company policies and goals"), and two items focused on supervisor communication (e.g., "Extent to which my supervisor offers guidance for solving job-related problems").

The respondents rated each item on a Likert scale ranging from 1 ("Totally dissatisfied") to 5 ("Totally satisfied"). The responses were combined into a composite score for each participant by averaging the items' values. Higher scores correspond to greater satisfaction with internal communication. The Cronbach's alpha for the combined scale is 0.81.

3.2.2. Mediator One: Perceived Organizational Support

Employees' perception of organizational support was assessed using 4 items from Eisenberger et al.'s (1986) Survey of Perceived Organizational Support. For example, one item reads, "The organization values my contribution to its well-being". The respondents scored the items using a Likert scale ranging from 1 ("Totally disagree") to 5 ("Totally agree"). Each participant's composite score was obtained by averaging the items' points. Higher values indicate more perceived organizational support. The Cronbach's alpha for this scale is 0.87.

3.2.3. Mediator Two: Job Satisfaction

The employees' satisfaction with their job was measured with an 11-item scale adopted from Warr et al.'s (1979) study (e.g., "Cooperation and relationships with coworkers" and "The work performed"). The respondents indicated their degree of satisfaction with each job facet on a Likert scale ranging from 1 ("Very dissatisfied") to 5 ("Very satisfied"). Each participant's overall job satisfaction score was also estimated by averaging their responses to all the scale's items so that higher scores represent greater job satisfaction. The Cronbach's alpha for the scale is 0.90.

3.2.4. Criterion Variable: Turnover Intention

The employees' intention to leave their hotel job voluntarily was measured using two items from Bozeman and Perrewé (2001) (i.e., "I'm actively searching for an opportunity to leave this company" and "Within a year, I hope to be in another job, in a different company"). The respondents indicated their level of agreement with each item on a Likert scale ranging from 1 ("Strongly disagree") to 5 ("Strongly agree"). The two items have a Pearson's correlation coefficient of 0.71 ($p < 0.01$). The participants' composite scores were calculated by averaging the two items' values, with higher scores indicating a stronger desire to leave their hotel.

3.2.5. Control Variable: Type of Employment Contract

Employees' type of formal employment contract can influence their willingness to leave their organization (Bernhard-Oettel et al. 2008; Manolopoulos et al. 2022), so this variable was set as a covariate in the analysis. A dummy variable was created, with 0 corresponding to respondents with a temporary employment contract (38.9%) and 1 indicating employees with permanent employment contracts (61.1%).

3.3. Assessment of Common Method Variance (CMV) and Measures' Convergent and Discriminant Validity

The data were collected from a single source all at the same time, so CMV could weaken the results' validity (Bozionelos and Simmering 2022; Podsakoff et al. 2003). Various preventive measures were taken in the survey construction phase including protecting the participants' anonymity and diminishing evaluation apprehension (e.g., "There are no right or wrong answers"). In addition, different rating scales were used. Overall, these techniques have been found to help reduce lenient, acquiescent, and socially desirable answers (Podsakoff et al. 2003).

Harman's single factor test was run after the data had been collected. This statistical technique is based on unrotated exploratory factor analysis, which showed that the first factor explains less than 50% of the variance. More specifically, 42.23% can be attributed to the first factor (Kaiser–Meyer–Olkin = 0.94; Bartlett's test (528) = 8307.47; $p < 0.001$). The results suggest that CMV does not significantly weaken the findings' validity and thus distort their interpretation.

Confirmatory factor analysis was also conducted to check whether the four variables' items capture distinct constructs as opposed to reflecting common source bias. The four-factor model fit the data well (i.e., root mean square error of approximation [RMSEA] = 0.058; Tucker–Lewis index [TLI] = 0.927; comparative fit index [CFI] = 0.936), while the single-factor model

presented unacceptable fit statistics (i.e., RMSEA = 0.108; TLI = 0.749; CFI = 0.779) (Hu and Bentler 1999; Marsh et al. 2004). These results indicate that the four constructs have discriminant validity and again that no serious CMV is present in the data.

Next, a latent factor model was created by adding an unmeasured latent method factor to the four-factor model. All the items were allowed to load on their theoretical constructs and the latent variable. The results indicate a good fit to the data (RMSEA = 0.055; TLI = 0.936; CFI = 0.949). The two models' goodness of fit was then compared using a CFI difference test. The CFI changed by 0.013 between the models, which is below the recommended cut-off value of 0.05 (Bagozzi and Yi 1990) and which implies that including a latent method factor in the present model would not significantly improve its overall fit. This finding further decreases the chances that CMV is present.

The variables' composite reliability (CR) and average variance extracted (AVE) were then estimated (Table 1). The CR values range from 0.83 to 0.90, so they are above the accepted cut-off point of 0.70 (Hair et al. 2010). The AVE values vary from 0.62 to 0.71, which means they are also above the threshold of 0.50 recommended by Fornell and Larcker (1981), except for job satisfaction (0.45). Fornell and Larcker (1981, p. 46) suggest that researchers can "conclude that the convergent validity of the construct is adequate, even though more than 50% of the variance is due to error", when the variable's CR values are above the recommended minimum. The construct's convergent validity was considered acceptable for the present study's subsequent data analysis because the CR results support this conclusion.

Table 1. Mean (M), standard deviation (SD), Spearman's correlation, Cronbach's alpha, squared correlation, composite reliability (CR), and average variance extracted (AVE) values.

Variables	M	SD	1	2	3	4	5	CR	AVE
1. Type of employment contract ¹	–	–	–	–	–	–	–	–	–
2. Satisfaction with internal communication	3.65	0.57	0.26 ^{2,**}	(0.81)	0.17 ³	0.49	0.20	0.85	0.65
3. Perceived organizational support	3.50	0.87	0.18 *	0.41 **	(0.87)	0.20	0.20	0.87	0.62
4. Job satisfaction	3.87	0.62	0.33 **	0.70 **	0.44 **	(0.90)	0.33	0.90	0.45
5. Turnover intention	2.01	0.97	−0.38 **	−0.44 **	−0.45 **	−0.58 **	(0.71) ⁴	0.83	0.71

¹ Type of employment contract: 0 = temporary, 1 = permanent; ² Spearman's correlations below the diagonal; ³ squared correlations in bold above the diagonal; ⁴ Cronbach's alphas in parentheses; * $p < 0.05$; ** $p < 0.01$.

Finally, the AVE values and squared correlations between all pairs of variables were compared to check for discriminant validity. As recommended by Fornell and Larcker (1981), the AVE is greater than the shared variance between the variables (Table 1). The various statistical techniques' results thus confirm that the four constructs have convergent and discriminant validity and that CMV is absent.

4. Results

Table 1 lists the means, SDs, and Spearman's correlation coefficients. Except for turnover intention, all the mean values fall above the mid-point of the response scale. The scores thus indicate that turnover intention is relatively low and employees are moderately satisfied with internal communication, their work situation, and the support provided by their hotel.

The correlation analysis produced coefficients that indicate the main variables are all significantly correlated with each other. As expected, the correlations with turnover intention are negative, while other variables are intercorrelated in a positive direction. The correlations are moderate to strong (i.e., between 0.41 and 0.70), but the probability of collinearity among the variables is low because the tolerance values are above 0.399 and the variance inflation factor values are below 2.508 (Hair et al. 2010). Type of employment contract is significantly correlated with the variables of interest. Hotel workers with permanent employment contracts express greater satisfaction with internal communication

and perceived support, as well as more job satisfaction and lower intention to leave their current job.

PROCESS macro for IBM SPSS version 26 software (Hayes 2018) was used to evaluate the mediation effects. The type of formal employment contract was set as a covariate. Table 2 presents the sequential mediation analysis results for Model 6.

Table 2. Non-standardized regression coefficients (Bs), standard errors (SEs), summary information, and indirect effects for serial mediation model.

Variables	Perceived Organizational Support (POS) (Mediator 1)		Job Satisfaction (JS) (Mediator 2)		Turnover Intention (TI) (Criterion Variable)	
	B	SE	B	SE	B	SE
<i>Total Effects</i>						
Constant	–	–	–	–	–4.94 ***	0.27
Satisfaction with internal communication (SIC)	–	–	–	–	–0.72 ***	0.08
Type of employment contract ¹	–	–	–	–	–0.53 **	0.09
					F (2, 367) = 83.23; p < 0.001 R ² = 0.31 ²	
<i>Direct effects</i>						
Constant	1.48 ***	0.27	0.83 **	0.13	–5.94 ***	0.27
SIC	0.54 ***	0.08	0.72 ***	0.04	–0.05	0.10
POS	–	–	0.09 ***	0.03	–0.20 ***	0.05
JS	–	–	–	–	–0.73 ***	0.10
Type of employment contract	0.08	0.09	0.16 ***	0.04	–0.39 ***	0.08
	F (2, 367) = 28.96; p < 0.001 R ² = 0.14		F (3, 366) = 183.99; p < 0.001 R ² = 0.60		F (4, 365) = 73.86; p < 0.001 R ² = 0.45	
<i>Indirect effects</i>						
	Effect		BootLLCI³		BootULCI⁴	
Total	–0.67		–0.87		–0.48	
SIC → POS → TI	–0.11		–0.19		–0.05	
SIC → JS → TI	–0.52		–0.71		–0.35	
SIC → POS → JS → TI	–0.04		–0.07		–0.01	

¹ Type of employment contract: 0 = temporary; 1 = permanent; ² R² = coefficient of determination; ³ LLCI = lower-level confidence interval; ⁴ ULCI = upper-level confidence interval; TI = turnover intention; ** p < 0.01; *** p < 0.001.

The first hypothesis (i.e., H1) proposed that a negative relationship exists between hotel workers’ satisfaction with internal communication and their willingness to leave their job. Table 2 above shows that satisfaction with internal communication has a statistically significant total effect on turnover intention (non-standardized coefficient (B) = –0.72; p < 0.001). This result indicates that employees’ perception of their hotel’s efforts to ensure better internal communication decreases these individuals’ turnover intention. H1 thus has empirically robust support. Satisfaction with internal communication and type of employment contract explain around one third of turnover intention’s unique variance (coefficient of determination [R²] = 0.31; F[2, 367] = 83.23; p < 0.001).

The second hypothesis (i.e., H2) posits that the link between satisfaction with internal communication and turnover intention is mediated by perceived organizational support. The results confirm that a positive assessment of internal communication significantly predicts workers’ perception of meaningful support from their company (B = 0.54; p < 0.001) and that the latter variable also significantly predicts reported levels of turnover intention (B = –0.20; p < 0.001). In addition, satisfaction with internal communication’s indirect effect is statistically significant, which provides evidence of a mediating effect (B = –0.11; lower-level confidence interval [LLCI] = –0.19; upper-level confidence interval [ULCI] = –0.05). H2 was thus confirmed by the data.

The third hypothesis (i.e., H3) posited that job satisfaction also has a mediation effect on the connection between satisfaction with internal communication and turnover intention. The analyses’ results indicate that employees’ positive perception of internal

communication helps explain their contentment with their work ($B = 0.72; p < 0.001$), and the latter satisfaction has a significant negative impact on staff members' desire to leave their hotel job ($B = -0.73; p < 0.001$). This indirect effect is statistically significant ($B = -0.52$; LLCI = -0.71 ; ULCI = -0.35), thereby verifying that a substantial mediating effect exists. These findings provide empirically robust support for H3.

Finally, the fourth hypothesis (i.e., H4) stated that perceived organizational support and job satisfaction serially mediate the relationship between hotel employees' satisfaction with internal communication and turnover intention. Positive perceptions of internal communication have a substantial indirect effect on turnover intention through perceived organizational support, and job satisfaction's mediation is also statistically significant ($B = -0.04$; LLCI = -0.07 ; ULCI = -0.01). The results thus show that stronger internal communication is associated with workers' perception of stronger support from their company ($B = 0.54; p < 0.001$), which then generates more job satisfaction ($B = 0.09; p < 0.001$) and, after that, contributes to diminishing any intention to leave their job ($B = -0.73; p < 0.001$). These findings support H4, so all the hypotheses were confirmed.

The covariate (i.e., type of employment contract) was found to have a significant negative effect on turnover intention ($B = -0.39; p < 0.001$). This result indicates that hotel staff members with permanent employment contracts have weaker intention to leave their current job than employees with temporary contracts. Overall, the model explains 45% of turnover intention's unique variance ($F[4, 365] = 73.86; p < 0.001$). Figure 2 presents the main findings.

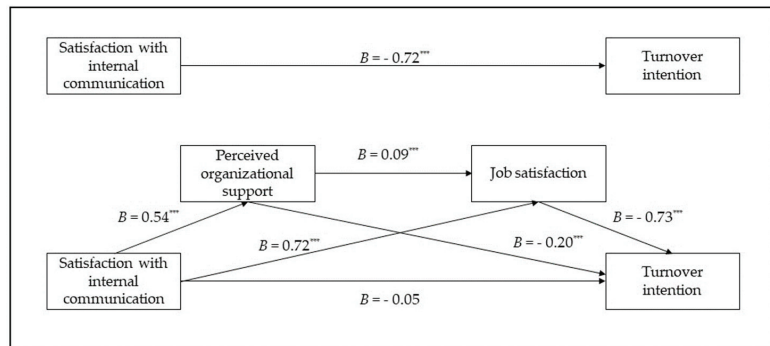


Figure 2. Satisfaction with internal communication's influence on turnover intention through perceived organizational support and job satisfaction. Workers' type of employment contract as covariate; number = 370; B = non-standardized regression coefficient; *** $p < 0.001$.

5. Discussion

5.1. Main Findings

This study sought to determine how employees' turnover intention can be explained by their satisfaction with internal communication, which is considered to be an enabler of stronger perceived organizational support and thus increased job satisfaction. The research focused specifically on Portugal's hospitality sector because it has been deeply affected by the current staff shortage worldwide (WTTC 2021). The present study's results expand the knowledge about internal communication as an important factor affecting employee–organization relationships, especially voluntary turnover intention. This communication has been found to be a key predictor of voluntary turnover behavior (Han 2022; Hom et al. 2017; Rubenstein et al. 2018)—a phenomenon that inhibits companies' efforts to manage staff entries and exits more efficiently.

The current findings support the proposed sequential mediation model as all four hypotheses were confirmed by the data collected from hotel workers. As H1 suggested, these employees' satisfaction with internal communication is negatively related to their intention to leave their company in the near future. This result coincides with previous

research (Carrière and Bourque 2009; Tsai et al. 2009) and underlines that satisfactory internal communication is a significant reason hotel staff members choose to stay with their employer (Milman 2003). In addition, the current findings include that positive perceptions of internal communication start the distal process that leads to decreased turnover intention through increased organizational support and job satisfaction.

H2, in turn, proposed that perceived organizational support significantly mediates the negative relationship between workers' satisfaction with internal communication and their intention to quit their company voluntarily. Prior studies have linked better internal communication to increased reported organizational support (Allen 1992, 1995; Neves and Eisenberger 2012; Verčič et al. 2021; Vieira-dos-Santos and Gonçalves 2018), and the latter variable has been connected to decreased turnover intention (Akgunduz and Sanli 2017; Allen et al. 2003; Duarte et al. 2015; Huang et al. 2019; Huning et al. 2020; McCartney et al. 2022).

Thus, satisfactory internal communication was expected to ensure hotel employees feel more valued and respected by their employer and thus report less turnover intention. The present study's results support H2 as good internal communication facilitates the development of positive bonds with the employing organization (Argenti 2003), which are crucial to workers' desire to stay in their job (Argenti 2003; Ineson et al. 2013; Moncarz et al. 2009; Ng et al. 2006).

H3 also received empirically robust support since job satisfaction proved to be a significant mediator of the negative relationship between hotel staff members' satisfaction with internal communication and their turnover intent. This result is unsurprising as previous research has established that job satisfaction is a key predictor of reduced turnover intentions and behaviors (Ferreira et al. 2017; McCartney et al. 2022; Rubenstein et al. 2018). The current finding goes one step further and confirms internal communication's crucial role in increased job satisfaction (Bakanauskiene et al. 2010; Carrière and Bourque 2009; Giri and Kumar 2010; Lee and Way 2010; Mehra and Nickerson 2019; Milman 2003; Pincus 1986; Steele and Plenty 2015). Internal communication has a positive impact on hotel employees' assessment of their work situation, thereby reducing their desire to leave their job.

Finally, H4 posited that perceived organizational support and job satisfaction would have a sequential mediating effect on the negative link between workers' satisfaction with internal communication and turnover intention, which was also supported by the present results. The findings include that internal communication strengthens perceived organizational support, thereby increasing employees' job satisfaction and ultimately reducing their intention to quit their job. These results expand on prior studies' analysis of how some but not all of the variables incorporated into the current proposed model intercorrelate with each other (Ahmed and Nawaz 2015; Allen et al. 2003; Ghani et al. 2022; Price and Mueller 1981; To and Huang 2022).

The chain of effects between these variables was found to be statistically significant as it explains almost half of the variance in hotel workers' willingness to leave their current employer. This effect supersedes the variance explained by type of employment contract, which is a significant socioprofessional variable affecting staff members' willingness to abandon their organization (Bernhard-Oettel et al. 2008; Manolopoulos et al. 2022). Type of contract was set as a covariate in the current research's analyses. Overall, little information is available about the process underlying how companies' internal communication shapes employee–organization relationships, especially with regard to employees' turnover intention, so these findings provide added value to this field of study.

5.2. Theoretical Contributions and Implications for Management

The results strengthen the existing literature on organizations' internal communication by focusing on hotel workers' satisfaction with communication flows within their company, as well as perceived organizational support, job satisfaction, and turnover intention in the hospitality industry. Studies have taken various approaches to the individual-level outcomes of internal communication, such as symmetric internal communication (Grünig

1992) and instrumental communication (Price and Mueller 1981), but researchers have less frequently concentrated on employees' subjective evaluations of communication flows. The present investigation found that hotel workers' positive perceptions of internal communication affect their assessment of the support provided by their organization and thus influence their job satisfaction and, in the end, intention to leave their employer. Internal communication, therefore, has an important role as a predictor of turnover intention. This connection appears to have been overlooked by prior research as internal communication is absent from recent meta-analyses and narrative reviews on employee turnover (e.g., Han 2022; Hom et al. 2017), with the exception of Rubenstein et al.'s (2018) work. More attention needs to be paid to this relationship in academic research.

From a practical perspective, the above findings indicate that Portuguese hospitality organizations should refine their internal communication strategies to increase their workers' satisfaction with workplace communication flows. Hotels that improve this type of communication can strengthen their staff members' perceptions of organizational support and thus enhance employees' job satisfaction and, ultimately, diminish their desire to leave for a new position elsewhere. Internal communication can be an effective way to cultivate stronger employee–organization relationships and, in turn, employee retention.

This study assessed workers' satisfaction with internal communication using Downs and Hazen's (1977) approach based on three dimensions: communication climate, corporate information, and supervisor communication. These three areas can guide improvements in hotels' internal communication. The first dimension refers to the extent to which internal communication motivates and stimulates employees' enthusiasm for meeting organizational goals and encourages workers to identify with the company and/or feel a vital part of it. In addition, staff members develop their own ability to communicate and receive in time the information needed to do their jobs, and conflicts are handled appropriately through proper communication channels.

To achieve these results, hotels need to invest in professional development focused on communication skills (e.g., recruiting communication specialists who can assist hoteliers and human resource managers), as well as providing training in effective conflict resolution. Training programs should target all of the organization's members, including managers at all levels since supervisor communication is another important dimension of internal communication. This area comprises the extent to which company leaders listen and pay attention to their followers, provide the right amount of supervision, and offer guidance for solving job-related problems, including being open to new ideas and trusting their team members.

Finally, corporate information covers communication about companies' policies, goals, ongoing changes, financial standing, and accomplishments and/or failures. Ensuring this information is shared in sufficient detail with workers is also important for their satisfaction with internal communication flows.

Downs and Hazen (1977) identified other dimensions that hotels can focus on to improve their communication processes, for example, personal feedback, coworker communication, and organizational integration. Overall, firms need to invest in communication among all internal stakeholders to ensure a better understanding of organizational culture, values, policies, and procedures, as well as facilitating better coordination and cooperation between workers (Kochan et al. 2019). The latter contributes to stronger relationships at work and a deeper sense of belonging (Argenti 2003). Employees are less predisposed to leave their jobs if these close ties exist. These ties can be particularly relevant in contexts where people place greater value on personal relations and prefer group work, as happens in Portugal. The country's national culture is characterized by low masculinity and high collectivism and uncertainty avoidance, with paternalistic human resource practices still prevailing in hospitality companies (Silva and Martins 2016). In conclusion, good internal communication can be an effective strategy that fosters strong employee–organization ties and ultimately better employee retention in the hotels.

5.3. Limitations and Future Research

The above findings provide significant added value, but they must be interpreted with care given this study's limitations in three main areas: the research design and data collection procedure, measures, and the sample. First, a risk of CMV exists given the correlation analyses and gathering of data from the same source (i.e., individual workers) at one time (i.e., all measures in one survey), which also limits definitive conclusions about causal relationships. The limitations of correlational design are extensively discussed in the literature (Podsakoff et al. 2003), so these restrictions should be kept in mind even though the present study included preventive and statistical techniques providing some assurance that CMV is not a problem in the dataset.

Second, the questionnaire needed to be relatively parsimonious to encourage participation and the completion of all the items, which meant that only three of the eight dimensions identified by Downs and Hazen (1977) could be included. Broader results could have been obtained by using the full Communication Satisfaction Questionnaire. Last, the sample was non-probabilistic, so the results' generalizability is limited. Future studies could use more representative samples to increase the findings' stability.

Further research is needed in many related areas as satisfaction with internal communication has received little attention as a predictor of the employee–organization relationship, especially voluntary turnover. Studies can focus on overcoming the above limitations by assessing all internal communication dimensions' effects on turnover intention and collecting data at more than one time from representative samples of the research population. Researchers can also measure different communication dimensions' relative effectiveness as predictors of workers' turnover intent. For instance, Verčič and Vokič's (2018) recent study concentrated on positive perceptions of internal communication's impact on life satisfaction. The results show that all dimensions have a positive effect on workers' life satisfaction but that satisfaction with both informal communication and communication climate has the strongest links with the criterion variable. The present research's variables could be associated with similar effects. Their identification may help hoteliers to prioritize their investment in internal communication dimensions to maximize returns in the form of perceived organizational support, work satisfaction, and above all turnover intention.

Equally interesting findings could be generated by examining internal communication's impact on collective employee turnover, namely, "the aggregate levels of employee departures that occur within groups, work units, or organizations" (Hausknecht and Trevor 2011, p. 353). Oh and Chhinzer (2021) found that collective turnover can transmute turnover intentions into turnover behavior in the workplace. Raising the quality of internal communication may buffer turnover contagion's effects, which would facilitate more effective employee turnover management.

Author Contributions: Conceptualization, A.P.D. and V.H.S.; methodology, A.P.D. and V.H.S.; formal analysis, A.P.D. and V.H.S.; writing—original draft preparation, A.P.D. and V.H.S.; writing—review and editing, A.P.D. and V.H.S.; project administration, A.P.D.; and funding acquisition, A.P.D. and V.H.S. All authors have read and agreed to the published version of the manuscript.

Funding: This work was supported by Portugal's Fundação para a Ciência e Tecnologia, grant SFRH/BPD/76114/2011 and contract DL 57/2016/CP1359/CT0004.

Institutional Review Board Statement: The study was conducted according to the Declaration of Helsinki's guidelines. The study also followed the ethical standards guidelines of Portugal's Order of Psychologists and the researchers' affiliated institutions.

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

Data Availability Statement: The data will be made available upon receipt of a reasonable request by the corresponding author.

Acknowledgments: We wish to thank the organizations from which the data were collected for their support and for their employees' participation in the survey.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript; or in the decision to publish the results.

References

- Ahmed, Ishfaq, and Muhammad Nawaz. 2015. Antecedents and outcomes of perceived organizational support: A literature survey approach. *Journal of Management Development* 34: 867–80. [CrossRef]
- Akgunduz, Yilmaz, and Sabahat Ceylin Sanli. 2017. The effect of employee advocacy and perceived organizational support on job embeddedness and turnover intention in hotels. *Journal of Hospitality and Tourism Management* 31: 118–25. [CrossRef]
- Al Samman, Adel Mahmoud, and Abdelnasser Mohamed. 2021. The mediating role of job satisfaction and affective commitment in the relationship between internal marketing practices and customer orientation. *International Journal of Organizational Analysis* 29: 847–72.
- Allen, David, Linda Shore, and Rodger Griffeth. 2003. The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management* 29: 99–118. [CrossRef]
- Allen, Myria. 1992. Communication and organizational commitment: Perceived organizational support as a mediating factor. *Communication Quarterly* 40: 357–67. [CrossRef]
- Allen, Myria Watkins. 1995. Communication concepts related to perceived organizational support. *Western Journal of Communication* 59: 326–46. [CrossRef]
- Argenti, Paul. 2003. *Corporate Communication*. New York: McGraw-Hill.
- Atouba, Yannick, and John Lammers. 2020. Examining the relationships between participative organisational communication practices and burnout among IT professionals. *Total Quality Management & Business Excellence* 31: 814–28.
- Bagozzi, Richard, and Youjae Yi. 1990. Assessing method variance in multitrait-multimethod matrices: The case of self-reported affect and perceptions at work. *Journal of Applied Psychology* 75: 547. [CrossRef]
- Bakanauskienė, Irena, Ritas Bendaravičienė, and Ricardas Krikstolaitis. 2010. Empirical evidence on employees' communication satisfaction and job satisfaction: Lithuania's university case. *Management of Organizations: Systematic Research* 54: 21–36.
- Bernhard-Oettel, Claudia, Nele De Cuyper, Eric Berntson, and Kerstin Isaksson. 2008. Well-being and organizational attitudes in alternative employment: The role of contract and job preferences. *International Journal of Stress Management* 15: 345–63. [CrossRef]
- Bowling, Nathan. 2010. Effects of job satisfaction and conscientiousness on extra-role behaviors. *Journal of Business and Psychology* 25: 119–30. [CrossRef]
- Bozeman, Dennis, and Pamela Perrewé. 2001. The effect of item content overlap on organizational commitment questionnaire-turnover cognition relationships. *Journal of Applied Psychology* 86: 161–73. [CrossRef] [PubMed]
- Bozionelos, Nikos, and Marcia Simmering. 2022. Methodological threat or myth? Evaluating the current state of evidence on common method variance in human resource management research. *Human Resource Management Journal* 32: 194–215. [CrossRef]
- Carrière, Jules, and Christopher Bourque. 2009. The effects of organizational communication on job satisfaction and organizational commitment in a land ambulance service and the mediating role of communication satisfaction. *Career Development International* 14: 29–49. [CrossRef]
- Chen, Gilad, Robert Ployhart, Helena Thomas, Neil Anderson, and Paul Bliese. 2011. The power of momentum: A new model of dynamic relationships between job satisfaction change and turnover intentions. *Academy of Management Journal* 54: 159–81. [CrossRef]
- Ćorić, Dubravka, Nina Vokić, and Ana Verčić. 2020. Does good internal communication enhance life satisfaction? *Journal of Communication Management* 24: 363–76. [CrossRef]
- Davidson, Michael, and Ying Wang. 2011. Sustainable labor practices? hotel human resource managers' views on turnover and skill shortages. *Journal of Human Resources in Hospitality and Tourism* 10: 235–53. [CrossRef]
- Downs, Cal, and Michael Hazen. 1977. A factor Analytic study of communication satisfaction. *Journal of Business Communication* 14: 63–74. [CrossRef]
- Duarte, Ana, Daniel Gomes, and José Neves. 2015. Satisfaction with human resource management practices and turnover intention in a five-star hotel: The mediating role of perceived organizational support. *Dos Algarves—A Multidisciplinary E-Journal* 25: 103–23.
- Duarte, Ana, José Neves, Daniel Gomes, and Gabriel Moisés. 2019. Corporate social responsibility, job satisfaction and customer orientation in Angola. *World Review of Entrepreneurship, Management and Sustainable Development* 15: 93–109. [CrossRef]
- Eisenberger, Robert, Jim Cummings, Stephan Armeli, and Lynch Patrick. 1997. Perceived organizational support, discretionary treatment, and job satisfaction. *Journal of Applied Psychology* 82: 812–20. [CrossRef] [PubMed]
- Eisenberger, Robert, Linda Shanock, and Xueqi Wen. 2020. Perceived organizational support: Why caring about employees counts. *Annual Review of Organizational Psychology and Organizational Behavior* 7: 101–24. [CrossRef]
- Eisenberger, Robert, Robin Huntington, Steven Hutchison, and Debora Sowa. 1986. Perceived organizational support. *Journal of Applied Psychology* 71: 500–7. [CrossRef]
- Feeley, Thomas, Shin-II Moon, Ryan Kozey, and Anne Slowe. 2010. An erosion model of employee turnover based on network centrality. *Journal of Applied Communication Research* 38: 167–88. [CrossRef]

- Ferreira, Aristides, Luis Martinez, José Lamelas, and Rosa Rodrigues. 2017. Mediation of job embeddedness and satisfaction in the relationship between task characteristics and turnover: A multilevel study in Portuguese hotels. *International Journal of Contemporary Hospitality Management* 29: 248–67. [CrossRef]
- Foote, David, and Tomas Tang. 2008. Job satisfaction and organizational citizenship behavior (OCB): Does team commitment make a difference in self-directed teams? *Management Decision* 46: 933–47. [CrossRef]
- Fornell, Claes, and David Larcker. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18: 39–50. [CrossRef]
- Ghani, Bilqees, Muhammad Zada, Khalid Memon, Rezwan Ullah, Afraseyab Khattak, Heesup Han, Antonio Ariza-Montes, and Luis Araya-Castillo. 2022. Challenges and strategies for employee retention in the hospitality industry: A review. *Sustainability* 14: 2885. [CrossRef]
- Giri, Vijai, and Pavan Kumar. 2010. Assessing the impact of organizational communication on job satisfaction and job performance. *Psychological Studies* 55: 137–43. [CrossRef]
- Gomes, Daniel, Neuza Ribeiro, and Maria Santos. 2023. “Searching for Gold” with Sustainable Human Resources Management and Internal Communication: Evaluating the Mediating Role of Employer Attractiveness for Explaining Turnover Intention and Performance. *Administrative Sciences* 13: 24. [CrossRef]
- Gomes, Daniel, Patricia Lourenço, and Neuza Ribeiro. 2021. When COVID-19 is the invader and internal communication is the hero: Understanding the influence of internal communication on individual performance and evaluating the mediating role of perceived support. *Administrative Sciences* 11: 136. [CrossRef]
- Grung, James. 1992. Symmetrical systems of internal communication. In *Excellence in Public Relations and Communication Management*. Hillsdale: Lawrence Erlbaum Associates, pp. 531–76.
- Hair, Joseph, Jr., William Black, Barry Babin, and Rolph Anderson. 2010. *Multivariate Data Analysis: A Global Perspective*, 7th ed. Upper Saddle River: Pearson.
- Han, Jung Woo. 2022. A review of antecedents of employee turnover in the hospitality industry on individual, team and organizational levels. *International Hospitality Review* 36: 156–73. [CrossRef]
- Hausknecht, John, and Charlie Trevor. 2011. Collective turnover at the group, unit, and organizational levels: Evidence, issues, and implications. *Journal of Management* 37: 352–88. [CrossRef]
- Hayes, Andrew. 2018. *Introduction to Mediation, Moderation and Conditional Process Analysis*, 2nd ed. New York: Guilford Press.
- Hinkin, Timothy, and Bruce Tracey. 2000. The cost of turnover: Putting a price on the learning curve. *Cornell Hotel and Restaurant Administration Quarterly* 41: 14–21. [CrossRef]
- Hom, Peter, and Rodger Griffeth. 1995. *Employee turnover*. Cincinnati: South-Western.
- Hom, Peter, Thomas Lee, Jason Shaw, and John Hausknecht. 2017. One hundred years of employee turnover theory and research. *Journal of Applied Psychology* 102: 530–45. [CrossRef]
- Hu, Li-Tze, and Peter Bentler. 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal* 6: 1–55. [CrossRef]
- Huang, Chenchen, Kai Wu, and Ying Zhang. 2019. Understanding precedents for frontline employee turnover in luxury hotels: Emotional intelligence as a unifying factor. *Journal of Human Resources in Hospitality & Tourism* 18: 26–46.
- Huning, Tobias, Kevin Hurt, and Rachel Frieder. 2020. The effect of servant leadership, perceived organizational support, job satisfaction and job embeddedness on turnover intentions: An empirical investigation. *Evidence-Based HRM a Global Forum for Empirical Scholarship* 8: 177–94. [CrossRef]
- Ineson, Elizabeth, Eszter Benke, and Jozsef Laszlo. 2013. Employee loyalty in Hungarian hotels. *International Journal of Hospitality Management* 32: 31–39. [CrossRef]
- Karanges, Emma, Kim Johnston, Amanda Beatson, and Ian Lings. 2015. The influence of internal communication on employee engagement: A pilot study. *Public Relations Review* 41: 129–31. [CrossRef]
- Kochan, Thomas, Christine Riordan, Alexander Kowalski, Mahreen Khan, and Duanyi Yang. 2019. The Changing Nature of Employee and Labor-Management Relationships. *Annual Review of Organizational Psychology and Organizational Behavior* 6: 195–219. [CrossRef]
- Kong, Haiyan, Xinyu Jiang, Wilco Chan, and Xiaoge Zhou. 2018. Job satisfaction research in the field of hospitality and tourism. *International Journal of Contemporary Hospitality Management* 30: 2178–94. [CrossRef]
- Lee, Chang, and Kelly Way. 2010. Individual employment characteristics of hotel employees that play a role in employee satisfaction and work retention. *International Journal of Hospitality Management* 29: 344–53. [CrossRef]
- Lee, Ejae, Minjeong Kang, Young Kim, and Sung-Un Yang. 2022. Exploring the interrelationship and roles of employee–organization relationship outcomes between symmetrical internal communication and employee job engagement. *Corporate Communications: An International Journal* 27: 264–83. [CrossRef]
- Liu-Lastres, Bingjie, Han Wen, and Fevzi Okumus. 2023. Examining employees’ affective and behavioral responses to internal crisis communication in times of COVID-19. *International Journal of Hospitality Management* 111: 103494. [CrossRef]
- Manolopoulos, Dimitris, Eirini Peitzika, Xenia Mamakou, and Barbara Myloni. 2022. Psychological and formal employment contracts, workplace attitudes and employees’ turnover intentions: Causal and boundary inferences in the hotel industry. *Journal of Hospitality and Tourism Management* 51: 289–302. [CrossRef]

- Marsh, Herbert, Kit-Tai Hau, and Zhonglin Wen. 2004. In search of golden rules: Comment on hypothesis testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling* 11: 320–41. [CrossRef]
- McCartney, Glenn, Charlene In, and José Pinto. 2022. COVID-19 impact on hospitality retail employees' turnover intentions. *International Journal of Contemporary Hospitality Management* 34: 2092–112. [CrossRef]
- McElroy, James, Paula Morrow, and Scott Rude. 2001. Turnover and organizational performance: A comparative analysis of the effects of voluntary, involuntary, and reduction-in-force turnover. *Journal of Applied Psychology* 86: 1294–99. [CrossRef]
- Mehra, Payal, and Catherine Nickerson. 2019. Organizational communication and job satisfaction: What role do generational differences play? *International Journal of Organizational Analysis* 27: 524–47. [CrossRef]
- Milman, Ady. 2003. Hourly employee retention in small and medium attractions: The central Florida example. *International Journal of Hospitality Management* 22: 17–35. [CrossRef]
- Mobley, William. 1977. Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology* 62: 237–40. [CrossRef]
- Mohsin, Asad, Ana Brochado, and Helena Rodrigues. 2023. Mind the gap: A critical reflection on hotel employee turnover. *International Journal of Contemporary Hospitality Management* 35: 2481–95. [CrossRef]
- Moncarz, Elisa, Jinlin Zhao, and Christine Kay. 2009. An exploratory study of US lodging properties' organizational practices on employee turnover and retention. *International Journal of Contemporary Hospitality Management* 21: 437–58. [CrossRef]
- Neves, Pedro, and Robert Eisenberger. 2012. Management communication and employee performance: The contribution of perceived organizational support. *Human Performance* 25: 452–64. [CrossRef]
- Ng, Thomas, Marcus Butts, Robert Vandenberg, David DeJoy, and Marc Wilson. 2006. Effects of management communication, opportunity for learning, and work schedule flexibility on organizational commitment. *Journal of Vocational Behavior* 68: 474–89. [CrossRef]
- Nikolić, Milan, Jelena Vukonjanski, Milena Nedeljković, Olga Hadžić, and Edit Terek. 2013. The impact of internal communication satisfaction dimensions on job satisfaction dimensions and the moderating role of LMX. *Public Relations Review* 39: 563–65. [CrossRef]
- Oh, Jinuk, and Nita Chhinzar. 2021. Is turnover contagious? The impact of transformational leadership and collective turnover on employee turnover decisions. *Leadership & Organization Development Journal* 42: 1089–103.
- Ortega, Eduardo, Gabriela Pedro, Neuza Ribeiro, and Daniel Gomes. 2023. Evaluating the mediator role of organizational identification in the relationship between symmetrical internal communication and individual performance of hotel employees. *Administrative Sciences* 13: 173. [CrossRef]
- Pincus, David. 1986. Communication satisfaction, job satisfaction, and job performance. *Human Communication Research* 12: 395–419. [CrossRef]
- Podsakoff, Philip M., Scott MacKenzie, Jeong-Yeon Lee, and Nathan Podsakoff. 2003. Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88: 879–903. [CrossRef] [PubMed]
- Porter, Caitlin, and James Rigby. 2021. The turnover contagion process: An integrative review of theoretical and empirical research. *Journal of Organizational Behavior* 42: 212–28. [CrossRef]
- Price, James, and Charles Mueller. 1981. A causal model of turnover for nurses. *Academy of Management Journal* 24: 543–65. [CrossRef] [PubMed]
- Qiu, Hanqin, Ben Haobin Ye, Kam Hung, and Qi Yan York. 2015. Exploring antecedents of employee turnover intention—Evidence of China's hotel industry. *Journal of China Tourism Research* 11: 53–66. [CrossRef]
- Ravina-Ripoll, Rafael, Esthela Galvan-Vela, Deisy Sorzano-Rodríguez, and Misael Ruiz-Corrales. 2022. Mapping intrapreneurship through the dimensions of happiness at work and internal communication. *Corporate Communications: An International Journal* 28: 230–48. [CrossRef]
- Rhoades, Linda, and Robert Eisenberger. 2002. Perceived organizational support: A review of the literature. *Journal of Applied Psychology* 87: 698–714. [CrossRef]
- Rosse, Joseph, and Charles Hulin. 1985. Adaptation to work: An analysis of employee health, withdrawal, and change. *Organizational Behavior and Human Decision Processes* 36: 324–47. [CrossRef]
- Rubenstein, Alex, Marion Eberly, Thomas Lee, and Terence Mitchell. 2018. Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology* 71: 23–65. [CrossRef]
- Silva, Susana, and Dora Martins. 2016. Human resource management in hotel units: The Portuguese case. *Academica Turistica* 9: 5–18.
- Soupatha, Lea. 2005. Engaging employees in company success: The UPS approach to a winning team. *Human Resource Management* 44: 95–98. [CrossRef]
- Spector, Paul. 1997. *Job Satisfaction: Application, Assessment, Causes, and Consequences*. Thousand Oaks: Sage.
- Špoljarić, Anja, and Ana Verčič. 2021. Internal communication satisfaction and employee engagement as determinants of the employer brand. *Journal of Communication Management* 26: 130–48. [CrossRef]
- Steele, Godfrey, and Daniel Plenty. 2015. Supervisor–subordinate communication competence and job and communication satisfaction. *International Journal of Business Communication* 52: 294–318. [CrossRef]

- Stofberg, Rosanna, Mark Bussin, and Calvin Mabaso. 2022. Pay transparency, job turnover intentions and the mediating role of perceived organizational support and organizational justice. *Employee Relations* 44: 162–82. [CrossRef]
- Tang, Au Due, Tuan Trong Luu, Wen-Kuo Chen, and Su-Chuan Liu. 2023. Internal corporate social responsibility and customer-oriented organizational citizenship behavior: The mediating roles of job satisfaction, work-family facilitation, life satisfaction, and the moderating role of organizational tenure. *Journal of Sustainable Tourism* 1–21. [CrossRef]
- Tanković, Ana, Ivana Bilić, and Iva Brajković. 2022. Internal communication and employee satisfaction in hospitality. *Management: Journal of Contemporary Management Issues* 27: 1–16. [CrossRef]
- To, Wai Ming, and Guihai Huang. 2022. Effects of equity, perceived organizational support and job satisfaction on organizational commitment in Macao's gaming industry. *Management Decision* 60: 2433–54. [CrossRef]
- Tourism of Portugal Institute. 2022. Portugal Elected Europe's Leading Tourism Destination 2022. Available online: <https://www.turismodeportugal.pt/en/Noticias/Pages/portugal-eleito-europe-leading-tourism-destination-2022.aspx> (accessed on 23 August 2023).
- Tourism of Portugal Institute. 2023. Consumo Turístico Representa 15.8% do PIB em 2022. Available online: <https://www.turismodeportugal.pt/pt/Noticias/Paginas/estimativas-consumo-turistico-pib.aspx> (accessed on 23 August 2023).
- Tsai, Ming-Ten, Shuang-Shii Chuang, and Wei-Ping Hsieh. 2009. An integrated process model of communication satisfaction and organizational outcomes. *Social Behavior and Personality: An International Journal* 37: 825–34. [CrossRef]
- Verčič, Ana, and Nina Vokić. 2018. Engaging employees through internal communication. *Public Relations Review* 43: 885–93. [CrossRef]
- Verčič, Ana, Dejan Verčič, and Krishnamurthy Sriramesh. 2012. Internal communication: Definition, parameters, and the future. *Public Relations Review* 38: 223–30. [CrossRef]
- Verčič, Ana, Zvonimir Galić, and Krešimir Žnidar. 2021. The relationship of internal communication satisfaction with employee engagement and employer attractiveness: Testing the joint mediating effect of the social exchange quality indicators. *International Journal of Business Communication* 60: 1313–40. [CrossRef]
- Vieira-dos-Santos, Joana, and Gabriela Gonçalves. 2018. Organizational culture, internal marketing, and perceived organizational support in Portuguese higher education institutions. *Revista de Psicología del Trabajo y de las Organizaciones* 34: 38–41.
- Warr, Peter, John Cook, and Toby Wall. 1979. Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology* 52: 129–48. [CrossRef]
- Weiss, Howard. 2002. Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Human Resource Management Review* 12: 173–94. [CrossRef]
- Welch, Mary, and Paul Jackson. 2007. Rethinking internal communication: A stakeholder approach. *Corporate Communications: An International Journal* 12: 177–98. [CrossRef]
- Westphalen, Marie Hélène. 1998. *A Comunicação na Empresa*. Porto: Rés.
- World Economic Forum. 2022. Travel & Tourism Development Index 2021 Rebuilding for a Sustainable and Resilient Future. Available online: https://www.weforum.org/reports/travel-and-tourism-development-index-2021/?psafe_param=1&DAG=3&gclid=EAIaIQobChMI95qmyYz1gAMVHjwGAB3OgAsJEAAYASAAEgLOxPD_BwE (accessed on 23 August 2023).
- World Travel and Tourism Council. 2018. Travel and Tourism Economic Impact 2018—Portugal. Available online: www.wttc.org/economic-impact/country-analysis/country-reports/ (accessed on 23 August 2023).
- World Travel and Tourism Council. 2021. Staff Shortages. Available online: <https://wttc.org/Portals/0/Documents/Reports/2021/WTTC-Staff-Shortages.pdf> (accessed on 23 August 2023).
- Wright, Thomas, and Russel Cropanzano. 2000. Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology* 5: 84–94. [CrossRef]
- Yoon, Jeongkoo, and Shane Thye. 2002. A dual process model of organizational commitment: Job satisfaction and organizational support. *Work and Occupations* 29: 97–124. [CrossRef]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.

Article

Is Online Teaching Challenging Faculty Well-Being?

Pilar Mosquera ^{1,*}, Paula C. Albuquerque ² and Winnie Ng Picoto ¹

¹ ADVANCE, ISEG—Lisbon School of Economics & Management, University of Lisbon, 1649-004 Lisbon, Portugal

² SOCIUS/CSG, ISEG—Lisbon School of Economics & Management, University of Lisbon, 1649-004 Lisbon, Portugal

* Correspondence: pilarconde@iseg.ulisboa.pt

Abstract: Organizations that practice Sustainable Human Resource Management are socially responsible and concerned with the safety, health and satisfaction of their employees. Under this sustainability orientation, it is very relevant to analyze whether the sudden transition to e-learning as a strategy of adaptation to the COVID-19 pandemic affected the well-being of faculty. One hundred and two college teachers at a business school in Lisbon completed a web-based questionnaire administered during the second lockdown due to the pandemic. The questionnaire included the Online Faculty Satisfaction Survey (OFSS) and the Work-Related Quality of Life (WRQoL) questionnaire. We use Partial Least Squares Path Modeling to derive to what extent the satisfaction with online teaching has impacted faculty well-being measured by the quality of working life. Results show that interaction with students, student engagement, flexibility and technology are the most relevant factors to faculty satisfaction with online teaching. Having control at work, good working conditions and general well-being are the most relevant factors for faculty overall well-being. As proposed, faculty satisfaction with online teaching positively and significantly influences faculty general well-being, home–work interface and job and career satisfaction.

Keywords: online teaching; faculty; well-being; sustainable HRM

Citation: Mosquera, Pilar, Paula C. Albuquerque, and Winnie Ng Picoto. 2022. Is Online Teaching Challenging Faculty Well-Being? *Administrative Sciences* 12: 147. <https://doi.org/10.3390/admsci12040147>

Received: 30 September 2022

Accepted: 25 October 2022

Published: 27 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Higher Education Institutions (HEIs) are an important player toward the accomplishment of the 17 Sustainable Development Goals established by the United Nations. In fact, HEIs are increasingly aware of the need to extend the objectives of environmental and economic sustainability to human and social sustainability by incorporating concerns with their human resources dimension, namely, with the well-being of the academic community (Wolff and Ehrström 2020). Whatever the type of sustainability considered, the focus is always on the preservation of resources. Human sustainability is concerned with the conservation and development of human capital (Osranek and Zink 2014; Pfeffer 2010). This is, in turn, directly linked to the meso–micro interpretations of Sustainable Human Resource Management (Ehnert et al. 2014) and the one adopted in this paper: the human resource practices that are responsible for sustainable organizations, with lasting successful performances and enduring competitive advantages (Ehnert et al. 2014; Zaugg et al. 2001). The employee-centered management focused on the health and well-being of the workforce creates a positive environment to enable the achievement of the organization's goals and its long-term viability (Ehnert et al. 2014; Osranek and Zink 2014). In this context, it is interesting to analyze how the HEIs managed the transition to online teaching in a sustainable way.

Before the COVID-19 pandemic, teaching was mostly conducted in a face-to-face format, and digital technologies served mainly to enrich in-person teaching. The pandemic resulted in the physical closure of HEIs, the acceleration of digitalization and the conversion of traditional education to online learning (Abdulmir and Hafidh 2020);

(Daumiller et al. 2021). The sudden move to the new teaching environment raised unique challenges that may have affected faculty well-being. During the pandemic, the faculty had to implement online teaching in a short time, without being able to identify the best methods and tools that would facilitate distance learning (Arcila Hernández et al. 2021). In fact, online teaching experiences during the pandemic were quite challenging, with teachers reporting considerable feelings of stress and tension during the period of adaptation to the online format damaging faculty well-being (Besser et al. 2022). Numerous studies indicate that college teachers consider that, to implement online teaching, more time and intensive work are required, which turns out to be an additional barrier to faculty adherence and satisfaction with online teaching (Owens et al. 2018). Furthermore, the increasingly demanding work has been recognized as a cause of stress in the academic context, operating frequently through work–family conflict (Mudrak et al. 2018).

Most of the existing studies about online learning focus on its impact on students (e.g., students' learning processes or students' satisfaction with this type of education) or on the goals and needs of HEIs, with scarce studies that attempt to measure faculty satisfaction with online learning (Bolliger and Wasilik 2009). Given the relevance of teachers to the success of learning, it is important to know their satisfaction with online teaching, as well as the reasons that may lead them to accept or reject it (Hiltz et al. 2010; Owens et al. 2018). Therefore, the main objective of the present study is to understand faculty satisfaction with online teaching and its impact on teachers' well-being.

This study shows that faculty satisfaction with online teaching positively and significantly influences some dimensions of teachers' well-being, namely, general well-being, home–work interface and job and career satisfaction. The most relevant factors to faculty satisfaction with online teaching are interaction with students, student engagement, flexibility and technology. Having control at work, good working conditions and general well-being are the most relevant factors for faculty overall well-being.

2. Literature Review

2.1. Online Teaching

Online teaching is a type of distance education—distance in time and/or space (Moore and Kearsley 1996)—with courses that are delivered using internet-based technologies (Tallent-Runnels et al. 2006). These types of courses are also referred to as “e-learning” (Murphy 2020). When they combine online with traditional, face-to-face components, they are called “hybrid” or “blended”. Online classes can be asynchronous—the teacher records the lectures and each student chooses when to log on—or synchronous—the teacher and the students are online at the same time (Tallent-Runnels et al. 2006).

Several benefits and limitations of online education have been identified, the most referred-to advantage being flexibility. Asynchronous classes provide both time and space flexibility, whereas synchronous classes are only flexible in the spatial dimension (Van Wart et al. 2020). They can be particularly attractive to those with caring duties, who prefer to attend classes from home, who live far from the university or those who are frequent travelers (Conrad 2004; Li and Irby 2008). The multimedia experience may also be motivating for some students, and the potential use of self-assessment tools can help students and instructors (Mupinga 2005). Technology may be engaging and facilitate collaboration between students and teachers (Aguilera-Hermida 2020). Moreover, the enhancement of digital skills can also be considered a benefit from the point of view of the institutions, once the lower need for and use of physical infrastructure is cost-saving (Van Wart et al. 2020).

On the other hand, online learning may be experienced as impersonal and distant, failing to provide an environment favorable to social and cultural learning, as the use of computers does not ensure interaction and it may be difficult to stimulate students' participation (Jacobs 2013; Rumble 2001). Additionally, online teaching is frequently accused of contributing to increasing faculty workload (Bolliger and Wasilik 2009) because of the required adaptation to a new teaching environment, the design and development

of an online course and the additional volume of messaging that requires more time to answer than verbal class interactions (Rumble 2001). This argument implicitly assumes that verbal interaction is more typical of the in-person classes than the online classes. As the use of technology requires preparation, both students and teachers should have the necessary skills, otherwise stress and frustration result (Minutillo et al. 2020; Mupinga 2005). It has also been observed that the intensive use of electronic devices can have health costs (e.g., musculoskeletal disorders) (Mahadik et al. 2017), and the lack of social interaction may even have mental health consequences (Minutillo et al. 2020). The overlap between classes and home life may also pose difficulties, particularly when dedicated private spaces are not available (Minutillo et al. 2020). The lack of an appropriate internet connection is another frequently mentioned problem (Mishra et al. 2020; Saha et al. 2022). Although theoretical disciplines work well in the online environment, that is not true for sports or other disciplines with more hands-on activities (Adedoyin and Soykan 2020; Saha et al. 2022).

There is an increasing number of studies that indicate the benefits of integrating the media in education (Greenhow et al. 2020). These means can extend learning beyond the classroom to other networks of contacts (networking), introduce a specialized hybrid model (former students, professionals in the field), mix different types of information and resources, reshape the role of teachers and build and solidify student/teacher relationships, contributing to greater engagement, socialization and learning outcomes (Greenhow and Galvin 2020). The creation and management of a profile on social networks can complement the interaction between teachers and students during distance learning, mitigating one of the disadvantages of distance learning—permitting fewer opportunities for informal identity sharing (e.g., casual conversations in hallways, conversations before and after classes, and conversations over lunch). Teachers may be encouraged to connect with students on topics or ideas that are not limited to the content of the lessons (e.g., personal hobbies and interests), helping teachers to build strong relationships with diverse students (Greenhow and Galvin 2020). Teachers should consider using social media platforms designed for educational purposes that work within closed and limited networks, guaranteeing transparency, privacy and ethics (Krutka et al. 2019).

However, the adoption of technology in education programs was limited until the COVID-19 pandemic turned online teaching and learning into the only possible way of maintaining the regular delivery of classes (Dubey and Pandey 2020). Although not all countries in the world were technologically prepared to implement online teaching (Sintema 2020), several studies show that online teaching was successfully used in most HEIs, as long as there was technical support and an appropriate environment (Basilaia and Kavadze 2020). Nevertheless, several authors (Adedoyin and Soykan 2020; Aguilera-Hermida 2020; Bozkurt and Sharma 2020; Hodges et al. 2020) note that the conditions of these emergency remote education (ERE) programs are substantially different from those of well-planned online programs.

Given the significant advances in technology that are likely to continue for decades to come, all faculty members must be prepared to implement best practices in online teaching, ensuring positive outcomes in students' retention and engagement (Davis et al. 2019). For a successful transition from face-to-face to online teaching, faculty have to change traditional teaching methods used within the "traditional classroom" and learn new skills. However, for the success of this change, it is essential that faculty not only strive to learn the technologies associated with online learning, but also understand the need to radically change and transform their pedagogical approaches and teaching methods (Keengwe and Kidd 2010).

Satisfaction with Online Teaching

Students' motivation and performance in distance learning courses can be directly affected by faculty satisfaction with online teaching (Hartman et al. 2019). Thus, it is of

the utmost importance to identify the factors that influence faculty satisfaction with online teaching.

Bolliger and Wasilik (2009) present a typology of factors that may be relevant to explain teachers' satisfaction (or lack of it) with online teaching:

1. Student-related factors: on the one hand, the possibility of reaching a more diverse population and engaging students in a highly interactive communication, but, on the other hand, the limited interaction with students, due to the lack of personal contact;
2. Faculty-related factors: on the one hand, promoting positive results in students (self-gratification), receiving recognition for the work they do and having opportunities for professional development and research, but, on the other hand, dealing with technological difficulties or inadequate tools;
3. Institution-related factors: on the one hand, the value placed by the organization on online teaching and the existing policies that support faculty with this, but, on the other hand, workload issues and possible negative impact in pedagogical evaluation.

The institutions' support is considerably important to help teachers deal with the transition (Naylor and Nyanjom 2021; Ntereke et al. 2021). Instructors who received timely technical support and training for software and hardware deal better with the stress of the change. Positive emotions and a sense of a shared vision facilitate a constructive approach (Naylor and Nyanjom 2021). In contrast, the lack of recognition of the additional time needed to research and implement online teaching creates discontent. Unfortunately, the lack of confidence in their technical skills to design effective online instruction is a common experience for university teachers (Ntereke et al. 2021; Tsegay et al. 2022). Another motive of discontent is the difficulty in interacting with students: teachers are not absolutely sure whether students are really there or only appearing online (Ntereke et al. 2021). Catching students' attention and provoking their enthusiasm is frequently particularly challenging (Mishra et al. 2020; Saha et al. 2022).

2.2. Faculty Well-Being

Well-being at work results from the interaction between the organizational environment and personal characteristics (Abid et al. 2020). There are different approaches to well-being at work. One of these approaches focuses on subjective experiences and work performance, considering satisfaction and commitment to be key elements of happiness at work (Pagán-Castaño et al. 2020), with satisfaction being more related to work and commitment to the organization as a whole (Fisher 2010). Another approach focuses on the quality of interactions and relationships between employees, managers and/or organization (Grant et al. 2007). A different approach to well-being focuses on the impact that work experiences and stressors can have on employees' health, both physical and mental (e.g., stress, anxiety and burnout) (McCoy et al. 2013). Stressors usually manifest themselves in the form of threats, obstacles and challenges in the work environment, affecting employees' effectiveness, levels of performance and well-being (Ahmed et al. 2019). In this paper, we will follow the last approach and consider ERE as a challenge that faculty had to face due to the COVID-19 pandemic with potential negative impact on faculty's well-being.

Most of the literature on faculty well-being has focused on job satisfaction, that is, the extent to which people like or dislike their jobs (Mudrak et al. 2018), partly because job satisfaction is relevant to increase faculty retention (McCoy et al. 2013). Even though job satisfaction is considered a key index of well-being (Seipel and Larson 2018), in our study we preferred to use a more holistic construct to encompass other variables that may give a better overview of the work experience and better explain how various factors interact to affect individuals at work (Kandasamy and Ancheri 2009). Therefore, in our study, we evaluated faculty well-being using a measure of the quality of working life that includes not only job satisfaction, but a set of other relevant constructs for faculty well-being.

Quality of Working Life

The quality of working life is associated with an environment where employees feel safe and happy, do not feel stressed, are satisfied with their work, their personal and professional needs are met and work–life balance is ensured. Diverse benefits have been associated with a high work-related quality of life, such as: higher job performance; higher organizational performance; increased job satisfaction, organizational commitment and general well-being; and reduced absenteeism, intention to leave and burnout (Akar 2018; Gokhale 2015).

According to Easton and Van Laar (2018), existing theoretical approaches to quality of working life are inconsistently defined and sometimes even contradictory. They proposed a broader conceptualization of quality of working life that included six dimensions: (i) general well-being; (ii) home–work interface; (iii) job and career satisfaction; (iv) control at work; (v) working conditions; and (vi) stress at work.

1. General well-being indicates the extent to which an individual feels good and/or satisfied with their life in general. It includes both physical and psychological well-being, which are deeply connected (e.g., physical illness affects job performance, which in turn can affect psychological well-being).
2. Home–work interface relates to the conciliation between personal and work demands.
3. Job and career satisfaction reflect how satisfied the individual is with his or her job and how fulfilled they feel.
4. Control at work is the level at which individuals feel involved in decisions that affect them at work.
5. Working conditions refer to the essential resources provided by the organizations to employees so they can do their work safely and effectively.
6. Stress at work is a harmful physical and emotional response that occurs when work demands do not match a worker’s abilities, resources or needs (e.g., when an individual perceives and feels excessive pressures and feels he is unable to fulfill the job requirements).

Higher education has long been considered a low-stress job given the flexible working hours, autonomy and low workload that were associated with an academic career. In most countries, before the COVID-19 pandemic, academic work was associated with high levels of job satisfaction (Mudrak et al. 2018). However, in recent decades, around the world, HEIs have undergone significant changes (e.g., massification, increasing internationalization, diversification of the academic work, profound changes in the way universities are managed, etc.) (Bentley et al. 2013) that increased faculty challenges and demands and decreased the quality of their working life (McCoy et al. 2013). The abrupt transition to online teaching during the pandemic imposed new challenges that may have had an impact on job satisfaction as well as other components of faculty quality of working life (Krugielka et al. 2021). Recent studies (Chen et al. 2022) have reported that low levels of satisfaction with online teaching have a negative impact on teachers’ psychological well-being. In reverse, faculty being satisfied with online teaching may have a positive impact on well-being.

H1. *Faculty satisfaction with online teaching has a positive impact on general well-being.*

Home–work interface relates to the conciliation between personal and work demands (Easton and Van Laar 2018). The most relevant issues that impact this balance can be adequate facilities at work, flexible working hours, working from home, job rotation, maternity and parental leave and care for children and dependents (Chen et al. 2014). Convenience and flexibility are important characteristics of the online teaching environment, and previous research has found a positive relationship between those characteristics and the online teaching satisfaction (Elshami et al. 2021). Furthermore, a study carried out by (Bhattarai 2020) during the COVID-19 pandemic suggests that the affordances from working from home can be important to achieve an enhanced work–life balance. This has important implications for the faculty well-being, as the lack of balance between work and family

can have a negative impact on individuals, both physical and psychological (e.g., depression, hypertension, risk of burnout, etc.) and also on organizations (e.g., job satisfaction; job performance, etc.) (Easton and Van Laar 2018). Therefore, we propose the following hypothesis:

H2. *Faculty satisfaction with online teaching has a positive impact on home–work interface.*

Job and career satisfaction reflect how satisfied the individual is with his or her job and how fulfilled they feel (Easton and Van Laar 2018). Some authors state that job satisfaction depends on both intrinsic and extrinsic factors. Having role and objectives clearly defined, a good recognition and reward system capable of satisfying employees' personal development, career improvement and training needs, good working conditions and positive social relationships with coworkers and the supervisor are aspects that contribute to job and career satisfaction. Online teaching often affords several tools that improve communication between students and the faculty, facilitating the interactions between them, thus creating a supportive learning environment (Wu et al. 2010) with a positive impact in terms of the learning quality and student performance. As teaching is one of the main activities of faculty members (Ortan et al. 2021), if they are satisfied with online teaching, this will positively impact job and career satisfaction. Therefore, we propose the following hypothesis:

H3. *Faculty satisfaction with online teaching has a positive impact on job and career satisfaction.*

Control at work is the level at which individuals feel involved in decisions that affect them at work (Easton and Van Laar 2018). Individual perceptions of control at work influence negative emotional reactions, both short-term (headaches or stomach-aches) and long-term (cardiovascular disease), and also counterproductive behavior at work (Easton and Van Laar 2018). During the pandemic, teachers were compelled to turn suddenly to a new format of online teaching without the required previous preparation (Minutillo et al. 2020; Mupinga 2005), which may have affected their perceptions of control at work. Nevertheless, many HEIs provided teachers with the appropriate technical support which increased their satisfaction with online teaching (Basilaia and Kavadze 2020) and their sense of control at work. Thus, we propose:

H4. *Faculty satisfaction with online teaching has a positive impact on general control at work.*

Working conditions refer to the essential resources provided by the organizations to allow their employees to do their work safely and effectively (Easton and Van Laar 2018). Adverse working conditions (e.g., dust, fumes, heat, etc.), can affect workers that may want to avoid the workplace, increasing turnover (Easton and Van Laar 2018). If the online teaching environment can provide faculty members with the necessary tools to effectively perform their jobs, it will positively impact the working conditions dimension of well-being (Bhattarai 2020). Therefore, we propose the following hypothesis:

H5. *Faculty satisfaction with online teaching has a positive impact on working conditions.*

Stress at work is a harmful physical and emotional response that occurs when work demands do not match a worker's abilities, resources or needs (e.g., when an individual perceives and feels excessive pressures and feels he is unable to fulfil the job requirements) (Easton and Van Laar 2018). Previous researchers have found that online teaching often increases workload, is more difficult to engage students in the learning processes and needs more time for class preparation (Elshami et al. 2021). These factors are related with higher levels of stress among the faculty community (Ortan et al. 2021). Therefore, we propose the following hypothesis:

H6. *Faculty satisfaction with online teaching has a negative impact on stress at work.*

Figure 1 presents the research model that portrays the relationships under study.



Figure 1. Research Model.

3. Research Methods

This study aims to understand the impact of online teaching on the overall well-being of the faculty staff at a business school in Lisbon. To access the validity of the proposed research model and hypotheses, a quantitative approach based on data collected through a questionnaire sent to all faculty members of the Business School was adopted. For the operationalization of the research model, construct items were adapted from existing scales (Appendix A). All items were measured with a five-point Likert scale, ranging from ‘strongly disagree’ to ‘strongly agree’.

To validate the questionnaire translation from English to Portuguese, the back-translation procedure suggested by Sekaran and Bougie (2016) was applied. A pretest was conducted with five faculty members, which resulted in the restructuring of some sentences to enhance clarity.

Given that we have a latent variable model and a small sample size, Partial Least Squares (PLS) Path Modeling was adopted in this study as implemented by the SmartPLS 3.0 software (Ringle et al. 2015) to assess the quality of the measurement and the structural models.

3.1. Data Collection and Participants

The questionnaire was administered online with Qualtrics XM and sent by email to all faculty members of the business school, leading to a nonprobabilistic sampling. Data were collected between March and April of 2021, during the second confinement period due to COVID-19 pandemic, when teaching was being conducted only remotely. After one follow-up to increase the response rate, a total of 139 responses were gathered, which corresponds to a response rate of 54.3%. From the total of 139 responses, 102 were considered valid, corresponding to 39.8% of the population.

Regarding the demographic characterization of the final sample, there is a slightly higher number of male respondents (54.9%); 41.2% are females and 3.9% decided to not reveal their gender. Concerning age, 21.9% of respondents are millennials and the rest are over 40 years old, the average being 48.44 years. Most of the faculty participating in

this study (63.6%) live in households with three or more people, 27.3% live in households of two people and only 9.1% live alone. Most respondents (63.7%) are in the university teaching career, while the remaining ones are invited professors (36.3%).

To further characterize our final sample, we computed some additional descriptive statistics. Respondents who are most satisfied with work and career (average = 3.70) are the ones with the most numerous households (more than 2 members), and the least satisfied ones are the faculty members that live alone (average = 2.90). Additionally, there are statistically significant differences in satisfaction with online education, as invited faculty members are more satisfied (average = 3.09) than career faculty members (average = 2.72). Furthermore, we also found statistically significant differences regarding the satisfaction with online education ($F = 3.736; p < 0.05$), where younger faculty members are the most satisfied ones with online teaching (average = 3.05).

3.2. Measures

The two scales that make up the final questionnaire have already been validated in samples of faculty members with good levels of reliability. The Work-Related Quality of Life (WRQoL), developed by Easton and Van Laar (2018), measures work-related quality of life, and was used as a measure of the well-being construct in the present study. It was previously applied in several other universities and countries and has shown good psychometric quality. It includes six dimensions: (i) general well-being; (ii) home–work interface; (iii) job and career satisfaction; (iv) control at work; (v) working conditions; and (vi) stress at work.

The Online Faculty Satisfaction Survey Revised (OFSS-R) was adapted by Blundell et al. (2020) from the Online Faculty Satisfaction Survey (OFSS) developed by Bolliger and Wasilik (2009) to measure faculty's satisfaction with online education. The first 15 items of the original instrument were excluded because they belonged to the introductory question of Bolliger and Wasilik (2009), which was not evaluated by Blundell et al. (2020), thus resulting in a scale of only 28 items. These items measure the faculty satisfaction with different aspects of online education that, according to the authors, would be related to students, the institution, and faculty. In addition to these three dimensions, they included a fourth one to measure general satisfaction with online teaching. Once we could not reproduce the proposed factorial structure, we grouped the items in six different dimensions based on their content. The student-related dimensions are: student engagement (e.g., "My online students are more enthusiastic about their learning than their traditional counterparts"); student Interaction (e.g., "The level of my interactions with students in an online class is higher than in a traditional face-to-face class"); and flexibility (e.g., "Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses"). The institution-related dimension is workload (e.g., "I have a higher workload with online teaching compared to traditional teaching"). The faculty-related dimension is technology (e.g., "I use fewer resources in online teaching than in face-to-face teaching"). The sixth-dimension measures general satisfaction with online teaching—overall satisfaction with online teaching (e.g., "I look forward to teaching my next online course"). Appendix A presents the complete operationalization for each latent variable of the research model.

4. Results

4.1. Measurement Model Assessment

To assess the measurement model quality, we assessed indicators for reliability (composite reliability for internal consistency) and evaluated convergent and discriminant validities (Table 1).

Table 1. Median, Reliability and Validity of constructs.

	Median	Composite Reliability	Average Variance Extracted (AVE)	R ²
Control at Work	0.056	0.802	0.670	0.003
General Well-Being	0.159	0.874	0.570	0.076
Home–Work Interface	0.311	0.903	0.824	0.033
Job and Career Satisfaction	0.145	0.812	0.521	0.066
Stress at Work	0.136	0.903	0.824	0.003
Working Conditions	0.229	0.891	0.803	0.007
Overall Well-Being	0.133	1.000	1.000	0.651
Faculty Satisf. Online Teach.	0.041	0.904	0.824	0.997
Flexibility	0.210	0.851	0.741	NA
General Satisfaction	0.083	0.908	0.500	NA
Technology	0.094	0.753	0.613	NA
Student Engagement	−0.143	0.810	0.681	NA
Student Interaction	−0.028	0.810	0.587	NA
Work overload	−0.337	0.854	0.749	NA

Regarding the reliability of constructs, all indicators have higher values than the threshold value of 0.7 for composite reliability (Table 1). Henseler et al. (2009) emphasize that the absolute standardized outer loadings of each indicator and its construct should be higher than 0.7. For our study, all values are acceptable (Appendix A). All constructs exhibit AVE values higher than 0.5 (so we deleted the items with lower loading values (FSOFT_6_rev, FSOFT_13_rev and FSOFT_14_rev), which allowed us to achieve the AVE of at least 0.5 for all latent variables, revealing the capability of the latent variables to explain, at least, 50% of the variance of its indicators (Henseler et al. 2009), showing that the model has good convergent validity. Finally, discriminant validity is assessed through the Fornell–Larcker criterion (Table 2) and the cross-loadings analysis (Henseler et al. 2009). All values are according to requirements (the AVE of each variable is higher than the squared correlation with other variables), with the exception of faculty satisfaction with online teaching, as it is a second-order construct sharing indicators with its first-order constructs. Appendix A presents the means, standard deviations and loading for each indicator.

Table 2. Discriminant validity—Fornell–Larcker criterium.

	CAT	FLEX	GWB	HWI	JCS	STE	SAT	FSOT	TECH	OWB	WKC	STI	OSAT	WOL
Control at Work	0.819													
Flexibility	−0.024	0.861												
General Well-Being	0.435	0.214	0.755											
Home–Work Interface	0.570	0.132	0.648	0.908										
Job and Career Satisfaction	0.684	0.199	0.697	0.719	0.722									
Students’ Engagement	0.156	0.592	0.231	0.128	0.167	0.825								
Stress at Work	0.180	0.057	0.278	0.302	0.244	0.031	0.908							
Fac.Sat.	0.055	0.849	0.276	0.181	0.256	0.805	0.057	0.707						
Online Teaching.	0.122	0.455	0.302	0.186	0.290	0.292	0.177	0.571	0.783					
Technology	0.573	0.099	0.723	0.594	0.641	0.127	0.232	0.167	0.242	1.000				
Overall Well-Being	0.611	0.042	0.521	0.612	0.641	0.065	0.286	0.081	0.205	0.655	0.896			
Working Conditions	0.037	0.683	0.237	0.206	0.243	0.673	0.022	0.907	0.472	0.172	0.098	0.766		
Student Interaction	−0.037	0.690	0.153	0.043	0.164	0.673	0.017	0.885	0.423	0.049	−0.029	0.738	0.908	
Online Satisfaction	0.095	0.150	0.090	0.119	0.144	0.137	0.157	0.149	0.140	0.028	0.157	0.097	0.148	0.866

Note: Numbers in bold denote the square root of the average variance extracted.

4.2. Structural Model Results

After verifying that the outer model presents good psychometric characteristics, we proceed to the evaluation of the structural model. The bootstrapping technique was applied

to generate 1500 samples from 102 cases. The structural model was evaluated considering the coefficients of determination of endogenous latent variables (i.e., R^2) and the path coefficients (in terms of sign, magnitude and significance). The model depicted in Figure 2 presents the PLS model results, and Table 1 presents the R^2 values for each endogenous variable. The results show that the data collected allow us to accept three out of six theoretical hypotheses that this research puts forward (H1, H2 and H3) and conclude that the nomological net explains 65% of the ultimate endogenous construct: overall well-being. Figure 2 shows results of the structural model analysis, and Table 3 shows the hypotheses that were or were not supported.

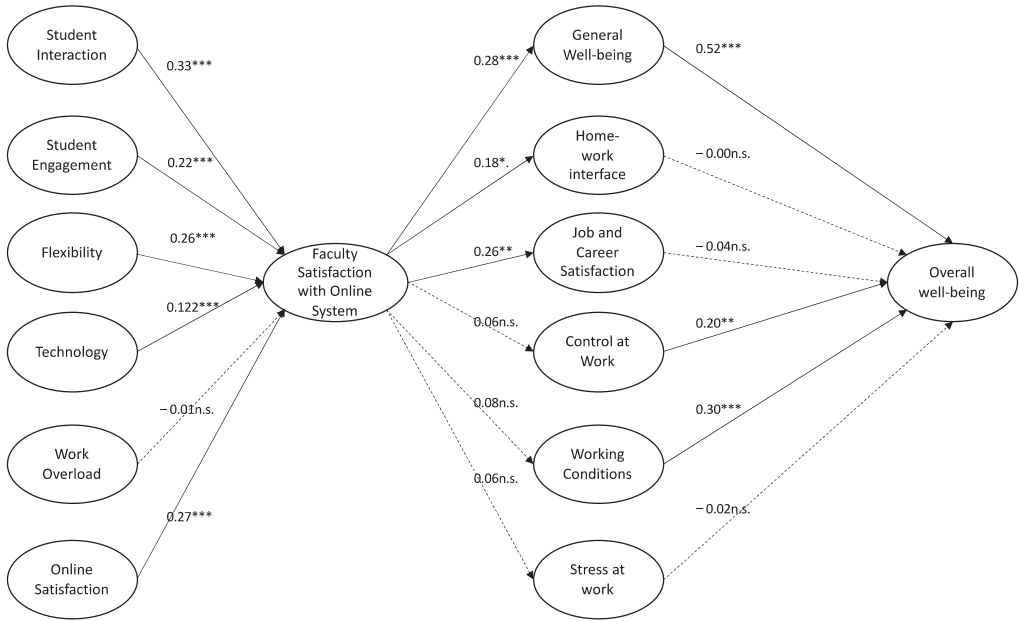


Figure 2. PLS results (n = 102). Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$; n.s. non significant.

Table 3. Research Hypothesis evaluation.

Hypothesis	Description	Path Coef.	Bootstrap <i>t</i> -Test	Hypothesis Evaluation
H1	Faculty satisfaction with online teaching has a positive impact on general well-being.	0.28	2.697	Accept
H2	Faculty satisfaction with online teaching has a positive impact on home–work interface.	0.18	1.647	Accept
H3	Faculty satisfaction with online teaching has a positive impact on job and career satisfaction.	0.26	2.274	Accept
H4	Faculty satisfaction with online teaching has a positive impact on general control at work.	0.06	0.494	Reject
H5	Faculty satisfaction with online teaching has a positive impact on working conditions.	0.08	0.715	Reject
H6	Faculty satisfaction with online teaching has a negative impact on stress at work.	0.06	0.501	Reject

To assess the predictive relevance of our research model, the Q^2 was computed, showing positive values for the endogenous variables that the model explains—faculty satisfaction with online teaching and overall well-being (respectively, 0.482 and 0.561); hence, the model has good predictive relevance (Hair et al. 2011).

5. Discussion

Our paper contributes to the understanding of the implications of online teaching on the faculty members' well-being. Previous studies have not addressed those two constructs in a single research model. Our results suggest that among the several dimensions of faculty satisfaction with online teaching, student interaction, online satisfaction and flexibility are the most important dimensions contributing to faculty satisfaction with the online teaching system. In fact, being able to succeed in the interaction with students, getting them involved in the learning processes and being able to provide better feedback are important to accomplish one of the faculty members' main missions, as they contribute to the development of a supportive learning context (Wu et al. 2010). Moreover, the flexibility afforded by the online system and the possibility to reach a wider set of students are very much appreciated by faculty members.

Interestingly, while technology has a significant impact on the satisfaction with the online system, it has smaller impact when comparing to the other dimensions that were found to be significant. This shows that the tools that a university adopts to deliver online teaching or the technical problems that faculty members may face are not so decisive for the faculty members' satisfaction with the online teaching. Work overload was the only dimension that was not found to be relevant. While existing research suggests that online teaching often involves more time for class preparation to be able to engage students in the learning processes, thus increasing work overload (Elshami et al. 2021), in our research we did not achieve the same results. One possible explanation is that the other dimensions with expected positive contribution to faculty satisfaction overcame the less positive implications of the usage of teaching online systems.

The results show that satisfaction of faculty with online teaching had a significant positive effect on general well-being ($\beta = 0.28, p < 0.01$), suggesting that teachers who enjoy the online teaching experience are more satisfied with their life in general and enjoy their lives. Considering that the survey was launched during the confinement, faculty members were mostly occupied with online teaching during work time, and the results highlight that fact. Faculty members who were more satisfied with online teaching also exhibited greater job and career satisfaction ($\beta = 0.26, p < 0.05$), suggesting that they felt encouraged to develop new skills and saw the new context as an opportunity to use their abilities at work. Furthermore, faculty satisfaction with online teaching was positively and significantly related to home–work interface ($\beta = 0.18, p < 0.1$), possibly due to the fact that the confinement period provided more time for the family and more flexibility (in time and/or space) that facilitates the conciliation between personal and work demands, as suggested by the literature (Chen et al. 2014).

Contrary to our expectations, satisfaction with online teaching did not exhibit a significant relation with control at work. This is possibly due to the fact that, although teachers were compelled to turn to online teaching during the pandemic, they did not lose control at work since they were free to organize their classes in the new format in a way that they considered was best. Satisfaction with online teaching did not significantly impact the faculty's perceptions of the working conditions, as expected. A possible explanation is the fact that the business school where the study was conducted provided faculty with the required learning platforms and teaching pedagogies to ensure the quality of online teaching (Owens et al. 2018). This also may explain the fact that satisfaction with online teaching had no significant negative effect on stress at work. Technological support and training during the transition process increased faculty readiness to teach online and reduced faculty stress (Toto and Limone 2021).

6. Conclusions

The sudden move to an online teaching environment, due to the COVID-19 pandemic, raised unique challenges that affected faculty well-being. Furthermore, given the relevance of teachers to the success of learning, it is important to know their satisfaction with online teaching (Hiltz et al. 2010; Owens et al. 2018) as well its impact on faculty well-being.

This paper considers the satisfaction of faculty with online teaching as a multidimensional construct, measured by several factors: student-related (student interaction, student engagement and learning flexibility), faculty-related (workload) and institution-related (technology). Faculty well-being was measured by the quality of working life, which is also a multidimensional construct to encompass variables other than job satisfaction (the most studied dimension of faculty well-being) and give a better overview of the work experience (Kandasamy and Ancheri 2009). In addition to job and career satisfaction, the home–work interface, working conditions, stress at work, control at work and general well-being were also considered in this study. Thus, the current study fills a research gap by exploring the significant channels of influence of the satisfaction with online teaching during the pandemic on the well-being at work in university teaching.

Some limitations can be pointed to this study. It offers a snapshot vision of the relation between online teaching and well-being at work, very much influenced by the COVID-19 pandemic context. On one hand, the anxiety associated with the pandemic risks could have influenced faculty levels of well-being. On the other hand, the possibility to continue the education process, thanks to the new remote teaching technologies, may explain the strong positive relation between online teaching and general well-being. Therefore, it would be interesting to replicate the study after the pandemic to find out whether the results differ. Another limitation concerns the possibility of not being able to extrapolate the results from this study, since data were collected from a single business school.

Nevertheless, the last limitation also constitutes a relevant contribution to practice, since the study provides insights regarding a more sustainable Human Resource Management in the studied HEI. Although participants exhibit considerably good levels of quality of working life, there is plenty of space to improve faculty well-being. For example, some participants are not satisfied with the career opportunities available in the HEI and wish to be more involved in decisions that affect them in their own area of work. Considering their relevance to faculty members, these aspects should be topics of concern to the management of this specific HEI. Career advancement opportunities, autonomy, role clarity and performance feedback have been considered key job resources that may prevent the negative impact of job demands on stress/burnout (Mudrak et al. 2018).

Furthermore, the low levels of satisfaction with online teaching should be considered in the development of future online courses. Particularly, HEIs should address student-related factors (student engagement, flexibility and student interactions), which are the most relevant aspects for faculty satisfaction with online teaching. To mitigate teachers' perceptions of lack of interaction with students in online teaching and help to build strong relationships, teachers may connect with students on social networks to discuss topics or ideas that are not limited to the content of the lessons (Greenhow and Galvin 2020).

Being an HEI engaged in promoting social sustainability, it is of the utmost importance to evaluate on a regular basis faculty perceptions and satisfaction with online teaching and identify the factors that may impact teachers' well-being to improve both the quality of teachers working life and, also, the quality of online teaching and learning.

Author Contributions: Conceptualization, P.M.; methodology, P.M., W.N.P.; data analysis and validation, W.N.P.; formal analysis, P.M., P.C.A. and W.N.P.; investigation, P.M.; resources, P.M.; data curation, W.N.P.; writing—original draft preparation, P.M., P.C.A. and W.N.P.; writing—review and editing, P.M. and P.C.A.; supervision, P.M.; project administration, P.M. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by FCT—Fundação para a Ciência e Tecnologia (Portugal), national funding through research grant UIDB/04521/2020. The APC was funded by ADVANCE—Centro Investigação Avançada em Gestão.

Informed Consent Statement: All subjects were invited to participate in the survey that was available online and could withdraw from it at any time.

Data Availability Statement: The datasets analyzed during the current study are available from the corresponding author on request due to privacy restrictions.

Acknowledgments: The authors gratefully acknowledge Inês Batista Rodrigues for data collection.

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

Appendix A. Constructs Indicators, Means, Standard Deviations and Loadings

Construct	Indicator Code	Indicator Description	Mean	Std Deviation	Loading
Control at Work	QOWL_12	I am involved in decisions that affect me in my own area of work	3.078	1.384	0.755
	QOWL_2	I feel able to voice opinions and influence changes in my area of work	3.882	0.973	0.878
Flexibility	FSOT_2	The flexibility provided by the online environment is important to me	3.480	1.341	0.857
	FSOT_25	Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses	3.029	1.361	0.864
General Well-Being	QOWL_10	I am satisfied with my life	3.824	1.052	0.819
	QOWL_15	In most ways my life is close to ideal	3.343	1.089	0.791
	QOWL_17	Generally, things work out well for me	4.000	0.918	0.815
	QOWL_21	Recently, I have been feeling reasonably happy, all things considered	3.422	1.124	0.827
	QOWL_4	I feel well at the moment	3.725	1.095	0.873
	QOWL_9_rev	Recently, I have been feeling unhappy and depressed	3.843	1.169	0.726
Home–Work Interface	QOWL_5	My employer provides adequate facilities and flexibility for me to fit work in around my family life	3.735	1.236	0.914
	QOWL_6	My current working hours/patterns suit my personal circumstances	3.529	1.326	0.901
Job and Career Satisfaction	QOWL_1	I have a clear set of goals and aims to enable me to do my job	4.343	0.707	0.659
	QOWL_11	I am encouraged to develop new skills	4.069	0.910	0.757
	QOWL_18	I am satisfied with the career opportunities available for me here	2.951	1.403	0.655
	QOWL_3	I have the opportunity to use my abilities at work	4.039	1.093	0.805
Student Engagement	FSOT_11	My online students are more enthusiastic about their learning than their traditional counterparts	2.088	0.919	0.805
	FSOT_20_rev	The participation level of my students in the class discussions in the online setting is lower than in the traditional one	2.157	1.135	0.845
Stress at Work	QOWL_19_rev	I often feel excessive levels of stress at work	2.922	1.250	0.893
	QOWL_7_rev	I often feel under pressure at work	2.775	1.283	0.922
Satisfaction with Online Teaching	FSOT_20_rev	The participation level of my students in the class discussions in the online setting is lower than in the traditional one	2.157	1.135	0.698
	FSOT_2	The flexibility provided by the online environment is important to me	3.480	1.341	0.722
	FSOT_25	Online teaching is gratifying because it provides me with an opportunity to reach students who otherwise would not be able to take courses	3.029	1.361	0.739
	FSOT_9	I look forward to teaching my next online course	2.686	1.313	0.835
	FSOT_3	My online students are actively involved in their learning	2.843	1.153	0.671
	FSOT_1	The level of my interactions with students in the online course is higher than in a traditional face-to-face class	1.794	1.097	0.663
	FSOT_15	I am satisfied with the use of communication tools in the online environment (e.g., chat rooms, threaded discussions, etc.)	3.539	1.226	0.563
	FSOT_11	My online students are more enthusiastic about their learning than their traditional counterparts	2.088	0.919	0.628
	FSOT_16	I am able to provide better feedback to my online students on their performance in the course	2.353	1.099	0.744
Technology	FSOT_17	I am more satisfied with teaching online as compared to other delivery methods	2.196	1.085	0.769
	FSOT_13_rev	Online teaching is often frustrating because of technical problems	2.647	1.210	0.613
	FSOT_15	I am satisfied with the use of communication tools in the online environment (e.g., chat rooms, threaded discussions, etc.)	3.539	1.226	0.923
Overall Well-Being	QOWL_23	I am satisfied with the overall quality of my working life	3.863	1.029	1.000
Working Conditions	QOWL_13	My employer provides me with what I need to do my job effectively	3.569	1.201	0.869
	QOWL_22	The working conditions are satisfactory	3.902	1.133	0.923

Construct	Indicator Code	Indicator Description	Mean	Std Deviation	Loading
Student Interaction	FSOT_3	My online students are actively involved in their learning	2.843	1.153	0.744
	FSOT_1	The level of my interactions with students in the online course is higher than in a traditional face-to-face class	1.794	1.097	0.767
	FSOT_16	I am able to provide better feedback to my online students on their performance in the course	2.353	1.099	0.787
Overall SOT	FSOT_9	I look forward to teaching my next online course	2.686	1.313	0.916
	FSOT_17	I am more satisfied with teaching online as compared to other delivery methods	2.196	1.085	0.900
Work overload	FSOT_6_rev	I have a higher workload when teaching an online course as compared to the traditional one	1.922	1.143	0.726
	FSOT_14_rev	It takes me longer to prepare for an online course on a weekly basis than for a face-to-face course	2.461	1.126	0.985

References

- Abdulmir, Ahmed S., and Rand R. Hafidh. 2020. The Possible Immunological Pathways for the Variable Immunopathogenesis of COVID—19 Infections among Healthy Adults, Elderly and Children. *Electronic Journal of General Medicine* 17: em202. [CrossRef]
- Abid, Ghulam, Saira Ahmed, Natasha Saman Elahi, and Sehrish Ilyas. 2020. Antecedents and Mechanism of Employee Well-Being for Social Sustainability: A Sequential Mediation. *Sustainable Production and Consumption* 24: 79–89. [CrossRef]
- Adedoyin, Olasile Babatunde, and Emrah Soykan. 2020. COVID-19 Pandemic and Online Learning: The Challenges and Opportunities. *Interactive Learning Environments* 1–13. [CrossRef]
- Aguilera-Hermida, A. Patricia. 2020. College Students' Use and Acceptance of Emergency Online Learning Due to COVID-19. *International Journal of Educational Research Open* 1: 100011. [CrossRef]
- Ahmed, Obobanyi Momohjimoh, Awanis Ku Ishak, and Bidayatul Akmal Mustafa Kamil. 2019. Transformational Leadership and Employee Psychological Wellbeing among Faculty Staff: The Mediating Role of Self-Efficacy. *International Journal of Management, Accounting and Economics* 6: 184–97.
- Akar, Huseyin. 2018. The Relationships between Quality of Work Life, School Alienation, Burnout, Affective Commitment and Organizational Citizenship: A Study on Teachers. *European Journal of Educational Research* 7: 169–80. [CrossRef]
- Arcila Hernández, Lina M., Kelly R. Zamudio, Abby G. Drake, and Michelle K. Smith. 2021. Implementing Team-based Learning in the Life Sciences: A Case Study in an Online Introductory Level Evolution and Biodiversity Course. *Ecology and Evolution* 11: 3527–36. [CrossRef]
- Basilaia, Giorgi, and David Kvavadze. 2020. Transition to Online Education in Schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research* 5: 1–9. [CrossRef]
- Bentley, Peter James, Hamish Coates, Ian R. Dobson, Leo Goedegebuure, and V. Lynn Meek, eds. 2013. Introduction: Satisfaction Around the World? In *Job Satisfaction around the Academic World*. Dordrecht: Springer, pp. 1–11. [CrossRef]
- Besser, Avi, Sari Lotem, and Virgil Zeigler-Hill. 2022. Psychological Stress and Vocal Symptoms Among University Professors in Israel: Implications of the Shift to Online Synchronous Teaching During the COVID-19 Pandemic. *Journal of Voice* 36: 291.e9–291.e16. [CrossRef]
- Bhattarai, Manoj. 2020. Working from Home and Job Satisfaction during the Pandemic Times. Independent Publication, Employment Program Director (YMCA of Greater Toronto, Canada)/Freelance Cloud Governance Researcher. Available online: https://www.researchgate.net/publication/342914908_Working_from_Home_and_Job_Satisfaction_During_the_Pandemic_Times (accessed on 14 September 2022).
- Blundell, Gregory Edgar, Daniel A. Castañeda, and Junghyae Lee. 2020. A Multi-Institutional Study of Factors Influencing Faculty Satisfaction with Online Teaching and Learning. *Online Learning* 24: 229–53. [CrossRef]
- Bolliger, Doris U., and Oksana Wasilik. 2009. Factors Influencing Faculty Satisfaction with Online Teaching and Learning in Higher Education. *Distance Education* 30: 103–16. [CrossRef]
- Bozkurt, Aras, and Ramesh C. Sharma. 2020. Emergency Remote Teaching in a Time of Global Crisis Due to CoronaVirus Pandemic. *Asian Journal of Distance Education* 15: i–vi. [CrossRef]
- Chen, I-Hua, Xiu-Mei Chen, Xiao-Ling Liao, Ke-Yun Zhao, Zhi-Hui Wei, Chung-Ying Lin, and Jeffrey Hugh Gamble. 2022. Evaluating the Immediate and Delayed Effects of Psychological Need Thwarting of Online Teaching on Chinese Primary and Middle School Teachers' Psychological Well-Being. *Frontiers in Psychology* 13: 943449. [CrossRef] [PubMed]
- Chen, Won-Sun, Jamaiyah Haniiff, Ching-Sin Siau, Wymen Seet, Sit-Fong Loh, Mohd Hadzrul Abd Jamil, Nadiah Sa'at, and Nurakmal Baharum. 2014. Psychometric Properties of the Malay Work-Related Quality of Life (WRQoL) Scale in Malaysia. *World Journal of Social Science Research* 1: 57. [CrossRef]
- Conrad, Dianne. 2004. University Instructors' Reflections on Their First Online Teaching Experiences. *Journal of Asynchronous Learning Networks* 8: 31–44. [CrossRef]

- Daumiller, Martin, Raven Rinas, Julia Hein, Stefan Janke, Oliver Dickhäuser, and Markus Dresel. 2021. Shifting from Face-to-Face to Online Teaching during COVID-19: The Role of University Faculty Achievement Goals for Attitudes towards This Sudden Change, and Their Relevance for Burnout/Engagement and Student Evaluations of Teaching Quality. *Computers in Human Behavior* 118: 106677. [CrossRef]
- Davis, Cindy, Ruth Greenaway, Matthew Moore, and Lyle Cooper. 2019. Online Teaching in Social Work Education: Understanding the Challenges. *Australian Social Work* 72: 34–46. [CrossRef]
- Dubey, Pushkar, and Deepak Pandey. 2020. Distance Learning in Higher Education during Pandemic: Challenges and Opportunities. *The International Journal of Indian Psychology* 8: 43–46.
- Easton, Simon, and Darren Van Laar. 2018. *User Manual for the Work-Related Quality of Life (WRQoL) Scale: A Measure of Quality of Working Life*. Portsmouth: University of Portsmouth. [CrossRef]
- Ehnert, Ina, Wes Harry, and Klaus J. Zink, eds. 2014. Sustainability and HRM. In *Sustainability and Human Resource Management*. CSR, Sustainability, Ethics & Governance. Berlin and Heidelberg: Springer, pp. 3–32. [CrossRef]
- Elshami, Wiam, Mohamed H. Taha, Mohamed Abuzaid, Coumaravelou Saravanan, Sausan Al Kawas, and Mohamed Elhassan Abdalla. 2021. Satisfaction with Online Learning in the New Normal: Perspective of Students and Faculty at Medical and Health Sciences Colleges. *Medical Education Online* 26: 1920090. [CrossRef]
- Fisher, Cynthia D. 2010. Happiness at Work: Happiness at Work. *International Journal of Management Reviews* 12: 384–412. [CrossRef]
- Gokhale, Meenakshi. 2015. Work-Related Quality of Life and Work Engagement of College Teachers. *Annamalai International Journal of Business Studies & Research*. pp. 60–63. Available online: https://www.researchgate.net/profile/Meenakshi-Gokhale/publication/309231676_Work-Related_Quality_of_Life_and_Work_Engagement_of_College_Teachers/links/5b71b067a6fdcc87df744295/Work-Related-Quality-of-Life-and-Work-Engagement-of-College-Teachers.pdf (accessed on 14 September 2022).
- Grant, Adam M., Marlys K. Christianson, and Richard H. Price. 2007. Happiness, Health, or Relationships? Managerial Practices and Employee Well-Being Tradeoffs. *Academy of Management Perspectives* 21: 51–63. [CrossRef]
- Greenhow, Christine, and Sarah Galvin. 2020. Teaching with Social Media: Evidence-Based Strategies for Making Remote Higher Education Less Remote. *Information and Learning Sciences* 121: 513–24. [CrossRef]
- Greenhow, Christine, Sarah M. Galvin, Diana L. Brandon, and Emilia Askari. 2020. A Decade of Research on K–12 Teaching and Teacher Learning with Social Media: Insights on the State of the Field. *Teachers College Record: The Voice of Scholarship in Education* 122: 1–72. [CrossRef]
- Hair, Joe F., Christian M. Ringle, and Marko Sarstedt. 2011. PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice* 19: 139–52. [CrossRef]
- Hartman, Joel, Charles Dziuban, and Patsy Moskal. 2019. Faculty Satisfaction in ALNs: A Dependent or Independent Variable? *Online Learning* 4: 155–79. [CrossRef]
- Henseler, Jörg, Christian M. Ringle, and Rudolf R. Sinkovics. 2009. The Use of Partial Least Squares Path Modeling in International Marketing. *Advances in International Marketing* 20: 277–319. [CrossRef]
- Hiltz, Starr Roxanne, Peter Shea, and Eunhee Kim. 2010. Using Focus Groups to Study ALN Faculty Motivation. *Journal of Asynchronous Learning Networks* 14: 21–38.
- Hodges, Charles B., Stephanie Moore, Barbara B. Lockee, Torrey Trust, and Mark Aaron Bond. 2020. The Difference between Emergency Remote Teaching and Online Learning. *Educause Review*. Available online: <https://tinyurl.com/rekxcrcq> (accessed on 14 September 2022).
- Jacobs, Pearl. 2013. The Challenges of Online Courses for the Instructor. *Research in Higher Education Journal* 21: 1–18.
- Kandasamy, Indira, and Sreekumar Ancheri. 2009. Hotel Employees' Expectations of QWL: A Qualitative Study. *International Journal of Hospitality Management* 28: 328–37. [CrossRef]
- Keengwe, Jared, and Terry T. Kidd. 2010. Towards Best Practices in Online Learning and Teaching in Higher Education. *MERLOT Journal of Online Learning and Teaching* 6: 533–41.
- Krugielka, Agnieszka, Grazyna Bartkowiak, and Sebastian Dama. 2021. Functioning of Academic Teachers in the Conditions of the COVID-19 Epidemic in Poland in 2020 (Qualitative Test on the Basis of Self-Assessment). *European Research Studies Journal* 24: 269–87. [CrossRef]
- Krutka, Daniel G., Marie K. Heath, and K. Bret Staudt Willet. 2019. Foregrounding Technoethics: Toward Critical Perspectives in Technology and Teacher Education. *Journal of Technology and Teacher Education* 27: 555–74.
- Li, Chi-Sung, and Beverly Irby. 2008. An Overview of Online Education: Attractiveness, Benefits, Challenges, Concerns and Recommendations. *College Student Journal* 42: 449–59.
- Mahadik, Aishwarya, Neha Bajpai, Garima Sharma, and D. S. Rathore. 2017. Prevalence and statistical analysis of musculoskeletal disorders among academicians from higher education. *International Journal of Physiotherapy and Research* 5: 1807–11. [CrossRef]
- McCoy, Shannon K., Ellen E. Newell, and Susan K. Gardner. 2013. Seeking Balance: The Importance of Environmental Conditions in Men and Women Faculty's Well-Being. *Innovative Higher Education* 38: 309–22. [CrossRef]
- Minutillo, Susannah, Michelle Cleary, and Denis Visentin. 2020. The Mental Health of Online Learners within the Educational Sector. *Issues in Mental Health Nursing* 41: 963–65. [CrossRef]
- Mishra, Lokanath, Tushar Gupta, and Abha Shree. 2020. Online Teaching-Learning in Higher Education during Lockdown Period of COVID-19 Pandemic. *International Journal of Educational Research Open* 1: 100012. [CrossRef]
- Moore, Michael G., and Greg Kearsley. 1996. *Distance Education: A Systems View*. Belmont, Albany and Bonn: Wadsworth.

- Mudrak, Jiri, Katerina Zabrodská, Petr Kveton, Martin Jelínek, Marek Blatný, Iva Solcova, and Katerina Machovcova. 2018. Occupational Well-Being Among University Faculty: A Job Demands-Resources Model. *Research in Higher Education* 59: 325–48. [CrossRef]
- Mupinga, Davison M. 2005. Distance Education in High Schools: Benefits, Challenges, and Suggestions. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas* 78: 105–9. [CrossRef]
- Murphy, Michael P. A. 2020. COVID-19 and Emergency ELearning: Consequences of the Securitization of Higher Education for Post-Pandemic Pedagogy. *Contemporary Security Policy* 41: 492–505. [CrossRef]
- Naylor, Dawn, and Julie Nyanjom. 2021. Educators' Emotions Involved in the Transition to Online Teaching in Higher Education. *Higher Education Research & Development* 40: 1236–50. [CrossRef]
- Ntereke, Beauty Boikanyo, Brigid Goitse Conteh, Boitumelo Tiny Ramoroka, and Keokgale Basetsana Tlhobogang. 2021. Teaching and Learning Online during the Pandemic: Lecturers' Perceptions and Experiences. *MOSENODI: International Journal of the Educational Studies* 24: 22–47. Available online: <https://journals.ub.bw/index.php/mosenodi/article/view/1983/1261> (accessed on 14 September 2022).
- Ortan, Florica, Ciprian Simut, and Ramona Simut. 2021. Self-Efficacy, Job Satisfaction and Teacher Well-Being in the K-12 Educational System. *International Journal of Environmental Research and Public Health* 18: 12763. [CrossRef] [PubMed]
- Osranek, Regina, and Klaus J. Zink. 2014. Corporate Human Capital and Social Sustainability of Human Resources. In *Sustainability and Human Resource Management*. Edited by Ina Ehnert, Wes Harry and Klaus J. Zink. CSR, Sustainability, Ethics & Governance. Berlin and Heidelberg: Springer, pp. 105–26. [CrossRef]
- Owens, Joan, Carol Kottwitz, Jane Tiedt, and Jeffery Ramirez. 2018. Strategies to Attain Faculty Work-Life Balance. *Building Healthy Academic Communities Journal* 2: 58. [CrossRef]
- Pagán-Castaño, Esther, Araceli Maseda-Moreno, and Cristina Santos-Rojo. 2020. Wellbeing in Work Environments. *Journal of Business Research* 115: 469–74. [CrossRef]
- Pfeffer, Jeffrey. 2010. Building Sustainable Organizations: The Human Factor. *Academy of Management Perspectives* 24: 34–45. [CrossRef]
- Ringle, Christian M., Sven Wende, and Jan-Michael Becker. 2015. *SmartPLS 3*. Bönningstedt: SmartPLS GmbH.
- Rumble, Greville. 2001. Whose Benefits, Whose Costs? *Inaugural Lecture* 21. Available online: <http://www.c3l.uni-oldenburg.de/cde/econ/readings/rumb101b.pdf> (accessed on 14 September 2022).
- Saha, Sourav Mohan, Sadia Afrin Pranty, Md. Jaber Rana, Md. Jahurul Islam, and Md. Emran Hossain. 2022. Teaching during a Pandemic: Do University Teachers Prefer Online Teaching? *Heliyon* 8: e08663. [CrossRef]
- Seipel, Matthew T., and Lisa M. Larson. 2018. Supporting Non-Tenure-Track Faculty Well-Being. *Journal of Career Assessment* 26: 154–71. [CrossRef]
- Sekaran, Uma, and Roger Bougie. 2016. *Research Methods for Business: A Skill-Building Approach*, 7th ed. Chichester: Wiley.
- Sintema, Edgar John. 2020. Effect of COVID-19 on the Performance of Grade 12 Students: Implications for STEM Education. *Eurasia Journal of Mathematics, Science and Technology Education* 16: em1851. [CrossRef]
- Tallent-Runnels, Mary K., Julie A. Thomas, William Y. Lan, Sandi Cooper, Terence C. Ahern, Shana M. Shaw, and Xiaoming Liu. 2006. Teaching Courses Online: A Review of the Research. *Review of Educational Research* 76: 93–135. [CrossRef]
- Toto, Giusi Antonia, and Pierpaolo Limone. 2021. Motivation, Stress and Impact of Online Teaching on Italian Teachers during COVID-19. *Computers* 10: 75. [CrossRef]
- Tsegay, Samson Maekele, Muhammad Azeem Ashraf, Shahnaz Perveen, and Mulugeta Zemuy Zegergish. 2022. Online Teaching during COVID-19 Pandemic: Teachers' Experiences from a Chinese University. *Sustainability* 14: 568. [CrossRef]
- Van Wart, Montgomery, Anna Ni, Pamela Medina, Jesus Canelon, Melika Kordrostami, Jing Zhang, and Yu Liu. 2020. Integrating Students' Perspectives about Online Learning: A Hierarchy of Factors. *International Journal of Educational Technology in Higher Education* 17: 53. [CrossRef]
- Wolff, Lili-Ann, and Peter Ehrström. 2020. Social Sustainability and Transformation in Higher Educational Settings: A Utopia or Possibility? *Sustainability* 12: 4176. [CrossRef]
- Wu, Jen-Her, Robert D. Tennyson, and Tzyh-Lih Hsia. 2010. A Study of Student Satisfaction in a Blended E-Learning System Environment. *Computers & Education* 55: 155–64. [CrossRef]
- Zaugg, Robert J., Adrian Blum, and Norbert Thom. 2001. *Sustainability in Human Resource Management*. Berne: IOP-Press. Available online: <https://empiricon.ch/assets/Publikationen/Personalmanagement/03.5-EN-sustainability-in-hrm-200106.pdf> (accessed on 14 September 2022).

Article

An Investigation into the Effect of Knowledge Management on Employee Retention in the Telecom Sector

Nurul Mohammad Zayed ¹, Friday Ogbu Edeh ², Khan Mohammad Anwarul Islam ³, Vitalii Nitsenko ^{4,5,*}, Tetiana Dubovyk ⁶ and Hanna Doroshuk ^{7,8}

- ¹ Department of Business Administration, Faculty of Business & Entrepreneurship, Daffodil International University, Dhaka 1341, Bangladesh
 - ² Department of Business Administration, Faculty of Management Sciences, Alex Ekwueme Federal University, Abakaliki P.M.B 1010, Nigeria
 - ³ Department of Business Administration, The Millennium University, Dhaka 1217, Bangladesh
 - ⁴ Department of Entrepreneurship and Marketing, Institute of Economics and Management, Ivano-Frankivsk National Technical Oil and Gas University, 76019 Ivano-Frankivsk, Ukraine
 - ⁵ SCIRE Foundation, 00867 Warsaw, Poland
 - ⁶ Department of Journalism and Advertising, State University of Trade and Economics, 02156 Kyiv, Ukraine
 - ⁷ Department of Management, Odesa Polytechnic National University, 65044 Odesa, Ukraine
 - ⁸ Munich School of Management, Institute for Strategy, Technology and Organization, Ludwig-Maximilians-Universität München, Geschwister-Scholl-Platz 1, 80539 München, Germany
- * Correspondence: vitaliinitsenko@onu.edu.ua; Tel.: +380-939983073

Abstract: Employees in the telecom sector are knowledge workers and, thus, managers, HR professionals, and policymakers in the industry need to retain them through knowledge management policies. It is against this premise that this study investigated the effect of knowledge management on employee retention in the telecom sector. Research design employed in this study is a cross-sectional survey with an accessible population of thirty telecom companies in the southeastern region of Nigeria using a simple random sampling technique. The sample size was determined with the Krejcie and Morgan sample size determination table. A questionnaire was used as an instrument for data collection. Respondents' profiles were analysed with frequency distribution while the formulated hypotheses were analysed with linear regression. The study found that knowledge management dimensions have a significant effect on the measures of employee retention. The study concludes that knowledge management measured in terms of knowledge acquisition, knowledge storage, and knowledge sharing predicted employee retention that is measured by supervisor support, coworkers support, and flexible working arrangements. One of the implications of this study is that managers of telecom companies should liaise with their board of directors to make funds available that would be used to train employees to acquire relevant knowledge that is needed in the telecom industry.

Citation: Zayed, Nurul Mohammad, Friday Ogbu Edeh, Khan Mohammad Anwarul Islam, Vitalii Nitsenko, Tetiana Dubovyk, and Hanna Doroshuk. 2022. An Investigation into the Effect of Knowledge Management on Employee Retention in the Telecom Sector. *Administrative Sciences* 12: 138. <https://doi.org/10.3390/admsci12040138>

Received: 6 September 2022

Accepted: 11 October 2022

Published: 17 October 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: knowledge management; employee retention; telecom; flexible working arrangements; supervisor support; coworker support

1. Introduction

Employee retention has been a major issue facing both small and multinational corporations across the globe (Edeh et al. 2021b; Kularathne and Senevirathne 2020; Biason 2020; Fukui et al. 2019; Nagabhaskar 2014; Aguenza and Som 2012). This is caused by changing demographics, need for achievement, entrepreneurial intention, entrepreneurial orientation, job insecurity, technological uncertainty, unhealthy working environment, lack of management skills, insufficient knowledge of leadership typologies, absence of resilience mechanism, as well as the lack of knowledge management strategies (Edeh et al. 2022; Edeh and Ukpe 2019; Sawaneh and Kamara 2019). On the other hand, recent evidence from developed economies revealed that high employee turnover was caused by non-material factors (Kuzior et al. 2022). It is based on the above contentions that

scholars have challenged business practitioners to employ sustainable retention strategies, such as supervisor support, internal promotion, coworker support, working environment, flexible working arrangements, career advancement, and training and development, which would prevent their employees from leaving for other organisations (Edeh et al. 2021a; Sishuwa and Phiri 2020; Edeh et al. 2020; Ohunakin et al. 2019; Choi 2019). In addition, studies have shown that for employees to remain with their organisation, especially in a digital economy dispensation, managers, supervisors, and human resource professionals must deploy knowledge management as a strategic tool for retaining their employees; otherwise, they could leave unannounced thereby incurring more expenditure for the organisation to recruit new individuals that would take their place (Edeh et al. 2022).

However, in a knowledge-based work environment such as the telecom sector, managers and human resource professionals had been advised to employ knowledge management as an instrument to foster the retention of their valued employees (Enyioko and Ikoro 2018; Serenko 2022). Knowledge management is a human resource policy that is geared toward the prevention of employee turnover, social loafing, and other counterproductive work behaviours in most organisations (Algaribeh 2018). Prior studies have shown that knowledge management engenders employee effectiveness, innovation capability, discretionary work behaviour, corporate sustainability, employee job satisfaction, firm survival, and entrepreneurial performance (Edeh et al. 2022; Edeh and Ukpe 2019; Mustafa et al. 2021; Kassaneh et al. 2021; Li et al. 2020; Okafor et al. 2019; Valmohammadi et al. 2019; Alias et al. 2018; Nwaiwu and Imafidon 2017).

The aforementioned studies have revealed that some of the major problems facing telecom companies in sub-Saharan Africa, especially in Nigeria, is their inability to implement effective retention plans that would discourage talented employees from leaving (Enyioko and Ikoro 2018; Zakariya and Shuaibu 2021). Research has shown that the management of telecom firms has not fully implemented flexible working periods for their employees and thus, prevents them from having their time and improving their wellbeing (Okafor et al. 2019; IBN 2022; Magaji et al. 2021). It was also discovered that top-level managers in most telecom firms fail to provide support to their subordinates when there is a need for assistance, and also some coworkers that are more knowledgeable than others sometimes do not want to share their knowledge with their colleagues (Zakariya and Shuaibu 2021; Baridula and Mekuri-Ndimele 2020). These are the major reasons why this study is necessary, especially in the telecom work environment where retention policies such as supervisor support, coworker support, and flexible working arrangements are relevant, as drawn from the preceding literature.

Drawing from the above, prior studies by Edeh et al. (2022); Edeh and Ukpe (2019); Li et al. (2020); Okafor et al. (2019); Valmohammadi et al. (2019); and Alias et al. (2018) had investigated the predictability of knowledge management on other criterion variables other than employee retention with a specific focus on telecom companies in sub-Saharan Africa work environments. This has created a research gap that this study has filled. It was this vacuum that motivated the researchers to embark on this study by investigating the effect of knowledge management on employee retention in the telecom sector within the sub-Saharan work setting with human capital theory and social exchange theory as the baseline theories. Meanwhile, what necessitated the choice of the telecom sector in this study is because of its contribution to the economic development of the world at large. Research has shown that in 2021 alone, the telecom industry contributed about USD 4.5 trillion to the global GDP (O'Dea). It was further projected that by 2025 the sector would have added USD 4.9 trillion to the global GDP (O'Dea). In Nigeria, the telecom sector contributed about 7.7% of the country's GDP in 2012; it dropped in 2013 by 7.4%; and it increased to 7.6%, 8.5%, 9.13%, 8.7%, 9.9%, 10.6%, and 17.5% in 2014, 2015, 2016, 2017, 2018, 2019, and 2020, respectively (Osugwu 2021).

2. Literature Review

2.1. Knowledge Management

The concept of knowledge management was popularized by Nonaka and Takeuchi (1995) in their writing “knowledge-creating company”. The authors were provoked by the constant technological changes in the organisation and advocated that the essence of organisational existence is to constantly create knowledge that would assist them in the competitive business environment (Scarborough and Carter 2000). Nonaka and Takeuchi (Nonaka and Takeuchi 1995) went further to opine that any organisation that wants to remain relevant in the digital economy must create knowledge that would provoke its employees to learn and discourage them from leaving. It is on this note that human resource scholars such as Armstrong (2009), Edeh et al. (2022), and Sayyadi (2009) argued that the new business economy revolves around knowledge management. However, knowledge management has received much attention because of its meaning and benefits. Early scholars of knowledge management defined knowledge management as any organisation process that has to do with creating, attracting, storing, sharing, and utilizing knowledge to promote learning and high performance (Scarborough and Carter 2000; Scarborough et al. 1999). Using different binoculars, Mustafa et al. (2021) accentuate that knowledge management is concerned with the process of selecting qualified individuals with the required knowledge that is needed by a particular business or an organisation. In contrast to the above definition, Sayyadi (2009) asserts that knowledge management is a new human resource management policy that is designed to produce quality and comprehensive knowledge in the workplace. Deviating from the above submission, Kassaneh et al. (2021) and Perevozova et al. (2019) suggested that knowledge management is not only domiciled with human resource professionals but it is a tool that can be used to attract new ideas or innovations from within or outside the organisation. Still, in the search for what knowledge management represents, Ogunbanwo et al. (2021) argued that knowledge management refers to a process of acquiring new knowledge, keeping it in databases as storage, and utilizing it for the benefit of the organisation. Simplifying it further, Edeh et al. (2022) contended that knowledge management is human resource nomenclature that is concerned with knowledge acquisition, knowledge storage, and knowledge sharing or distribution amongst coworkers to achieve formulated goals.

Drawing from the above contentions, it appears that most of the authors focused their satellite on already acquired knowledge, leaving the employee who is the vehicle through which knowledge is driven to the stakeholders of the organisation. It is based on this premise that Nurdin and Yusuf (2020) elucidated that knowledge management represents organisational strategies for sieving knowledge from its employees and sharing it to other members of the organisation. Supporting the position above, Favoretto and Carvalho (2021) believe that any policy that encourages employees to release any information capable of solving the problems facing the organisation is termed knowledge management. In congruence with the above, Ogunbanwo et al. (2021) argued that employees may possess accurate knowledge that can be used to tackle the organisational problem but the implementation is domiciled with the managers. What this implies is that an employee can have knowledge that would turn around the future of the business but sometimes managers may not give them that opportunity because of the fear of losing their position (Sayyadi 2009; Favoretto and Carvalho 2021). To salvage these challenges, Kassaneh et al. (2021) suggested that effective knowledge management involves every member of the organisation. Li et al. (2020) admitted that the essence of knowledge management is to prevent talented employees from leaving the organisation. Nurdin and Yusuf (2020) concurred with Li et al. (2020) and advised human resource professionals or management teams to harvest knowledge from their subordinates by creating a friendly work atmosphere that would motivate the subordinates to share their idea concerning a particular issue.

Prior research has shown that knowledge management predicted innovation capability (Edeh et al. 2022). Kotwal and Gupta (2021) examined the role that knowledge management plays in the telecom sector of Jammu and discovered that knowledge management

significantly impacted the competitive advantage of the firms. Alrefaai and Khalil's (2019) empirical investigation on knowledge management and learning organisation, which was conducted in telecom enterprises in Damascus, shows that the dimensions of the predictor variable correlated with a learning organisation. Okafor et al. (2019) investigated knowledge management strategies and firm performance in telecom firms in Port Harcourt and discovered that knowledge creation, knowledge storage, knowledge sharing, and knowledge application have a significant positive correlation with corporate performance. Algaribeh (2018) conducted a study on the influence of knowledge management on firm performance in Jordan telecom companies and found knowledge acquisition, knowledge sharing, knowledge interpretation, as well as organisational memory predicts the performance of telecom firms. Nwaiwu and Imafidon (2017) investigated the relationship between knowledge management and organisational survival in telecom firms in Nigeria and found that knowledge acquisition, knowledge storage, knowledge sharing, and knowledge utilisation correlated with the survival of telecom enterprises.

From the existing knowledge management literature above, it was shown that the three validated dimensions of knowledge management include knowledge acquisition, knowledge storage, and knowledge sharing (Edeh et al. 2022; Algaribeh 2018; Okafor et al. 2019; Nwaiwu and Imafidon 2017; Nina et al. 2021). Knowledge acquisition refers to the process of obtaining relevant knowledge that would be useful to the organisation (Edeh et al. 2022). Examples include suggestions and ideas from the subordinates during board meetings, and sending members of staff to attend conferences, workshops, and other training that is considered beneficial for the growth of the organisation (Mustafa et al. 2021). Knowledge storage is concerned with the process or systems of keeping acquired knowledge so that whenever it is needed to solve problems in the organisation, it can be called up at any time (Okafor et al. 2019). Examples include storages such as databases, office files, and computer memory cards, to mention but a few (Li et al. 2020; Perevozova et al. 2019). Knowledge sharing is concerned with the process of disseminating or distributing knowledge amongst members of the organisation (Nwaiwu and Imafidon 2017).

2.2. Employee Retention

Employee retention is still a very serious issue facing managers in different organisations and in every sector of the economy across the globe. This is due to inadequate managerial skills on the part of the leadership of many businesses across the world (Mahadi et al. 2020; Diah et al. 2020; Malik et al. 2020). However, scholars had advocated that retaining employees depends on the business environment where the organisation is located (Diah et al. 2020; Adedeji and Ugwumadu 2018). This may be true especially in sub-Saharan Africa work settings where employees are encouraged to notify their management before leaving (Adedeji and Ugwumadu 2018). Employee retention refers to the procedure of ensuring that employees are not allowed to leave the organization in an unplanned manner (Ohunakin et al. 2019; Adedeji and Ugwumadu 2018). Ibrahim (2019) has a different view regarding employee retention. He contended that any plan, strategy, or policy that is designed by the human resource department to encourage employees to stay is termed employee retention. While considering the above assertion, Mahadi et al. (2020) opined that the reasons why organisations strive to retain their employees are to avoid leaking their business secrets to competitors. This is very crucial and must be avoidable by telecom managers, especially as the industry is intensely occupied with competitiveness. In addition, researchers were of the view that when it comes to retaining employees, management should look beyond cultural affiliation and focus on providing support to their subordinates as they value it more than rewards (Magaji et al. 2021; Diah et al. 2020; Serenko 2022). The above argument may be true in the telecom industry where employees prefer to acquire new knowledge that would give them a competitive edge in the future. In line with the above, Naz et al. (2020) stressed that employees that do not receive support from their supervisors or coworkers are usually tempted to engage in social loafing at work. Adding to the statement above, Mahadi et al. (2020) admitted that

social loafing engagement has the capacity of generating conflict amongst team members and thereafter fosters mistrust in the workplace.

However, Sija (2022) asserts that the process of retaining employees varies from one country to another. Hence, employee retention is also dependent on the type of business or industry. Malik et al. (2020) contended that the policies used for retaining employees in the oil and gas industry cannot be used in the telecom industry. Kigathi and Waiganjo (2017) also added that to retain employees in the telecom industry, managers and human resource professionals should consider the deployment of flexible working arrangements, coworker support, supervisor support, and working environments. In addition, Kundu and Gahlawat (2016) posited that due to the competitive nature of telecom sector, employees in the industry do not necessarily pay attention to financial motivation but prefer a work environment that provides them with the opportunity to work from the comfort of their homes. Some authors have linked employee retention to management's ability to compensate workers in terms of injury, economic disruption, and other factors that may lead to changes in their living standards.

Nevertheless, studies have shown that employee retention is the function of the human resource department (Naz et al. 2020; Chatzoudes and Chatzoglou 2022; Eguchi et al. 2019). This may be the reason why Ashton (2017) elucidated that the major responsibility of the human resource department is to ensure that recruited employees do not leave the organisation due to management deficiencies. Therefore, to retain employees in the telecom sector, Kumari (2018) strongly advocated for the implementation of a flexible working period and support from supervisors and colleagues. Corroborating with the above submission, Magaji et al. (2021) contended that every industry has its peculiarity when it comes to employee retention and, hence, suggested that managers of telecom businesses should provide supervisory support to their subordinates to avoid high employee turnover. Drifting away from the various arguments about employee retention, Ashton (2017) clarifies that employee retention refers to a process of ensuring that employees are provided with necessary policies that would make them happy to stay with their enterprise rather than allowing them to quit. In this manner, what inspires employees to stay in the organisation depends on the industry and not necessarily the amount of money they receive at the end of the day. Drawing from the review above, it is pertinent to note that in the telecom sector, especially those operating in sub-Saharan Africa, employees prefer to remain with their employers if they are supported by their supervisors separate from their coworkers, including the provision of working from their homes (Enyioko and Ikoro 2018; Gajendra et al. 2021). This position is in line with the submission of Zakariya and Shuaibu (2021), who posited that telecom companies in Nigeria now encourage their employees with the opportunity to work from home.

Nonetheless, validated dimensions of employee retention from the various literature includes working environment, job satisfaction, performance appraisal, career opportunities, training and development, empowerment, fringe benefits, pay, work-life balance, coworker support, supervisor support, employee recognition, remunerations, flexible working arrangements (Sawaneh and Kamara 2019; Choi 2019; Sija 2022; Chatzoudes and Chatzoglou 2022), working experience, training and development, job satisfaction, management support, prompt payment of salary, coworker support, supervisor support, provision of the good working environment (Kularathne and Senevirathne 2020; Jayaswal 2021; Edeh and Udensi 2017), financial rewards, management, recognition, psychological contract, work-life balance, career development, job security and job characteristics (Nagabhaskar 2014; Aгуenza and Som 2012; Sishuwa and Phiri 2020). In line with the review of the literature above, this research would adapt supervisor support, coworker support, and flexible working arrangements as dimensions of employee retention because of their reliability and validity in many studies (Edeh et al. 2021a, 2021b; Eguchi et al. 2019; Kumari 2018; Pap et al. 2021; Campbell 2015). Supervisor support refers to the assistance from managers or supervisors to their subordinates within and outside the workplace (Eguchi et al. 2019). It can also be a formal work relationship between any top-level managers and their subor-

dinates (Pap et al. 2021). Coworker support is helping behaviour from colleagues in the same organisation (Kumari 2018). Edeh et al. (2021a) asserts that any organisation in which coworkers support each other to achieve organisational objectives would never be defeated by any competitor. A flexible working arrangement is an organisation policy that allows employees to work from the comfort of their homes or work shift hours, which would help employees take care of their family needs (Campbell 2015; Omondi and K'Obonyo 2018). Hayman (2009) accentuates that most telecom firms across the globe are adopting flexible working arrangements as a competitive strategic advantage and also to improve the wellbeing of their employees.

2.2.1. Knowledge Acquisition and Flexible Working Arrangements

Knowledge acquisition is the process through which knowledge is acquired or attracted to utilize it for organisational prosperity. In this regard, the acquired knowledge is expected to enhance the effectiveness of workers in the telecom sector, which would equip them to work at their homes according to the specified objective (Okafor et al. 2019). It is against this backdrop that Omondi and K'Obonyo (2018) opined that a flexible working arrangement goes a long way in reducing organizational traffic and stated that it was a result of new technological knowledge that necessitated flexible working schedules in most firms. Going by the assertion above, it can be deduced that knowledge acquired without being utilized has not solved any problem in the organisation. Therefore, Algaribeh (2018) posited that it behoves managers of telecom companies to ensure that acquired knowledge is effectively utilized by employees wherever they are working. Research has shown that a flexible working arrangement is one of the major instruments for retaining employees in the workplace (Idowu 2020). Renard et al. (2021) discovered that in the new normal business environment, employees prefer to work in organisations that provide flexible working schedules and support knowledge creation. In addition, it was also found that flexible working arrangements policy in the workplace avails employees with the opportunity to acquire more knowledge that could be used to solve organisational problems (Austin-Egole et al. 2020). Meanwhile, Baridula and Mekuri-Ndimele (2020) contended that the retention of employees in the telecom sector is highly dependent on the knowledge acquired through training, discussions, and contributions during meetings. It is against this backdrop that the first research hypothesis is formulated.

H1: *Knowledge acquisition has a significant effect on flexible working arrangements.*

2.2.2. Knowledge Storage and Supervisor Support

To store relevant knowledge in the formal organisation is to preserve wisdom that could be used in the future and, hence, management support is very necessary for retaining employees. On the other hand, knowledge storage is based on acquired wisdom and thus, retrieving from wherever it is stored requires the approval of the managers responsible for knowledge management in the telecom industry (Okafor et al. 2019). Supervisor support engenders employees' job satisfaction which fosters their emotional stability to stay with their firms instead of moving to another (Kularathne and Senevirathne 2020). Again, stored knowledge in databases or office files when approved for use by top management provides a harmonious atmosphere between the employee and the supervisor (Kumari 2018). It is this relationship that promotes employee retention because it was revealed that employees prefer a work environment that is free from initiating structure but they would prefer a consideration relationship with management (Zakariya and Shuaibu 2021). This study, however, advocates that knowledge storage is very essential to retaining telecom employees, which is the function of supervisors. Based on this argument, the second research hypothesis is formulated.

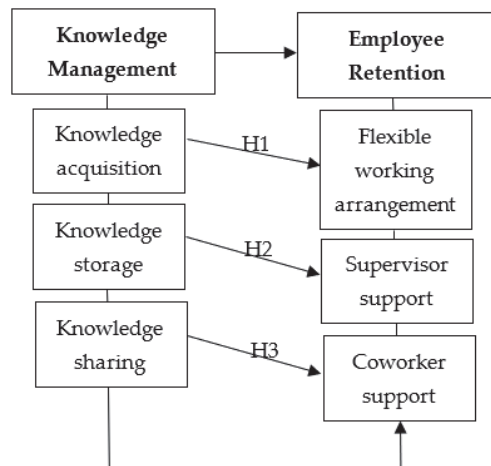
H2: *Knowledge storage has a significant effect on supervisor support.*

2.2.3. Knowledge Sharing and Coworker Support

Sharing knowledge in the workplace is very significant when it comes to employee retention in every organisation, including telecom enterprises. Scholars have argued that when an employee shares ideas or suggestions that could solve problems in the organisation, it goes a long way to motivating other colleagues to provide support to each other (Hayman 2009; Liu et al. 2020). This was proven by Zakariya and Shuaibu (2021) when they contended that coworker support is a relationship that goes with altruism. Therefore, knowledge sharing promotes coworker support in the workplace as a result of previous exchanges exhibited by one of the employees during working hours (Castaneda and Cuellar 2020). Nwaiwu and Imafidon (2017) elucidated that employees in the telecom industry provide support to each other by sharing knowledge that could assist one another when needed. On the one hand, Castaneda and Cuellar (2020) maintained that the issue of knowledge sharing is considered as a factor to stimulate employees to support each other in the workplace and also strengthens their morale to remain within their organisation. Drawing from the contention, the third hypothesis is formulated.

H3: Knowledge sharing has a significant effect on coworker support.

Figure 1 below shows the conceptual framework of the study indicating how research assumptions were developed. In the framework, the predictor variable is knowledge management with its dimensions: knowledge acquisition, knowledge storage, and knowledge sharing. On the right-hand side is the criterion variable (employee retention) with its indicators: flexible working arrangement, supervisor support, and coworker support.



Source: Authors' conceptualization

Figure 1. Conceptual framework.

2.3. Theoretical Underpinning

In line with the review of literature, the theories that underpinned this study are the human capital theory by Becker (1964), and the social exchange theory by Homans (1958). Human capital represents the skills, abilities, and knowledge of individuals employed in the organisation (Jason and Ramsden 2021). The tenet of human capital theory in this study is that employees are assets to the organisation that must be provided with relevant knowledge that would enable them to accomplish their task; otherwise, when the old knowledge fades, they would be tempted to leave the organisation in search of greener pasture elsewhere. Social exchange theory, on the other hand, is a relationship based on costs and benefits (Ogbonna and Mbah 2022). The premise of the social exchange theory in

this study is that employee retention is dependent on the amount of knowledge acquired from the inception of joining the organisation.

2.4. Research Objectives

The main objective of this study is to investigate the effect of knowledge management on employee retention in the telecom sector. However, drawing from the literature review, the study enumerated the following specific objectives:

- (1) To investigate the significant effect of knowledge acquisition on flexible working arrangements
- (2) To examine the significant effect of knowledge storage on supervisor support
- (3) To determine the significant effect of knowledge sharing on coworker support

3. Research Methods

The research method used in this research is quantitative because it involves the use of a questionnaire for data collection (Sreejesh et al. 2014), while the research design is a cross-sectional survey which is a snapshot of the representative population with an equal chance and also supports the use of a questionnaire for data collection within a short period (Saunders et al. 2009; Bryman and Bell 2007). The target population for this study consists of fifty telecom companies that are registered with the Enugu State Ministry of Science and Technology with head offices in the southeast region of Nigeria.

3.1. Sampling and Data Collection

A purposive sampling technique was used to select thirty major telecom companies with head offices in Enugu state, which is considered the largest city in the region. One of the authors that resides in Nigeria was assigned to collect the data relating to knowledge management and employee retention. Informed consent of the participants was sought through the general managers of each of the telecom companies. The authors of this study explained to the participants that the essence of the study is to find out the effect of knowledge management on employee retention in the telecom sector. In addition, the participants were duly informed that their participation in the study would not harm them. They were further informed that their identities (information) would not be reported in the research. The general managers of each telecom firm were also informed that the names of their enterprises would not be mentioned in the research. Lastly, the researchers informed the participants that the research is purely an academic exercise carried out by a group of academics from different institutions across the world and that the study was not in any way funded by any organisation. It was after the fulfilment of ethical conditions by both parties that the general managers instructed the authors to submit copies of the questionnaire and promised that it would be distributed to every member of the organisation. Thereafter, the general managers informed the researchers to return within two months to collect the instrument. It was discovered that the thirty selected telecom companies have a staff strength of one thousand, two hundred (1200) employees (sample frame) at the time this research was carried out. To draw the sample size from the sample frame, the researchers employed the Krejcie and Morgan (1970) sample size determination table and the result was two hundred and ninety-one (291). The researchers administered two hundred and ninety-one (291) copies of the questionnaire and when the feedback was received, it was discovered that about two hundred and forty-two (242) copies of the questionnaire were correctly filled and marked valid for analysis while the remaining forty-nine (49) copies were wrongly filled and marked invalid.

3.2. Measures

A validated Knowledge Management Questionnaire (KMQ) containing knowledge acquisition, knowledge storage, and knowledge sharing was adapted from Valmohammadi and Ahmadi (2015) and Biasutti and EL-Deghaidy (2012). The instrument was confirmed to be valid and reliable by other knowledge management scholars (Edeh et al. 2022; Mustafa et al.

2021; Valmohammadi et al. 2019; Alias et al. 2018; Nina et al. 2021; Tadesse 2020). On the other hand, a validated Employee Retention Questionnaire (ERQ) containing supervisor support, coworker support, and flexible working arrangements was adapted from Dileep and Normala (2014) and confirmed in the studies of Campbell (2015), Kumari (2018), Eguchi et al. (2019), Pap et al. (2021), and Edeh et al. (2021a, 2021b).

3.3. Data Analysis Technique

Frequency distribution was used to analyse participants' demographic profiles such as gender, age, working experience and, education. On the other hand, linear regression was employed as a statistical tool to analyse the three formulated research hypotheses. Statistical software used to analyse the data is IBM Statistical Package for Social Sciences (21.0).

4. Results

This section covers the analysis of demographic characteristics as well as the formulated research hypotheses. Table 1 results on demographics of participants show that 87 participants, representing 36.0%, fall within 18–35 years; 97 respondents, representing 40.1%, fall within 36–45 years; and 58 participants, representing 24.0%, fall within 46 years and above. Demographic results of the participants indicate that the majority of the participants are still keen to provide relevant information associated with knowledge management and employee retention. Gender results indicated that 64 participants, representing 26.4%, are females while 178 participants, representing 73.6%, are males. This implies that the number of males that took part in the current research are greater compared to the females. Work experience results revealed that 52 participants, representing 21.5%, have worked in the telecom sector for about 1–6 years; 96 respondents, representing 39.7%, have worked in the telecom sector for about 7–12 years, and 94 respondents, representing 38.8%, have worked in telecom sector for about 13 years and above. This indicates that the majority of the participants have worked in the telecom sector for about 7–13 years and above. Education qualification result shows that 27 participants, representing 11.2%, hold other educational qualifications other than the ones stated in the instrument; 63 respondents, representing 26.0%, hold diploma certificates; 141 participants, representing 58.3%, hold a bachelor's degree; and 11 participants, representing 4.5%, hold a master's degree. These results suggest that the majority of the respondents are educated up to tertiary institutions, which implies that they were capable of answering the research questions in the instrument without any interpreter.

Table 1. Demographic characteristics.

Variables	Frequency	(%)
Age (years)		
18–35	87	36.0
36–45	97	40.1
46 and above	58	24.0
Gender		
Male	178	73.6
Female	64	26.4
Work experience (years)		
1–6	52	21.5
7–12	96	39.7
13 and above	94	38.8
Education		
Others	27	11.2
Diploma certificate	63	26.0
Bachelor's degree	141	58.3
Master's degree	11	4.5

Table 2 below shows the results of the analysed hypotheses. From the table, it was revealed that knowledge management dimensions have a significant effect on employee retention measures. In specific terms, hypothesis one result indicated that knowledge acquisition has a significant positive effect on flexible working arrangements with a moderate coefficient determination of 0.613^a, and a 0.000 level of significance, which is less than 0.001 ($p < 0.001$). The hypothesis two result shows that knowledge storage has a significant positive effect on supervisor support with a high coefficient of determination of 0.777^a, and a 0.000 significance level, which is less than 0.001 ($p < 0.001$). Hypothesis three results also indicated that knowledge sharing has a significant positive effect on coworker support, having the highest coefficient determination of 0.809^a and a 0.000 level of significance, which is less than 0.001 ($p < 0.001$). The decision to reject or accept the null hypotheses is based on the three model results of calculated F values which are greater than the tabulated values (144.605; 365.820; 453.358 > 3.89). Lastly, the R² of the models revealed that 38%, 60%, and 65% of the total variation in knowledge management can be explained by employee retention. In line with the calculated values of F, the study therefore rejects the null hypotheses and accepts the alternate hypotheses.

Table 2. Hypotheses results.

R	R ²	Adjusted R ²	T-Stat.	β	Df	N	F Stat.	Std. Error	Sig.
0.613 ^a	0.376	0.373	12.025	0.613 *	3.89	242	144.605	0.046	0.000
0.777 ^a	0.604	0.602	19.126	0.777 *	3.89	242	365.820	0.041	0.000
0.809 ^a	0.654	0.652	21.292	0.809 *	3.89	242	453.358	0.034	0.000

Predictors: knowledge acquisition, knowledge storage, knowledge sharing. *Criterion:* flexible working arrangements, supervisor support, coworker support. *Note:* ^a (Coefficient of determination); * (standard coefficient).

5. Discussion

The results of the study revealed that knowledge management dimensions (knowledge acquisition, knowledge storage, knowledge sharing) have a significant effect on the measures of employee retention (flexible working arrangement, supervisor support, coworker support) in the telecom sector. The findings of this research were backed mostly with empirical investigations on knowledge management in the telecom industries drawn from the literature review. Specifically, the result of hypothesis one shows that knowledge acquisition predicted flexible working arrangements. Drawing from the empirical evidences in the literature, it was discovered that the results from Edeh et al. (2022) and Okafor et al. (2019) corroborated with hypothesis one results. Edeh et al.'s (2022) finding revealed that knowledge acquisition predicted the innovation capability of banks in Nigeria while Okafor et al.'s (2019) result shows that knowledge acquisition has a significant effect on organisational performance. The corroboration of the above results maybe due to the fact that the business environment in which the investigations were carried out is Nigeria, implying that other business environments could yield a different result. It was also shown that the retention of workers in the telecon sector is largely dependent on the level of knowledge acquisition (Baridula and Mekuri-Ndimele 2020). The second hypothesis result indicated that knowledge storage has significant positive effects on supervisor support. This corresponds with the findings of AIGaribeh (2018) and Nwaiwu and Imafidon (2017), as shown in the literature. The AIGaribeh (2018) result on knowledge management and corporate performance of telecom firms revealed that knowledge storage predicted the performance of selected telecom firms in Jordan. On the other hand, Nwaiwu and Imafidon's (2017) finding on knowledge management and organisational survival of telecom companies in Nigeria shows that knowledge storage has a significant effect on the survival of selected telecom enterprises. In support of AIGaribeh (2018) and Nwaiwu and Imafidon (2017), research in the telecom industry has shown that employees prefer to stay in an organisation that fosters consideration orientation, especially with the supervisor (Zakariya and Shuaibu 2021).

Lastly, hypothesis three results revealed that knowledge sharing has a significant positive effect on coworker support. The empirical results of Alrefaai and Khalil (2019) and Kotwal and Gupta (2021), as shown in the literature, are in line with the finding above. Alrefaai and Khalil (2019) found that knowledge sharing strongly predicted the learning organisation dimension in telecommunication companies in Damascus. In the same manner, Kotwal and Gupta (2021) results show that knowledge sharing has a significant positive effect on the competitive advantage of telecommunication organisations in Jammu. In addition, it was discovered that knowledge sharing in the telecom industry is an altruistic behaviour that stimulates cohesiveness amongst coworkers and prevents them from leaving the organisation (Zakariya and Shuaibu 2021).

6. Conclusions

Based on the findings, the study concludes that knowledge management that is measured in terms of knowledge acquisition, knowledge storage, and knowledge sharing predicted employee retention is anchored on retention policies such as supervisor support, coworkers support, and flexible working arrangement. The findings of this study have contributed to knowledge management body of knowledge through the confirmation of its positive effect on employee retention. Thus, it behoves scholars to leverage the dimensions of knowledge management used in this study to advance the course of their research by utilizing the same research approach or other methodologies. One of the implications of this study is that managers of telecom companies should liaise with their board of directors to make funds available that would be used to train employees with the aim of acquiring relevant knowledge that is needed in the telecom industry. Secondly, business practitioners in the telecom sector should organise on-the-job workshops or conferences for the sensitization of workers on the need to support each other whenever there is a need which would later translate to high productivity, high profitability, customer satisfaction, and customer loyalty. In addition, the study also recommends that telecom policymakers in different countries should adopt the findings of this study and use it as a policymaking instrument for improving employer–employee working relationships in the telecom industry. Regarding limitations of the study, this study was limited to quantitative approach only. Thus, other scholars can incorporate both qualitative and quantitative methodologies in order to make comparison on the findings. Another limitation of the study is the geographical scope which is the sub-Saharan Africa work environment with Nigeria as specific focus. Subsequent scholars in other continent need to dissect knowledge management and employee retention in telecom sector before findings across the globe can be generalized. Concerning the suggestion for future study, this study suggests that further research with regard to knowledge management should be examined in other industries other than the telecom sector to increase the body of knowledge in the research area. Secondly, other validated and reliable indicators of employee retention should be used to investigate how knowledge management could influence the retention of employees in their industry. Again, future research should examine the effect of knowledge management on employee retention with a moderating variable.

Author Contributions: Conceptualization, F.O.E., N.M.Z., and V.N.; methodology, F.O.E., V.N., and H.D.; software, N.M.Z. and F.O.E.; validation, K.M.A.I., T.D., and H.D.; formal analysis, N.M.Z., V.N., and H.D.; investigation, F.O.E., N.M.Z., and T.D.; data curation, N.M.Z., H.D., and K.M.A.I.; writing—original draft preparation, F.O.E., N.M.Z., and K.M.A.I.; writing—review and editing, V.N., H.D., and K.M.A.I.; visualization, N.M.Z. and T.D.; supervision, V.N. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Data sharing not applicable.

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

References

- Adedeji, Abosede O., and Obianuju C. Ugwumadu. 2018. Factors motivating employee loyalty and employee retention in deposit money banks in Nigeria. *International Journal of Human Resource Studies* 8: 300–13.
- Aguenza, Benjamin Balbuena, and Ahmad Puad Mat Som. 2012. Motivational factors of employee retention and engagement in organizations. *International Journal of Advances in Management and Economics* 1: 88–95.
- Algaribeh, Khaled M. 2018. Influence of knowledge management process on organizational performance: Case study of Jordan Telecom Group Orange. *International Journal of Management Sciences and Business Research* 7: 40–45.
- Alias, Nor Khadijah, Nazri Manso Ahmad, Ab Rahman Azmi, Rahman Ahmad Abdul, and Zam Hariro Samsudin Ahmad. 2018. The impact of knowledge management towards employee's job satisfaction. *International Journal of Academic Research in Business and Social Sciences* 8: 245–65. [CrossRef]
- Alrefaai, Mohammad Reda, and Abdul Hamid A. L. Khalil. 2019. The impact of knowledge management on the learning organization: An empirical study on the telecommunications sector in Damascus city. *International Journal of Academic Research in Business and Social Sciences* 9: 760–69.
- Armstrong, Michael. 2009. *Armstrong's Handbook of Human Resource Management Practice*, 11th ed. London and Philadelphia: Kogan Page.
- Ashton, Ann Suwaree. 2017. How human resources management best practice influence employee satisfaction and job retention in the Thai hotel industry. *Journal of Human Resources in Hospitality & Tourism* 17: 1–25. [CrossRef]
- Austin-Egole, Ifeyinwa Stella, Ekeoma B. J. Iheriohanma, and Chinedu Nwokorie. 2020. Flexible working arrangements and organizational performance: An overview. *IOSR Journal of Humanities and Social Science* 25: 50–59.
- Baridula, Vito, and Joy Adanma Mekuri-Ndimele. 2020. Organizational trust and employee commitment of telecommunication companies in Port Harcourt, Nigeria. *American Journal of Humanities and Social Sciences Research* 4: 57–65.
- Becker, Gary S. 1964. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. New York: Colombia University Press.
- Biason, Ricardo S. 2020. The effect of job satisfaction on employee retention. *International Journal of Economics, Commerce and Management* 3: 405–13.
- Biasutti, Michelle, and Heba EL-Deghaidy. 2012. Using Wiki in teacher education: Impact on knowledge management processes and student satisfaction. *Computers & Education* 59: 861–72.
- Bryman, Alan, and Emma Bell. 2007. *Business Research Methods*, 2nd ed. New York: Oxford University Press.
- Campbell, Kelley Marie. 2015. Flexible Work Schedules, Virtual Work Programs, and Employee Productivity. Ph.D. dissertation, College of Management and Technology, Walden University, Minneapolis, MN, USA.
- Castaneda, Delio Ignacio, and Sergio Cuellar. 2020. Knowledge sharing and innovation: A systematic review. *Knowledge Process Management* 27: 159–73. [CrossRef]
- Chatzoudes, Dimitrios, and Prodromos Chatzoglou. 2022. Factors affecting employee retention: Proposing an original conceptual framework. *International Journal of Economics and Business Administration* 10: 49–76. [CrossRef]
- Choi, Sungjoo. 2019. Flexible work arrangements and employee retention: A longitudinal analysis of the federal workforces. *Public Personnel Management* 49: 1–26. [CrossRef]
- Diah, Ahyar Muhammad, La Ode Hasiara, and Ramli Irwan. 2020. Employee retention of pharmaceutical firms in Indonesia: Taking investment in employee development and social and economic exchange as predictors. *Systematic Review Pharmacy* 11: 564–72.
- Dileep, Kumar M., and Govindarajo S. Normala. 2014. Instrument development "intention to stay instrument" (ISI). *Asian Social Science* 10: 149–69.
- Edeh, Friday Ogbu, Agnes Ugboego Chukwu, Ukamaka Azubuike Ngozi, and Felicitas Onwuegbule Obiageri. 2020. Knowledge management and extra-role behaviour: The role of organisational culture. *Journal of Business and Management Studies* 2: 1–10.
- Edeh, Friday Ogbu, and Chukwu E. Udensi. 2017. Human resource management practices and lecturers' retention in Nigerian universities. *International Journal of Management and Marketing Systems* 13: 1–15.
- Edeh, Friday Ogbu, and Edem Blessing Uke. 2019. Knowledge management and Employee effectiveness of Nigerian Deposit Money Banks. *International Journal of Management & Entrepreneurship Research* 1: 31–41.
- Edeh, Friday Ogbu, Georgina Edeoga, Chukwu Agnes Ugboego, Linus Adama, Chiamaka Eunice Oketa, and Ngozi Ukamaka Azubuike. 2021a. Organisational justice and human resource retention: Role of leadership consideration. *Gusau International Journal of Management and Social Sciences* 4: 32–45.
- Edeh, Friday Ogbu, Georgina Edeoga, Chukwu Agnes Ugboego, Anthony Chukwuma Nwali, Linus Adama, and Nelson Chibuike Osueke. 2021b. Building organisational resilience through human resource retention. *Journal of the Management Sciences* 57: 88–99.
- Edeh, Friday Ogbu, Nurul Mohammad Zayed, Vitalii Nitsenko, Olha Brezhniva-Yermolenko, Julia Negovska, and Maryna Shtan. 2022. Predicting innovation capability through knowledge management in the banking sector. *Journal of Risk and Financial Management* 15: 312. [CrossRef]
- Eguchi, Hisashi, Yuko Kachi, Hayami K. Koga, Mariko Sakka, Masahito Tokita, and Akihito Shimazu. 2019. Validation of the Japanese Version of the Multidimensional Measure of Family Supportive Supervisor Behaviors (FSSB-J). *Frontiers in Psychology* 10: 2628. [CrossRef] [PubMed]

- Enyioko, Victoria Uzoamaka, and Emenike Innocent Ikoro. 2018. Effects of compensation plan on employee performance in the telecommunication industry. Study of MTN Nigeria. *IJAR International Journal of Economics and Business Management* 4: 21–34.
- Favoretto, Camila, and Marly Monteiro de Carvalho. 2021. An analysis of the relationship between knowledge management and project performance: Literature review and conceptual framework. *Gestão & Produção* 28: e4888. [CrossRef]
- Fukui, Sadaaki, Wei Wu, and Michelle P. Salyers. 2019. Impact of supervisory support on turnover intention: The mediating role of burnout and job satisfaction in a longitudinal study. *Administration and Policy in Mental Health and Mental Health Services Research* 46: 488–97. [CrossRef]
- Gajendra, Karishma, Gajendra J. Naidu, and Kishan Jatty Gajendra. 2021. A study of employee attrition and retention strategies with special reference to telecom sector in Tamil Nadu. *Asian Journal of Management and Commerce* 2: 1–6.
- Hayman, Jeremy R. 2009. Flexible work arrangements: Exploring the linkages between perceived usability of flexible work schedules and work/life balance. *Community, Work & Family* 12: 327–38. [CrossRef]
- Homans, George C. 1958. Social behavior as exchange. *American Journal of Sociology* 63: 597–606. [CrossRef]
- IBN. 2022. Telecoms Workers Vow to Ground MTN Nigeria-Inside Business Nigeria. Available online: <https://insidebusiness.ng/180470/telecoms-workers-vow-to-ground-mtn-nigeria/> (accessed on 27 July 2022).
- Ibrahim, Medinah Hayatudeen. 2019. Interpersonal relationship and employee retention: An exploration of zinger model. *Ilorin Journal of Administration and Development (IJAD)* 5: 95–102.
- Idowu, Samuel Adebayo. 2020. Role of flexible working hours' arrangement on employee job performance and retention in manufacturing industries in Agbara, Nigeria. *Economic Insights-Trends and Challenges* 3: 23–37.
- Jason, Hung, and Mark Ramsden. 2021. The application of human capital theory and educational signalling theory to explain parental influences on the Chinese population's social mobility opportunities. *Social Sciences* 10: 362. [CrossRef]
- Jayaswal, Abhinay. 2021. Employee retention in Nepalese Hydropower companies. *Journal of Emerging Technologies and Innovative Research* 8: 344–56.
- Kassaneh, Thomas Cherkos, Ettore Bolisani, and Juab-Gabriel Cegarra-Navarro. 2021. Knowledge management practices for sustainable supply chain management: A challenge for business education. *Sustainability* 13: 2956. [CrossRef]
- Kigathi, Patrick Ngure, and Esther Waiganjo. 2017. Factors influencing retention of health workers in the Public Health Sector in Kenya: A case study of Kenyatta National Hospital. *International Journal of Scientific and Research Publications* 7: 2250–3153.
- Kotwal, Sindhu, and Rimpi Gupta. 2021. Role of knowledge management in the telecom sector. *International Journal of Engineering and Management Research* 11: 1–14.
- Krejcie, Robert V., and Daryle W. Morgan. 1970. Determining sample size for research activities. *Educational and Psychological Measurement* 30: 607–10. [CrossRef]
- Kularathne, H. M. R. D., and Y. Y. Senevirathne. 2020. The relationship between co-worker support, supervisor support, organizational support and employee turnover intention of operational level employees in apparel sector, central province, Sri Lanka. *International Journal of Creative and Innovative Research in All Studies* 2: 7–17.
- Kumari, Nancy. 2018. Factors Influencing the Retention of Employees in the it Services Industry in Bengaluru. Ph.D. dissertation, ICFAI University Jharkhand, Ranchi, India.
- Kundu, Subhash C., and Neha Gahlawat. 2016. Effects of employee retention practices on perceived firm and innovation performance. *International Journal of Innovation and Learning* 19: 25. [CrossRef]
- Kuzior, Aleksandra, Karolina Kettler, and Łukasz Rąb. 2022. Great Resignation—Ethical, Cultural, Relational, and Personal Dimensions of Generation Y and Z Employees' Engagement. *Sustainability* 14: 6764. [CrossRef]
- Li, Cai, Sheikh Farhan Ashraf, Fakhar Shahzad, Iram Bashir, Majid Murad, Nausheen Syed, and Madiha Riaz. 2020. Influence of knowledge management practices on entrepreneurial and organizational performance: A mediated-moderation model. *Frontiers in Psychology* 11: 577106. [CrossRef]
- Liu, Feng, Yuduo Lu, and Peng Wang. 2020. Why knowledge sharing in scientific research teams is difficult to sustain: An interpretation from the interactive perspective of knowledge hiding behavior. *Frontiers in Psychology* 11: 537833. [CrossRef] [PubMed]
- Magaji, N., I. J. Ogundiwin, and V. O. Babatope. 2021. Effect of training and compensation on firm profit of selected telecommunication companies in Nigeria. *International Journal of Economics, Commerce and Management* 9: 162–73.
- Mahadi, Nomahaza, Norliyana M. F. Woo, Shathees Baskaran, and Azizu Yadi Yaakop. 2020. Determinant factors for employee retention: Should I stay? *International Journal of Academic Research in Business and Social Sciences* 10: 201–13. [CrossRef]
- Malik, Eiman, Sajjad Baig, and Umair Manzoor. 2020. Effect of HR practices on employee retention: The role of perceived supervisor support. *Journal of Public Value and Administration Insights (JPVAI)* 3: 1–7.
- Mustafa, Rania, Mohamed Wahaba, Alaa El-Gharabawi, and Mohamed A. Ragheb. 2021. The impact of knowledge management on institutional performance through the balanced scorecard—An applied study on ports training institution. *Open Access Library Journal* 8: e6997. [CrossRef]
- Nagabhaskar, Muppuri. 2014. Motivational factors of employee retention and engagement in organizations. *International Journal of Development Research* 4: 221–24.
- Naz, Shumaila, Cai Li, Qasim Ali Nisar, Muhammad Aamir Shafique Khan, Naveed Ahmad, and Farooq Anwar. 2020. A study in the relationship between supportive work environment and employee retention: Role of organizational commitment and person–organization fit as mediators. *SAGE Open* 10: 1–20. [CrossRef]

- Nina, Shashkova, Ilulia Ushkarenko, Andrii Soloviov, Oleksii Osadchyi, and Vitalii Nitsenko. 2021. Behavioral Segmentation of Baby Food Consumers: Risk Areas, Possible Solutions. The Case of Ukraine. *European Journal of Sustainable Development* 10: 349–64.
- Nonaka, Ikujiro, and Hirotaka Takeuchi. 1995. *The Knowledge Creating Company*. New York: Oxford University Press.
- Nurdin, Nurdin, and Khaeruddin Yusuf. 2020. Knowledge management lifecycle in Islamic bank: The case of Syariah banks in Indonesia. *International Journal Knowledge Management Studies* 11: 59–80. [CrossRef]
- Nwaiwu, Joy Chidiebere, and Hulda Chioma Imafidon. 2017. Knowledge management and organisational survival: A study of telecommunication industry in Port Harcourt, Nigeria. *International Journal of Advanced Academic Research Social & Management Sciences* 3: 41–53.
- O’Dea, S. Global Mobile Industry Contribution to GDP Worldwide from 2014 to 2025 (in Trillion U.S Dollars). Available online: <https://www.statista.com/statistics/1100651/worldwide-mobile-industry-contribution-gdp/> (accessed on 29 July 2022).
- Ogbonna, Hyginus Obinna, and Chidi Slessor Mbah. 2022. Examining social exchange theory and social change in the works of George Caspar Homans—Implications for the state and global inequalities in the world economic order. *Mediterranean Journal of Social Sciences* 13: 90–104. [CrossRef]
- Ogunbanwo, Afolakemi, J. O. Okesola, and Buckley Shery. 2021. Knowledge management conceptual framework in Nigeria tertiary institutions. Paper presented at the 4th International Conference on Science and Sustainable Development (ICSSD 2020), Ota, Nigeria, August 3–5.
- Ohunakin, Folakemi, Adenike A. Adeniji, Olumuyiwa A. Oludayo, Adewale O. Osibanjo, and Oluseyi O. Oduyoye. 2019. Employees’ retention in Nigeria’s hospitality industry: The role of transformational leadership style and job satisfaction. *Journal of Human Resources in Hospitality & Tourism* 18: 441–70. [CrossRef]
- Okafor, Lawrence Chima, Loveday Owate Olaka, and Ebere Florence Okorie. 2019. Knowledge management strategies and firm performance: A survey of telecommunication companies in Port Harcourt. *IOSR Journal of Business and Management* 21: 1–10.
- Omondi, Angeline Akinyi, and Peter K’Obonyo. 2018. Omondi, Angeline Akinyi, and Peter K’Obonyo. 2018. Flexible work schedules: A critical review of literature. *The Strategic Journal of Business & Change Management* 5: 2069–86.
- Osuwagwu, Prince. 2021. Why ICT will Remain Nigeria’s Top GDP Earner. Available online: <https://www.vanguardngr.com/2021/09/why-ict-will-remain-nigerias-top-gdp-earner/> (accessed on 29 July 2021).
- Pap, Zselyke, Delia Virga, and Guy Notelaers. 2021. Perceptions of customer incivility, job satisfaction, supervisor support, and participative climate: A multi-level approach. *Frontiers in Psychology* 12: 713953. [CrossRef]
- Perevozova, Iryna, Savchenko Maryna, Shkurenko Olga, Obelnytska Khystyna, and Hrechanyk Nataliia. 2019. Formation of entrepreneurship model by innovation activity of industrial enterprises. *Journal of Entrepreneurship Education* 22: 1–6.
- Renard, Karine, Cornu Frederic, Emery Yves, and Giauque David. 2021. The impact of new ways of working on organizations and employees: A systematic review of literature. *Administrative Sciences* 11: 38. [CrossRef]
- Saunders, Mark, Philip Lewis, and Andrian Thornhill. 2009. *Research Methods for Business Students*, 5th ed. London: Pearson Education Limited.
- Sawaneh, Ibrahim Abdulai, and Fatmata Kanko Kamara. 2019. An effective employee retention policies as a way to boost organizational performance. *Journal of Human Resource Management* 7: 41–48. [CrossRef]
- Sayyadi, Mostafa. 2009. How effective leadership of knowledge management impacts organizational performance. *Business Information Review* 36: 30–38. [CrossRef]
- Scarborough, Harry, and Chris Carter. 2000. *Investigating Knowledge Management*. London: Chartered Institute of Personnel and Development.
- Scarborough, Harry, Jacky Swan, and John Preston. 1999. *Knowledge Management: A Literature Review*. London: Institute of Personnel and Development.
- Serenko, Alexander. 2022. The Great Resignation: The great knowledge exodus or the onset of the Great Knowledge Revolution? *Journal of Knowledge Management. ahead-of-print*. [CrossRef]
- Sija, Andrew. 2022. Determinants of employee retention in private healthcare. *European Journal of Human Resource Management Studies* 5: 53–74. [CrossRef]
- Sishuwa, Yvonne, and Jackson Phiri. 2020. Factors influencing employee retention in the transport and logistics industry. *Open Journal of Social Sciences* 8: 145–60. [CrossRef]
- Sreejesh, S., Sanjay Mohapatra, and M. R. Anusree. 2014. *Business Research Methods—An Applied Orientation*. Cham: Springer International Publishing.
- Tadesse, Dereje Kefale. 2020. The impact of knowledge management towards organization performance. *IOSR Journal of Business and Management* 22: 37–48.
- Valmohammadi, Changiz, and Mohsen Ahmadi. 2015. The impact of knowledge management practices on organizational performance: A balanced scorecard approach. *Journal of Enterprise Information Management* 28: 131–59. [CrossRef]
- Valmohammadi, Changiz, Sofiyabadi Javad, and Kolahi Bahare. 2019. How do knowledge management practices affect sustainable balanced performance? Mediating role of innovation practices. *Sustainability* 11: 5129. [CrossRef]
- Zakariya, Rakiya Baba, and Mikaila Shuaibu. 2021. Training, perceived organizational support and employee turnover intention among telecommunication firms in northern Nigeria: Moderating effect of perceived job alternatives. *International Journal of Business & Law Research* 9: 125–36.

Article

Effects of ESG Activity Recognition Factors on Innovative Organization Culture, Job Crafting, and Job Performance

Minsuck Jin and Boyoung Kim *

Seoul Business School, aSSIST University, Seoul 03767, Korea

* Correspondence: bykim2@assist.ac.kr; Tel.: +82-10-4046-2428

Abstract: This study aims to verify the effects of organizational members' ESG activity recognition on job performance with the mediation of innovative organizational culture and job crafting. To this end, a questionnaire survey was carried out based on previous studies, and 237 questionnaire response copies were analyzed. An empirical study was conducted on the effects of each ESG activity recognition factor on job performance with the mediation of innovative organizational culture and job crafting. According to the analysis result, the society factor had a positive (+) effect on innovation-oriented culture among the ESG activity recognition factors, the environment factor had a negative (−) effect, and the governance factor did not have any effect. In contrast, governance had a positive (+) effect on relationship-oriented culture in innovative organizational culture. However, the environment and societal factors did not have any effect. The innovation-oriented culture and relationship-oriented culture directly affected job crafting, but they were confirmed not to have a direct effect on job performance. Hence, the result shows that the ESG activity recognition's society factor reinforces innovative organizational culture, and the governance factor can consolidate organizational relationships.

Keywords: ESG management; ESG activity recognition; innovative organization culture; job crafting; job performance

Citation: Jin, Minsuck, and Boyoung Kim. 2022. Effects of ESG Activity Recognition Factors on Innovative Organization Culture, Job Crafting, and Job Performance. *Administrative Sciences* 12: 127. <https://doi.org/10.3390/admsci12040127>

Received: 1 September 2022

Accepted: 23 September 2022

Published: 28 September 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Environmental, Social, and Governance (ESG) management is becoming a hot topic worldwide (Hassan and Mahrous 2019). A firm's ecosystem is exposed to various environmental changes, regardless of nationality, business type, and size. The changes are accelerated through the COVID-19 pandemic due to rapid climate change and increased interest in ESG (Cornell and Shapiro 2021). ESG management targets social achievements, including environment, personnel, and labor, based on the firm's charity or mood and environmental protection stance, which can be the concept of its Corporate Social Responsibility (CSR) or Social Responsibility Investment (SRI). ESG management has focused on sustainable corporate activity operation beyond a superficial reputation management level, such as a concept of investment (Ortas et al. 2015; Sassen et al. 2016).

However, the environmental aspect has recently been emphasized, including climate change, waste recycling, and carbon emissions reduction. Furthermore, the importance of a firm's transparent and fair governance has emerged (Mohammad and Wasiuzzaman 2021). All in all, ESG management, considering the environment and governance, beyond corporate activities contributing to society with various methods for community development, is gaining attention (Guillén 2020; Kerikmäe et al. 2018; Pellegrini et al. 2019; Žofčínová et al. 2022). These non-financial values started to work as crucial evaluation indicators for investment attraction, as they settle for investment through ESG from the outside and uplift the firm's image through it. Shakil (2020) asserted that public interest in safety, the environment, and environmental protection is growing from the ESG perspective in the sustainable development context of the global community. He explained that investors

prefer companies to make efforts to seek a balance between financial profits and public benefits (Miralles-Quirós et al. 2019).

Larry Fink, CEO of BlackRock, one of the world's largest asset management companies, declared they would withdraw investments from the companies not seriously showing interest in climate change in an annual letter for investors in January 2021 (Sachin and Rajesh 2022). Mervelskemper and Streit (2017) explained that consideration of environment, society, and governance are three key factors deciding future financial performance. The reason is that environmental protection is recognized as a firm's responsibility, as climate change affects all humans' survival, although it was customary for firms to focus on pursuing profits and values in the past. The adoption of ESG management requires many companies' cost expenditures, including investments in eco-friendly products, social activities for social contributions, and an audit body setup for transparent governance. However, environmental activities can reduce risks causing various environmental problems (Tan and Zhu 2022). Social activities improve the firm's brand and image, and governance activities enhance transparency (Margolis and Walsh 2003). Investments in ESG are evaluated as a significant asset value determining corporate future competitive edge and profitability not stated in the financial statements (Zumente and Bistrova 2021).

When looking at companies presently leading ESG management, foreign companies, like Microsoft, aim for negative carbon emissions, while Patagonia uses over 60% recycled materials for outdoor products. Many firms, including Amazon, Tesla, and Unilever, propel projects to minimize carbon emissions. Apple declared its goal to achieve carbon neutrality by 2030, as well as racial equality and justice initiative to dismantle the racial discrimination barrier. McDonald's is spearheading charity activities for children alienated from education due to diseases through the "Ronald McDonald's House" activity. Samsung also plans to continue ESG for sustainable management and is preparing to join RE 100 (Hansen et al. 2019; Aouadi and Marsat 2018).

ESG-related studies thus far have mainly analyzed environmental improvement and firms' external financial performance or corporate value relationship (Cannas et al. 2022; Chams et al. 2021). However, studies on firm internal members' innovation and organizational culture, which should propel and practice ESG, are insufficient. As Sassen et al. (2016) insisted, innovative organizational culture thrusting ESG activities becomes a pivotal foundation for creating new ideas, accumulating knowledge, and dominating global markets. According to a study by Friede et al. (2015), organizational members' innovative organizational culture should be accompanied by a firm's organizational structure change to accept new changes and drive ESG management. Because organizational innovation begins from the members' voluntary commitment to the organization's improvement, innovation can be viewed as starting from individuals (Yoon et al. 2018).

Consequently, organizations demand individual innovative behaviors, such as idea creation, from their organizations to respond to internal and external changes and enhance performance, as reported in a study by Janssen et al. (2018). In a study by De Vries and Balazs (1999) effective vertical and horizontal communication is emphasized within an organization to create new business management approaches and organizational changes. If collaboration is possible between the members, the study explains that an innovation-oriented culture can have a more positive effect on innovative behaviors (Büschgens et al. 2013). To initiate new changes and induce organizational members' participation in and commitment to future-oriented organizational activities, there is a need to consider the job activity changes of organizational members who build an innovative organizational culture and re-create jobs (Bani-Melhem et al. 2018; Bahadori et al. 2021).

This study aimed to empirically analyze the effect relationship of the firm's ESG management activities concerning the environment, society, and ESG management activities of environment, society, and governance with the mediation of its members' innovative organizational culture on job crafting or job performance. This study presents the effects of corporate activity recognition concerned with the environment, society, and governance on innovation and relationships within an organizational culture by segmenting the innovative

cultural organization into the innovation-oriented culture and relationship-oriented culture. This study also analyzed the effects of organizational members' recognition of ESG activities on job crafting and performance based on innovative organizational culture. Finally, it presents specific implications on the measures for organizational change management and member management for ESG management activities.

2. Theoretical Background and Hypothesis Development

2.1. ESG Management and Innovative Organization Culture

Moskowitz (1972) asserted how corporate values can be affected by investors, not stockholders, and how they can be understood according to ESG adoption. He paid attention to ESG values in that social responsibility investment produces better achievements than traditional investment types that only emphasize management performance. "E (Environment)" refers to how a firm affects the environment in the management process. Here, resources, energy, wastes, greenhouse gases, carbon emissions, and resource recycling are included. "S (Society)" evaluates whether a firm performs its social responsibility properly. Here, contribution, labor and employment, consumer safety and protection, and social contribution are included. "G (Governance)" refers to management transparency. This determines whether a company's decision-making process, corporate structure, personnel, and management policies are operated under democratic procedures (Huang 2021).

Sustainability is directly connected to a firm's survival, and various stakeholders boldly assess the firm's non-financial factors and financial performance (Gillan et al. 2021). In a study on the innovation role between corporate CSR activities and financial performance, Martinez-Conesa et al. (2017) reported that firms carrying out CSR activities could actively grow into firms with the best performance. A firm's sustainability can be guaranteed in a business environment where the positive connection is improved through increased innovation, and innovation enhances the importance of intangible assets. Landi and Sciarelli (2018) proved that CSR activities enable a firm's innovation, provide an opportunity to enter new markets and become a means to improve corporate image.

Alsayegh et al. (2020) insisted that firms cannot carry out sustainable management if they do not consider the economic, social, and environmental parts of the business management process. A study by Sachin and Rajesh (2022) explained that the ESG concept started to emerge due to a new customer value establishment, as firms repeatedly shut down, supply chains collapsed and suffered gaps due to the infectious diseases of their organizational members, and essential changes emerged in the demand sector. Aouadi and Marsat (2018) asserted that changes according to firms' ESG adoption are accelerating paradigm shifts and that an effort to re-establish their management approach becomes necessary.

Bani-Melhem et al. (2018) explained that all organizational cultures are fundamental factors affecting members' thinking and behaviors if an organization or a group judges the situations in internal and external environments and solves problems. Innovative organizational culture gathers each member's ideas so that firms can predict various environmental changes and devise quick response measures. The synergy between an organization and individuals is essential for firms to survive and grow (Hogan and Coote 2014). As Kotsantonis et al. (2016) asserted, ESG management should consider new organizational changes and the members' acceptance. Therefore, ESG management needs to be expanded into organizational culture and a system that may affect its members' jobs (Piao et al. 2022). As Liu and Nemoto (2021) insisted, ESG management activities become the foundation to propel organizational innovation and change; therefore, there is a need to consider organizational members' recognition and job activity through the construction of organizational culture pursuing innovation.

One must examine the innovative organizational culture that affects ESG management activities. Veenstra and Ellemers (2020) explained innovative organization culture as the culture emphasizing innovation, creativity, and dynamics and how organizational members are motivated by the importance of job or ideal appeal, growth, and external

legality. Firms can build a competitive edge through innovation (Zainullin and Zainullina 2021). Innovation-oriented culture can be the factor found by focusing on organizational management innovation systems enabling innovation activities continuously for the long term, from a technical perspective (Stock et al. 2013; Wynen et al. 2017). Innovation-oriented culture refers to firms being open to new ideas in technical and managerial areas and actively pursuing those ideas (Joo 2020).

Innovation-oriented culture can be interpreted as an ability to solve problems creatively or anew, and the concept was explained by Duan et al. (2020) for the first time as follows: an actively adopting mode including process innovation and manufacturing innovation in the production and operation management area, and actively propelling mode of production innovation and service innovation in the marketing management area. Buccieri et al. (2020) reported that change and innovation in an organization is a crucial growth engine, and it is critical for organizational members to sympathize with and participate in change and the organizational structure. From such a perspective, ESG activities should be regarded as a strategic issue affecting all firm sectors, including potential innovation and long-term performance (Mead et al. 2020; Zhang et al. 2020; Broadstock et al. 2020). The following hypotheses could be designed based on the previous studies:

Hypothesis 1 (H1). *Environment in ESG activity recognition will have a positive (+) effect on organizational innovation-oriented culture.*

Hypothesis 2 (H2). *Society in ESG activity recognition will have a positive (+) effect on organizational innovation-oriented culture.*

Hypothesis 3 (H3). *Governance in ESG activity recognition will have a positive (+) effect on organizational innovation-oriented culture.*

Relationship-oriented culture, another effect factor of innovative organization culture presented by Chandler and Graham (2010), is a concept considering the relationship with the other party in a transaction as necessary. Specifically, a relationship can create long-term efficiency based on mutual dependence (Yilmaz et al. 2005). A relation-oriented organization relies on relational exchange to maximize its profits. Relation-oriented culture between organizational members can be achieved if the other party's outcome and common outcome are expected to be beneficial in the long term (Kim 2020). Therefore, relationship-oriented culture between the members becomes critical to successfully drawing innovative activities (McKelvie et al. 2017).

According to a study by Winklhofer et al. (2006), relationship-oriented culture was defined as explicit and implicit pledges on the continuous relationship between exchange members. A study by Hwa Hsu and Lee (2012) defined long-term relationship-oriented culture as follows: Each party in a transaction relationship insists on their activities from a long-term perspective, and partner-like thinking that the other party can decide their success and failure is dominant (Steen et al. 2020). The relationship-oriented culture will affect organizational members' recognition of the firm's ESG management activities and the members' acceptance of the ESG management activities as job activities. Thus, the following hypotheses could be designed:

Hypothesis 4 (H4). *Environment in ESG activity recognition will have a positive (+) effect on organizational relationship oriented culture.*

Hypothesis 5 (H5). *Society in ESG activity recognition will have a positive (+) effect on organizational relationship oriented culture.*

Hypothesis 6 (H6). *Governance in ESG activity recognition will have a positive (+) effect on organizational relationship oriented culture.*

2.2. Innovative Organization Culture, Job Crafting, and Job Performance

Innovation is based on new ideas, and innovation is carried out by people, so a study on the factors drawing an individual's innovative behaviors is essential (Nasifoglu Elidemir et al. 2020). Because innovation has high uncertainty and failure possibility, the possibility of attempting innovative behaviors is high if an organization offers proper support. Trust in an organization is vital so that a new thing can be attempted without fear of criticism or punishment in the case of failure (Kmieciak 2020; Carmeli and Spreitzer 2009; Hattori and Lapidus 2004). As for behavior, innovative job activities are performed, and job performance becomes higher if there is organizational support to induce members' innate motivation (Deci and Ryan 2000; Ernita and Martial 2020).

If each firm's organizational members recognize they are the principal actor of the job, they can carry out the job as a crafter, through which job crafting means a series of processes making the job more meaningful by changing their job (Singh 2008). The motivation for job crafting is highly likely to be triggered if organizational members recognize that an opportunity for job crafting exists (Tims and Bakker 2010; Lazazzara et al. 2020). Job crafting was re-defined as an organizational member's job without the manager's intervention, namely as a job design mode in the uncertain dynamic management environment beyond the past top-down job handling mode, in which job is delegated from top to bottom (Wrzesniewski and Dutton 2001; Afsar et al. 2019). Because of job crafting's characteristic that a job is reconstituted by voluntarily changing the scope or meaning of the job given to an organizational member, job crafting can increase capabilities and possibilities to help other individuals within the organization (Thomas et al. 2020; Tian et al. 2021).

ESG management specifies items to propel from each perspective of environment, society, and governance. The activity recognition increases in job management from an innovative organization perspective that individuals should present their direction in the job performing process, actively participate in job design, and view the job with an enthusiastic attitude (Jin and Kim 2022). This study aims to verify the effects of ESG activity recognition on job performance through the mediation effect of job crafting. Based on the previous studies, the following hypotheses could be designed:

Hypothesis 7 (H7). *Corporate members' innovation-oriented culture will have a positive (+) effect on job crafting.*

Hypothesis 8 (H8). *Corporate members' relationship-oriented culture will have a positive (+) effect on job crafting.*

A firm's objective function is the creation of economic value. However, firms' stakeholders demand corporate social value creation in solving social problems (Barnett and Salomon 2003). They are changing as they grow together with the firms and as the social problem aspect, such as environmental pollution and social inequality, becomes complicated in addition to the economic value of today's firms (Cornell and Shapiro 2021). The difficulty in adopting ESG management in the initial stages is evaluating the firm's ESG performance, and it also expresses the evaluation of organizational members' job performance (Welch and Yoon 2022). Job performance results from organizational members' efforts to accomplish organizational goals or tasks (Viswesvaran and Ones 2000). Job performance can be improved depending on an individual's ability, role recognition, and efforts and can be changed through learning (Chughtai and Buckley 2011).

Jans and McMahon (1989) reported that organizational members expect the realization of their values to pursue the meaning of job, identity, and self-expression rather than performance or reward in carrying out the job. They pursue positive experiences by actively changing jobs. A study by Kaštelan Mrak and Kvasić (2021) insisted that job satisfaction and the resulting performance have a positive effect on organizational capabilities. Corporate members have excellent learning abilities, high individual motivation to achieve, and high independent autonomy (Veenstra and Ellemers 2020; Crucke et al. 2022), so they can

question past methods and try more efficient job performance. The following hypotheses could be designed based on the previous studies:

Hypothesis 9 (H9). *Corporate members’ innovation-oriented culture will have a positive (+) effect on job performance.*

Hypothesis 10 (H10). *Corporate members’ relationship-oriented culture will have a positive (+) effect on job performance.*

Job crafting is the priority item for each corporate member. Workers can enhance their job level through job crafting to gain social support and by changing jobs into a mode to perform better or form a social relationship to ease the stress from overload. Job crafting behaviors can help job goal achievement and enable a sense of achievement and personal growth (Tims et al. 2015; Lee and Lee 2018). De Beer et al. (2016) said personal job satisfaction, identity, and performance could be improved, while organizational commitment can be advanced through job crafting. Organizational members’ job crafting activities enable job commitment and can improve the job level by obtaining resources necessary for job performance by appropriately changing jobs suitable for them and forming relationships with others. Bakker et al. (2012) asserted that individual suitability could be enhanced through job crafting because job crafting activities make job requirements or resources suitable for individual capabilities or desires. Based on the previous studies, the following hypothesis could be designed:

Hypothesis 11 (H11). *Corporate members’ job crafting will have a positive (+) effect on job performance.*

3. Research Method

3.1. Research Model

This study aimed to determine the effects of the ESG activity recognition of manufacturing company members with innovative organizational culture and job crafting on job performance. Independent variables were set as environment, society, and governance (ESG) activity recognition. Mediation variables were set as innovation-oriented culture, relationship-oriented culture, and job crafting, and a dependent variable was set as job performance. As shown in Figure 1, the research model was designed.

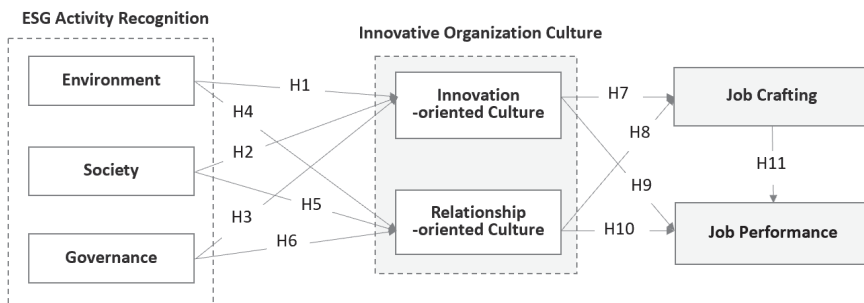


Figure 1. Research model.

3.2. Measurement Variables and Data Collection

A questionnaire survey was carried out to collect data to analyze the research model. Questionnaire questions were composed as shown in Table 1 through previous studies, and manipulative variables of questionnaire components were defined. When looking at the manipulative definition of the variables applied to the questionnaire survey, a firm’s ESG activity recognition means organizational members’ recognition state to execute business that can co-exist with society through transparent governance. Job crafting means

the change of each firm’s business type change according to ESG activity recognition. Innovative organizational culture means organizational employees’ abilities to absorb innovative and new organizational changes according to ESG management.

Table 1. Variable definitions and measurement items.

Factors	Survey Items	References
ESG Activity Recognition	Environment (1) Our company propels carbon emissions-reducing activities and is practicing environmental management. (2) Our company supports actual investments and organizations for environmental management. (3) Our company has a performance management and evaluation system for environmental management. (4) Our company produces eco-friendly products and is offering services.	Cannas et al. (2022) Cornell and Shapiro (2021) Shakil (2020) Aouadi and Marsat (2018)
	Society (1) Our company is implementing a policy for its members’ employment stability. (2) Our company is evaluating by linking stakeholders’ (partner firms) environmental, social, and governance (ESG) performance. (3) Our company is executing win-win partnership programs for stakeholders’ growth. (4) Our company carries out social donation and corporate social responsibility (CSR) activities for communities.	
	Governance (1) Our company adopts the ethical regulations of its members. (2) Our company discloses information and issues gravely affecting organizational decision-making. (3) Our company performs continuous disclosures (publishing sustainability management reports) externally on its board of directors and information. (4) Our company holds general shareholders’ meetings and shares agenda to protect shareholders’ rights.	
Innovative Organization Culture	Innovation-oriented Culture (1) I execute and encourage innovative behaviors in various methods. (2) I highly evaluate the practical value of innovative ideas. (3) I endeavor to reflect innovative ideas at work.	Duan et al. (2020) Zhang et al. (2020) Broadstock et al. (2020)
	Relationship-oriented Culture (1) Our company overcomes new organizational changes well due to high consideration and reliability among members. (2) When I perform a new task, my colleagues are mutually cooperative. (3) I try to make an effort to help new and experienced employees if a change occurs within the new organization.	
Job Crafting	(1) I always agonize about how my job is connected with organizational and company performance. (2) I think about how my job affects my life. (3) I think about how my job will contribute to our society.	Tims et al. (2015) Lee and Lee (2018) De Beer et al. (2016)
Job Performance	(1) I achieve higher job performance than my colleagues. (2) I think I successfully perform work assigned to me. (3) My job performance is highly acknowledged.	Crucke et al. (2022) Kaštelan Mrak and Kvasić (2021)

Lastly, job performance means that individual organizational members’ job evaluation results are affected by organizational ESG management activities. As for the variables defined, ESG activity recognition consisted of 12 questions, with four questions on environment, society, and governance, respectively. Innovative organization culture consisted of six questions, with three on innovation-oriented and relationship-oriented culture, respectively, and three on job crafting and performance. The questionnaire consisted of 30 questions in total. To enhance factor analysis validity and reliability, one question on society and governance, and one on innovation-oriented culture and relationship-oriented culture, respectively, were removed.

3.3. Demographic Information of the Data

This study conducted an online questionnaire survey through random samples targeting Korean manufacturing company employees with work experience with an ESG company. The companies surveyed are 13 large companies engaged in manufacturing, including seven industries: electronics, automobiles, heavy industry, semiconductors, energy, chemicals, and food. The questionnaire survey was conducted for two weeks, from 15 March to 31 March 2022. A total of 329 questionnaire response copies were collected, and an analysis was carried out through the final 237 questionnaire response copies.

Concerning the gender ratio of the respondents, males were 66%, and women were 34%. As for age, those in their 20s, 30s, 40s, and 50s comprised 23.4% (77 people), 46.5% (153 people), 26.7% (88 people), and 3.3% (11 people), respectively. Concerning careers, the respondents with less than 10 years, 10 years to less than 20 years, and 20 years to less than 25 years composed 57.2%, 36.5%, and 6.4% each. Regarding position, the employee, section chief, and senior employee made up 22.8%, assistant department manager, department manager, and deputy division manager made up 39.9%, division managers made up 13.7%, and executives made up 3.3%. As for job group, production, HR/general affairs, R&D, marketing, IT/automation, finance/accounting, innovation/innovation, and others comprised 19.5%, 16.4%, 13.4%, 16.1%, 9.4%, 15.2%, 4.6%, and 5.5%, respectively (see Table 2).

Table 2. Demographic information of survey participants.

Classification		Frequency	Percentage
Gender	Male	217	66.0
	Female	112	34.0
	Total	329	100.0
Age	25–29	77	23.4
	30–39	153	46.5
	40–49	88	26.7
	50–59	11	3.3
	Total	329	100.0
Position	Employee (Staff)	75	22.8
	Manager	198	39.9
	Division manager	45	13.7
	Executive	11	3.3
	Total	329	100.0
Career	1 year to less than 10 years	188	57.2
	10 years to less than 20 years	120	36.5
	20 years to less than 25 years	21	6.4
	Total	329	100.0
Job group	Production	64	19.5
	HR/General Affairs	54	16.4
	R&D	44	13.4
	Marketing	53	16.1
	IT/Automation	31	9.4
	Finance/Accounting	50	15.2
	Innovation/Planning	15	4.6
	Others	18	5.5
Total	329	100.0	

4. Results

4.1. Analysis Results of Reliability and Validity

Table 3 shows that the measurement model's reliability and convergent validity analysis results were good. Internal consistency reliability was verified based on 0.7 and higher

composite reliability index of the structural equation measurement model, and securing convergent validity was verified through factor loading, Cronbach α , and composite reliability index values. In line with the criteria, the factor loading was all good at 0.547–0.905. Because the t -value was 8.0 and higher, statistical significance was confirmed. The average Variance Extracted (AVE) value was 0.501–0.710, and Cronbach α was 0.734–0.898, so convergent validity was secured. As a result of an analysis of measurement model fit, χ^2 (df) was 788.610, and χ^2 /degree of freedom was 3.414. Goodness-of-Fit-Index (GFI) was 0.897, Adjusted Goodness-of-Fit-Index (AGFI) was 0.845, and Normal Fit Index (NFI) was 0.911. Root Mean Square Error of Approximation (RMSEA) was 0.086, so the measurement model fit components were statistically significant.

Table 3. Results of reliability and convergent validity test.

Variables	Question	Standard Loading Factor	SE	t -Value (p)	AVE	CR	Cronbach α	
ESG Activity Recognition	Environment	1-1	0.791	-	-	0.534	0.817	0.812
		1-2	0.876	0.071	15.903 ***			
		1-3	0.616	0.062	11.090 ***			
		1-4	0.602	0.063	10.822 ***			
	Society	1-5	0.590	-	-	0.501	0.765	0.734
		1-6	0.624	0.145	8.893 ***			
		1-7	0.701	0.157	9.982 ***			
	Governance	1-8	0.547	-	-	0.528	0.767	0.785
		1-9	0.713	0.178	8.711 ***			
		1-10	0.749	0.178	8.846 ***			
Innovative Organization Culture	Innovation-oriented Culture	2-1	0.760	-	-	0.613	0.819	0.843
		2-2	0.889	0.087	15.324 ***			
	Relationship-oriented Culture	2-3	0.770	-	-			
		2-4	0.876	0.111	15.780 ***			
Job Crafting	3-1	0.883	-	-	0.673	0.860	0.855	
	3-2	0.811	0.053	18.332 ***				
	3-3	0.763	0.047	16.630 ***				
Job Performance	4-1	0.755	-	-	0.710	0.879	0.876	
	4-2	0.860	0.081	15.905 ***				
	4-3	0.905	0.081	16.539 ***				

Measurement model fit: χ^2 (df) 788.610, χ^2 /degree of freedom 3.414, RMR 0.024, GFI 0.897, AGFI 0.845, NFI 0.911, TLI 0.901, CFI 0.898, RMSEA 0.086/*** $p < 0.001$.

According to the analysis of AVE and CR values between potential variables in this study, each potential variable’s square root of AVE values was more significant than the correlation coefficients between potential variables, as shown in Table 4, discriminant validity was confirmed to be secured.

Table 4. Discriminant validity.

Classification	E	S	G	IoC	RoC	JC	JP
Environment ϵ	0.731						
Soceity (S)	0.629	0.708					
Governance (G)	0.303	0.629	0.727				
Innovation-oriented Culture (IoC)	0.116	0.129	0.111	0.783			
Relationship-oriented Culture (RoC)	0.296	0.150	0.175	0.506	0.831		
Job Crafting (JC)	0.277	0.340	0.230	0.545	0.477	0.820	
Job Performance (JP)	0.238	0.185	0.147	0.257	0.299	0.560	0.843

The square root of AVE is shown in bold letters.

4.2. Analysis Results of Structural Model and Hypothesis

As presented in Table 5, a result of structural model fit analysis, $\chi^2(p)$ was 836.147, and $\chi^2/\text{degree of freedom}$ was 3.528. Goodness-of-Fit-Index (GFI) was 0.901, Normal Fit Index (NFI) was 0.923, Adjusted Goodness-of-Fit-Index (AGFI) was 0.895, Root Mean Square Residential (RMR) was 0.028, and Root Mean Square Error of Approximation (RMSEA) was 0.085, so fit component values were significant. Although not affected by samples, the Comparative Fix Index (CHI) indicated that the model's explanation power was 0.904, and Tucker–Lewis Index (TLI), judging from the structural model's explanation power was 0.911. Therefore, the basic model was analyzed to be suitable.

Table 5. Discriminant validity.

	Hypothesis (Path)	β	B	SE	t-Value	Status of Adoption
H1	Environemtn -> Innovation-oriented Culture	−0.503	−0.41	0.154	−2.670 **	Adopted
H2	Soceity -> Innovation-oriented Culture	0.822	1.156	0.454	2.548 *	Adopted
H3	Governance -> Innovation-oriented Culture	−0.012	−0.017	0.261	−0.065	Rejected
H4	Environment -> Relationship-oriented Culture	0.062	0.052	0.127	0.406	Rejected
H5	Social -> Relationship-oriented Culture	0.098	0.142	0.368	0.385	Rejected
H6	Governance -> Relationship-oriented Culture	0.326	0.454	0.231	1.967 *	Adopted
H7	Innovation-oriented Culture -> Job Crafting	0.515	0.527	0.084	6.306 ***	Adopted
H8	Relationship-oriented Culture -> Job Crafting	0.337	0.336	0.077	4.343 ***	Adopted
H9	Innovation-oriented Culture -> Job Performance	−0.183	−0.193	0.103	−1.866	Rejected
H10	Relationship-oriented Culture -> Job Performance	0.115	0.118	0.086	1.379	Rejected
H11	Job crafting -> Job Performance	0.811	0.834	0.109	7.682 ***	Adopted

Structural model fit: $\chi^2(\text{df})$ 836.147, $\chi^2/\text{degree of freedom}$ 3.528, RMR 0.028, GFI 0.901, AGFI 0.895, NFI 0.923, TLI 0.911, CFI 0.904, RMSEA 0.085/* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

As shown in Table 5, a result of hypotheses verification through a structural equation model path analysis, five hypotheses out of 11 hypotheses were rejected. Environment had a negative (−) effect (−2.670, $p < 0.01$) on innovation-oriented culture. Society was confirmed to have a positive effect (+) (2.548, $p < 0.05$) on innovation-oriented culture. “Governance” did not significantly affect innovation-oriented culture, so the hypothesis was rejected. Environment and society did not significantly affect relationship-oriented culture. Meanwhile, governance had a positive (+) effect (1.967, $p < 0.05$) on relationship-oriented culture. Innovation-oriented culture had a positive (+) effect (6.306, $p < 0.001$) on job crafting, so the hypothesis was adopted. Relationship-oriented culture had a positive effect (+) (4.343, $p < 0.001$) on job crafting. However, innovation and relationship-oriented culture were confirmed not to affect job performance significantly. Job crafting was confirmed to have a positive (+) effect (0.768, $p < 0.001$) on job performance, so the hypothesis was adopted.

5. Discussion

Each company presently considers environmental protection and social contribution, not limited to an economic value such as sales and operating profit, complies with laws and ethics, improves corporate governance, and enhances sustainability. From this management philosophy context, companies pursue ESG management. This study examined the effects of each company member's ESG activity recognition with the mediation of innovative organization and job crafting on job performance. Study results drawn based on the analysis results are shown below:

First, the social factor among ESG activity recognition factors had a positive (+) effect on innovation-oriented culture. The social factor of ESG includes various meanings such as human rights, contribution to community, labor and employment, consumer safety and protection, and social contribution. Innovation-based propulsion for corporate sustainability should be carried out to fulfill the factor. As for innovation-oriented culture, organizational members connect new ideas with innovative work methods, and companies agonize social contribution to make sustainable companies through their members' participation and collaboration. The results can be embodied through sustainability management report publication and ESG evaluation and can be connected to corporate brand value and image improvement. As shown in a study by Martinez-Conesa et al. (2017), this supports an assertion that companies that carry out CSR activities the most actively grow into those achieving the best performance, and the positive connection improves through an increase in innovation. Furthermore, it supports that innovation helps assure corporate sustainability in the business environment in which the importance of intangible assets increases.

Second, the governance factor among ESG activity recognition factors had a positive (+) effect on relationship-oriented culture. Meanwhile, the environment and society variables did not have an effect. The organizational members' job connection relationship has a close correlation with governance. Relationship-oriented culture affects relationships with the other party in transactions but affects job performance depending on enabling mutual growth through an earnings model, considering how business success strategy and management strategy are reflected meticulously along with stakeholders. As shown in a study by Kooij et al. (2017), each party with a transaction relating to meeting end-user needs insists on its activities from a long-term perspective, thinking of itself as a partner since its success or failure can depend on the other party.

Third, the components of innovative organization culture, namely innovation-oriented culture and relationship-oriented culture, directly affect job crafting. The firm's decision-making on the new business model is a mutual activity system beyond the firm's boundary by creating customer value and monetizing with efficient sales and profit structure (Aouadi and Marsat 2018). Companies develop a new business model within diverse stakeholders through relationship-orientated culture and make them reflected in organizational culture. The corporate members recognize themselves as active actors and can conduct job crafting themselves. Likewise, as shown in a study by Tims and Bakker (2010), an assertion that organizational members can carry out their job as crafters is supported if they recognize active roles in innovative organizational culture.

Lastly, innovative organizational culture did not directly affect job performance but had a significant effect (+) on the mediation of job crafting. The firm's ESG management is operated in a leader-centered top-down mode, and each member's innovative activities consist of a structure difficult to be acknowledged as ESG performance (Yoon et al. 2018). Firms prioritize management strategy and reflect it in their members' consciousness of change and organizational culture. The structure is derived from a culture in which members' ideas are ignored, and creativity cannot be exerted by an organizational vertical reporting system and rigid organizational culture. Firms should improve bureaucratic culture through horizontal organizational culture and position integration, change, and job-centered task force operation and they should be equipped with job structures in which their members' opinions are reflected. As reported in a study by Viswesvaran and Ones

(2000), the disturbance of redefining a job in a job design mode required for oneself without the intervention of a manager that is necessary for job crafting makes an environment that cannot create a performance. An assertion is supported that firms are desirable to create job performance based on each organizational member's job creation and collaboration.

6. Conclusions

6.1. Research Implications

As the academic implication, this research showed that job performance should be achieved through job crafting by meditating on innovative organizational culture for the corporate ESG activity. Suppose trust is possible in an organization so that new things can be attempted without fear of criticism or punishment, even in the case of failure. In that case, the organizational members' innovative organizational culture enables the members to perform job crafting that enhances new job requirements or resources by adding new value to capabilities or technology that individuals have, which can be connected to high job satisfaction. Firms should steadily explore new technology opportunities, ensure various research activities and job autonomy, and the decision-making of corporate members should be linked with bold investments. In this way, a ESG system to support should be made. Firms also need to support systematic training for the organizational members with enough field domain knowledge to create future resources so that win-win growth of the firms and their members can be conducted.

The managerial implications of this study are as follows: First, the social factor must be accompanied by innovation-oriented culture rather than the environmental and governance factors among ESG activities. The social factor of ESG strongly demands responsibility activities on social, environmental, and stakeholder aspects beyond problem consciousness, propelled by a specific company or group. The social factor works as an essential factor for the relationship with various stakeholders and the relationship between organizational workers and their working conditions. To fulfill social performance, members need to be based on creative and new problem-solving abilities and need to solve social problems through their positive participation expansion and social value maximization. In this way, companies grow. It is desirable to sufficiently reflect organizational members' opinions after supporting them so that job crafting can be exerted in the working environment with a need for ESG recognition and the bond of sympathy within enough periods. Based on organizational members' participation using the firm's core capabilities, regular communication channels with stakeholders and partnerships with diverse communities should be composed.

Second, it was ascertained that governance consciousness in ESG activities could affect organizational innovative culture formation relationship factors. As transparency and ethics of governance are emphasized, an internal organization's relationship-oriented culture improves and helps innovative organizational culture formation. Internally, there is a need to shape organizational culture to immediately reflect many organizational members' opinions in the strategy establishment and operation system by actively using representative council by generation for communication between the members and anonymous communication channels. Companies should endeavor for transparent governance management. Punishment against unethical activities, namely bribes, corruption, and unreasonable activities, should be reinforced. Firms need to fortify monitoring and internal reporting system against unethical activities internally. Regarding wage and bonus payments, there is a need to carry out a transparent system and consultation, as well as to construct a culture in which the details of decision-making related to corporate management should be open to the press/media immediately, while discussions should be invigorated. The corporate efforts will play a pivotal role in developing ESG management based on the basic respect of organizational members.

6.2. Research Limitations and Future Plans

This study delved into job performance, including innovative organizational culture and employees' job crafting on ESG management and activity recognition, recently becoming a hot topic of firms worldwide. This study has significance in that the study proved the effects of each ESG activity factor. Nonetheless, this study has the following limitations:

First, this study targeted only Korean employees performing ESG activities, so there is a limitation in the generalization of study results. A further study is needed to conduct research based on global samples, targeting more countries, whereas a comparative analysis of differences in ESG activities by country, continent, and corporate characteristics can be performed. Furthermore, this study targeted the employees of large manufacturing corporations leading Korea's ESG activities. Since ESG activities are an essential issue throughout industries, including small and medium-sized enterprises, service industry companies, public organizations, and governances, etc., further study needs to be conducted, and comparative research is necessary by targeting diverse company groups.

Second, this study examined the relationship between innovative organizational culture and job crafting according to ESG activity recognition. However, strategies for ESG management amid a rapidly changing global environment are developing fast. Consequently, there is a need to consider various variables affecting organizational employees' job activities, including attitude and required capabilities. The factors affecting the job activities of ESG management employees can be carried out.

Third, this study is an initial study that deals with the perception and attitude of organizational employees within a company about ESG. Accordingly, the clarity of the research results may be lowered as many hypotheses have been designed in the process of dealing with various variables. Therefore, in future studies, research based on a structural research design that can present clear hypotheses and results through a research model design concentrated on specific variables is needed.

Lastly, this study was conducted in a cross-sectional method collecting data at a specific time, so there is a limitation to reflecting corporate ESG activity level at present that can be shown as time passes. Consequently, there is a need to perform a longitudinal study that can repeatedly investigate diversities of parameters in addition to innovative organization culture and change support behaviors over several points in time to seek more precise answers to the factors affecting job crafting in terms of continuous change of ESG environment that corporate members recognize.

Author Contributions: Conceptualization, M.J.; methodology, M.J. and B.K.; software, B.K.; validation, B.K.; formal analysis, M.J.; investigation, M.J.; resources, M.J.; data curation, B.K.; writing—original draft preparation, M.J.; writing—review and editing, B.K.; visualization, M.J. and B.K.; supervision, B.K.; project administration, M.J. and B.K.; funding acquisition, M.J. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Not applicable for studies not involving humans or animals.

Informed Consent Statement: Not applicable for studies not involving humans.

Data Availability Statement: Not applicable for data availability.

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

References

- Afsar, Bilal, Mariam Masood, and Waheed Ali Umrani. 2019. The role of job crafting and knowledge sharing on the effect of transformational leadership on innovative work behavior. *Personnel Review* 48: 1186–208. [CrossRef]
- Alsayegh, Maha Faisal, Rashidah Abdul Rahman, and Saeid Homayoun. 2020. Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure. *Sustainability* 12: 3910. [CrossRef]
- Aouadi, Amal, and Sylvain Marsat. 2018. Do ESG controversies matter for firm value? Evidence from international data. *Journal of Business Ethics* 151: 1027–47. [CrossRef]

- Bahadori, Negar, Turhan Kaymak, and Mehdi Seraj. 2021. Environmental, social, and governance factors in emerging markets: The impact on firm performance. *Business Strategy & Development* 4: 411–22.
- Bakker, Arnold B., Maria Tims, and Daantje Derks. 2012. Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations* 65: 1359–78. [CrossRef]
- Bani-Melhem, Shaker, Rachid Zeffane, and Mohamed Albaity. 2018. Determinants of employees' innovative behavior. *International Journal of Contemporary Hospitality Management* 30: 1601–20. [CrossRef]
- Barnett, Michael L., and Robert M. Salomon. 2003. Throwing a curve at socially responsible investing research: A new pitch at an old debate. *Organization & Environment* 16: 381–89.
- Broadstock, David C., Roman Matousek, Martin Meyer, and Nikolaos G. Tzeremes. 2020. Does corporate social responsibility impact firms' innovation capacity? The indirect link between environmental & social governance implementation and innovation performance. *Journal of Business Research* 119: 99–110.
- Buccieri, Dominic, Raj G. Javalgi, and Erin Cavusgil. 2020. International new venture performance: Role of international entrepreneurial culture, ambidextrous innovation, and dynamic marketing capabilities. *International Business Review* 29: 101639. [CrossRef]
- Büschgens, Thorsten, Andreas Bausch, and David B. Balkin. 2013. Organizational culture and innovation: A meta-analytic review. *Journal of Product Innovation Management* 30: 763–81. [CrossRef]
- Cannas, Claudia, Maurizio Dallochio, and Laura Pellegrini. 2022. Environmental, social, and governance issues: An empirical literature review around the world. *Climate Change Adaptation, Governance and New Issues of Value* 1: 107–124.
- Carmeli, Abraham, and Gretchen M. Spreitzer. 2009. Trust, connectivity, and thriving: Implications for innovative behaviors at work. *The Journal of Creative Behavior* 43: 169–91. [CrossRef]
- Chams, Nour, Josep García-Blandón, and Khaled Hassan. 2021. Role reversal! Financial performance as an antecedent of ESG: The moderating effect of total quality management. *Sustainability* 13: 7026. [CrossRef]
- Chandler, Jennifer D., and John L. Graham. 2010. Relationship-oriented cultures, corruption, and international marketing success. *Journal of Business Ethics* 92: 251–67. [CrossRef]
- Chughtai, Aamir Ali, and Finian Buckley. 2011. Work engagement: Antecedents, the mediating role of learning goal orientation and job performance. *Career Development International* 16: 684–705. [CrossRef]
- Cornell, Bradford, and Alan C. Shapiro. 2021. Corporate stakeholders, corporate valuation and ESG. *European Financial Management* 27: 196–207. [CrossRef]
- Crucke, Saskia, Tom Kluijtmans, Kenn Meyfrootd, and Sebastian Desmidt. 2022. How does organizational sustainability foster public service motivation and job satisfaction? The mediating role of organizational support and societal impact potential. *Public Management Review* 24: 1155–81. [CrossRef]
- De Beer, Leon T., Maria Tims, and Arnold B. Bakker. 2016. Job crafting and its impact on work engagement and job satisfaction in mining and manufacturing. *South African Journal of Economic and Management Sciences* 19: 400–12. [CrossRef]
- De Vries, Manfred F. R. Kets, and Katharina Balazs. 1999. Transforming the mind-set of the organization: A clinical perspective. *Administration & Society* 30: 640–75.
- Deci, Edward L., and Richard M. Ryan. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry* 11: 227–68. [CrossRef]
- Duan, Yanqing, Guangming Cao, and John S. Edwards. 2020. Understanding the impact of business analytics on innovation. *European Journal of Operational Research* 281: 673–86. [CrossRef]
- Ernita, Firmansyah, and Tri Martial. 2020. Effect of manager entrepreneurship attitude and member motivation on organizational member participation. *Management Science Letters* 10: 2931–36. [CrossRef]
- Friede, Gunnar, Timo Busch, and Alexander Bassen. 2015. ESG and financial performance: Aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment* 5: 210–33.
- Gillan, Stuart L., Andrew Koch, and Laura T. Starks. 2021. Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance* 66: 101889. [CrossRef]
- Guillén, Arturo. 2020. Coronavirus crisis or a new stage of the global crisis of capitalism? *Agrarian South: Journal of Political Economy* 9: 356–67. [CrossRef]
- Hansen, Brage Bremset, Åshild Ønvik Pedersen, Bart Peeters, Mathilde Le Moullec, Steve D. Albon, Ivar Herfindal, Bernt-Erik Sæther, Vidar Grøtan, and Ronny Aanes. 2019. Spatial heterogeneity in climate change effects decouples the long-term dynamics of wild reindeer populations in the high Arctic. *Global Change Biology* 25: 3656–68. [CrossRef] [PubMed]
- Hassan, Salah, and Abeer A. Mahrous. 2019. Nation branding: The strategic imperative for sustainable market competitiveness. *Journal of Humanities and Applied Social Sciences* 1: 146–58. [CrossRef]
- Hattori, Ruth Ann, and Todd Lapidus. 2004. Collaboration, trust and innovative change. *Journal of Change Management* 4: 97–104. [CrossRef]
- Hogan, Suellen J., and Leonard V. Coote. 2014. Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research* 67: 1609–21. [CrossRef]
- Huang, Danny Zhao-Xiang. 2021. Environmental, social and governance factors and assessing firm value: Valuation, signalling and stakeholder perspectives. *Accounting & Finance* 62: 1983–2010.
- Hwa Hsu, Shang, and Chun-Chia Lee. 2012. Safety management in a relationship-oriented culture. *International Journal of Occupational Safety and Ergonomics* 18: 35–45. [CrossRef] [PubMed]

- Jans, Nicholas A., and Anne McMahon. 1989. The comprehensiveness of the job characteristics model. *Australian Journal of Psychology* 41: 303–14. [CrossRef]
- Janssen, Frank, Alain Fayolle, and Amélie Wuillaume. 2018. Researching bricolage in social entrepreneurship. *Entrepreneurship & Regional Development* 30: 450–70.
- Jin, Minsuck, and Boyoung Kim. 2022. The effects of ESG activity recognition of corporate employees on job performance: The case of South Korea. *Journal of Risk and Financial Management* 15: 316. [CrossRef]
- Joo, Cheol-Keun. 2020. The Influence of innovation-oriented organizational culture on management performance—focusing on the mediating effect of proactive entrepreneurial behaviour and market orientation. *Journal of Digital Convergence* 18: 119–31.
- Kaštelan Mrak, Marija, and Sanda Grudić Kvasić. 2021. The mediating role of hotel employees' job satisfaction and performance in the relationship between authentic leadership and organizational performance. *Management: Journal of Contemporary Management Issues* 26: 97–110. [CrossRef]
- Kerikmäe, Tanel, Thomas Hoffmann, and Archil Chochia. 2018. Legal technology for law firms: Determining roadmaps for innovation. *Croatian International Relations Review* 24: 91–112. [CrossRef]
- Kim, Moon Jun. 2020. The effect of organizational culture and job environment characteristics perceived by organization members on job satisfaction. *International Journal of Internet, Broadcasting and Communication* 12: 156–65.
- Kmiecik, Roman. 2020. Trust, knowledge sharing, and innovative work behavior: Empirical evidence from Poland. *European Journal of Innovation Management* 24: 1832–59. [CrossRef]
- Kooij, Dorien Tam, Maria Tims, and Jos Akkermans. 2017. The influence of future time perspective on work engagement and job performance: The role of job crafting. *European Journal of Work and Organizational Psychology* 26: 4–15. [CrossRef]
- Kotsantonis, Sakis, Chris Pinney, and George Serafeim. 2016. ESG integration in investment management: Myths and realities. *Journal of Applied Corporate Finance* 28: 10–16.
- Landi, Giovanni, and Mauro Sciarelli. 2018. Towards a more ethical market: The impact of ESG rating on corporate financial performance. *Social Responsibility Journal* 15: 11–27. [CrossRef]
- Lazazzara, Alessandra, Maria Tims, and Davide De Gennaro. 2020. The process of reinventing a job: A meta-synthesis of qualitative job crafting research. *Journal of Vocational Behavior* 116: 103267. [CrossRef]
- Lee, Jae Young, and Yunsoo Lee. 2018. Job crafting and performance: Literature review and implications for human resource development. *Human Resource Development Review* 17: 277–313. [CrossRef]
- Liu, Lian, and Naoko Nemoto. 2021. Environmental, social and governance (ESG) evaluation and organizational attractiveness to prospective employees: Evidence from Japan. *Journal of Accounting and Finance* 21: 14–29.
- Margolis, Joshua D., and James P. Walsh. 2003. Misery loves companies: Rethinking social initiatives by business. *Administrative Science Quarterly* 48: 268–305. [CrossRef]
- Martinez-Conesa, Isabel, Pedro Soto-Acosta, and Mercedes Palacios-Manzano. 2017. Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of Cleaner Production* 142: 2374–83. [CrossRef]
- McKelvie, Alexander, Anna Brattström, and Karl Wennberg. 2017. How young firms achieve growth: Reconciling the roles of growth motivation and innovative activities. *Small Business Economics* 49: 273–93. [CrossRef]
- Mead, Taryn, Sally Jeanraud, and John Bessant. 2020. Factors influencing the application of nature as inspiration for sustainability-oriented innovation in multinational corporations. *Business Strategy and the Environment* 29: 3162–73. [CrossRef]
- Mervelskemper, Laura, and Daniel Streit. 2017. Enhancing market valuation of ESG performance: Is integrated reporting keeping its promise? *Business Strategy and the Environment* 26: 536–49. [CrossRef]
- Miralles-Quirós, María Mar, José Luis Miralles-Quirós, and Jesús Redondo Hernández. 2019. ESG performance and shareholder value creation in the banking industry: International differences. *Sustainability* 11: 1404. [CrossRef]
- Mohammad, Wan Masliza Wan, and Shaista Wasiuzzaman. 2021. Environmental, Social and Governance (ESG) disclosure, competitive advantage and performance of firms in Malaysia. *Cleaner Environmental Systems* 2: 100015. [CrossRef]
- Moskowitz, Howard R. 1972. Perceptual changes in taste mixtures. *Perception & Psychophysics* 11: 257–62.
- Nasifoglu Elidemis, Servet, Ali Ozturen, and Steven W. Bayighomog. 2020. Innovative behaviors, employee creativity, and sustainable competitive advantage: A moderated mediation. *Sustainability* 12: 3295. [CrossRef]
- Ortas, Eduardo, Igor Álvarez, and Ainhoa Garayar. 2015. The environmental, social, governance, and financial performance effects on companies that adopt the United Nations Global Compact. *Sustainability* 7: 1932–56. [CrossRef]
- Pellegrini, Carlo Bellavite, Raul Caruso, and Niketa Mehmeti. 2019. The impact of ESG scores on cost of equity and firm's profitability. *New Challenges in Corporate Governance, Theory and Practice* 3: 38–40.
- Piao, Xiangdan, Jun Xie, and Shunsuke Managi. 2022. Environmental, social, and corporate governance activities with employee psychological well-being improvement. *BMC Public Health* 22: 22. [CrossRef]
- Sachin, Nikunj, and R. Rajesh. 2022. An empirical study of supply chain sustainability with financial performances of Indian firms. *Environment, Development and Sustainability* 24: 6577–601. [CrossRef]
- Sassen, Remmer, Anne-Kathrin Hinze, and Inga Hardeck. 2016. Impact of ESG factors on firm risk in Europe. *Journal of Business Economics* 86: 867–904. [CrossRef]
- Shakil, Mohammad Hassan. 2020. Environmental, social and governance performance and stock price volatility: A moderating role of firm size. *Journal of Public Affairs* 22: e2574. [CrossRef]
- Singh, Parbudyal. 2008. Job analysis for a changing workplace. *Human Resource Management Review* 18: 87–99. [CrossRef]

- Steen, Marie, Julian Taghawi Moussawi, and Ole Gjolberg. 2020. Is there a relationship between Morningstar's ESG ratings and mutual fund performance? *Journal of Sustainable Finance & Investment* 10: 349–70.
- Stock, Ruth Maria, Bjoern Six, and Nicolas A. Zacharias. 2013. Linking multiple layers of innovation-oriented corporate culture, product program innovativeness, and business performance: A contingency approach. *Journal of the Academy of Marketing Science* 41: 283–99. [CrossRef]
- Tan, Yafei, and Zhaohui Zhu. 2022. The effect of ESG rating events on corporate green innovation in China: The mediating role of financial constraints and managers' environmental awareness. *Technology in Society* 68: 101906. [CrossRef]
- Thomas, Emmarentia C., Kevin GF Thomas, and Marieta Du Plessis. 2020. An evaluation of job crafting as an intervention aimed at improving work engagement. *SA Journal of Industrial Psychology* 46: 1–12. [CrossRef]
- Tian, Wenqing, Huatian Wang, and Sonja Rispens. 2021. How and when job crafting relates to employee creativity: The important roles of work engagement and perceived work group status diversity. *International Journal of Environmental Research and Public Health* 18: 291. [CrossRef]
- Tims, Maria, and Arnold B. Bakker. 2010. Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology* 36: 1–9. [CrossRef]
- Tims, Maria, Arnold B. Bakker, and Daantje Derks. 2015. Job crafting and job performance: A longitudinal study. *European Journal of Work and Organizational Psychology* 24: 914–28. [CrossRef]
- Veenstra, Esmee M., and Naomi Ellemers. 2020. ESG indicators as organizational performance goals: Do rating agencies encourage a holistic approach? *Sustainability* 12: 10228. [CrossRef]
- Viswesvaran, Chockalingam, and Deniz S. Ones. 2000. Perspectives on models of job performance. *International Journal of Selection and Assessment* 8: 216–26. [CrossRef]
- Welch, Kyle, and Aaron Yoon. 2022. Do high-ability managers choose ESG projects that create shareholder value? Evidence from employee opinions. *Review of Accounting Studies* 27: 1–28. [CrossRef]
- Winklhofer, Heidi, Andrew Pressey, and Nikolaos Tzokas. 2006. A cultural perspective of relationship orientation: Using organisational culture to support a supply relationship orientation. *Journal of Marketing Management* 22: 169–94. [CrossRef]
- Wrzesniewski, Amy, and Jane E. Dutton. 2001. Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review* 26: 179–201. [CrossRef]
- Wynen, Jan, Koen Verhoest, and Bjorn Kleizen. 2017. More reforms, less innovation? The impact of structural reform histories on innovation-oriented cultures in public organizations. *Public Management Review* 19: 1142–64. [CrossRef]
- Yilmaz, Cengiz, Bulent Sezen, and Ozlem Ozdemir. 2005. Joint and interactive effects of trust and (inter) dependence on relational behaviors in long-term channel dyads. *Industrial Marketing Management* 34: 235–48. [CrossRef]
- Yoon, Bohyun, Jeong Hwan Lee, and Ryan Byun. 2018. Does ESG performance enhance firm value? Evidence from Korea. *Sustainability* 10: 3635. [CrossRef]
- Zainullin, Sergei, and Olga Zainullina. 2021. Scientific review digitalization of corporate culture as a factor influencing ESG investment in the energy sector. *International Review* 1: 130–36. [CrossRef]
- Zhang, Qi, Lawrence Loh, and Weiwei Wu. 2020. How do environmental, social and governance initiatives affect innovative performance for corporate sustainability? *Sustainability* 12: 3380. [CrossRef]
- Žofčínová, Vladimíra, Andrea Čajková, and Rastislav Král. 2022. Local leader and the labour law position in the context of the smart city concept through the optics of the EU. *TalTech Journal of European Studies* 12: 3–26. [CrossRef]
- Zumente, Ilze, and Julija Bistova. 2021. ESG importance for long-term shareholder value creation: Literature vs. practice. *Journal of Open Innovation: Technology, Market, and Complexity* 7: 127. [CrossRef]

Article

Corporate Social Responsibility: The Impact of Employees' Perceptions on Organizational Citizenship Behavior through Organizational Identification

Carla Freire *, Joana Gonçalves and Maria Rita Carvalho

School of Economics and Management, University of Minho, 4710-057 Braga, Portugal

* Correspondence: cfreire@eeg.uminho.pt

Abstract: The impact of the employees' perceptions of CSR activities on the employee-organization relationship has been little explored in the literature. This study aims to analyze the impact of corporate social responsibility (CSR) perceptions (Environment-related CSR; Employee-related CSR, Customer-related CSR) on organizational citizenship behavior through the mediating role of the organizational identification of employees in the hotel sector. A questionnaire was applied to a sample of 214 frontline employees who work in four- and five-star hotels. Using Model 4 of the PROCESS macro, a mediation model was designed to test the hypotheses. The results indicate that there is a mediation model that uses the effect of organizational identification in the relationship between perceptions of CSR and organizational citizenship behavior. This study concludes that an increase in identification with the organization based on environmental-related activities, employee-related activities, or customer-related activities impact on OCB. The results of this study represent contributions to the literature in the CSR field, as well as to the case of human resources managers who wish to enhance organizational citizenship behavior and identification among hotel staff.

Keywords: CSR perceptions; environment-related CSR; employee-related CSR; customer-related CSR; organizational identification; organizational citizenship behavior; hotels

Citation: Freire, Carla, Joana Gonçalves, and Maria Rita Carvalho. 2022. Corporate Social Responsibility: The Impact of Employees' Perceptions on Organizational Citizenship Behavior through Organizational Identification. *Administrative Sciences* 12: 120. <https://doi.org/10.3390/admsci12030120>

Received: 19 August 2022

Accepted: 14 September 2022

Published: 19 September 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The employee-organization relationship is influenced by employees' perceptions of CSR activities (Oh et al. 2021; George et al. 2021), namely, the employees' perspective on how impactful the social responsibility activities developed by the company are to its beneficiaries and society (Bhattacharya et al. 2009; Kim et al. 2010; Park and Levy 2014; Song et al. 2019).

Companies that develop more CSR practices are considered to be more attractive, since socially responsible activities contribute to the creation of a favorable image and reputation, and are thus able to attract the best employees (e.g., Porter and Kramer 2011). This is particularly true of younger candidates who tend to value environmentally friendly corporate policies (PwC—PricewaterhouseCoopers 2011). In this sense, the literature "acknowledges the value-driven role of CSR" (Malik 2015, p. 419); subsequently, companies tend to launch efforts to become good organizational citizens through various activities and programs designed to benefit multiple stakeholders (e.g., the environment and community, employees and customers). Therefore, when employees have a positive perception of the company's values and CSR initiatives, they tend to identify more closely with the company, and are more predisposed to exert extra efforts to achieve organizational objectives.

The literature has shown that CSR activities developed by companies positively influence employees' attitudes and behaviors (e.g., Clarkson 1995; Kim et al. 2010), which especially impacts on organizational citizenship behaviors (e.g., Zhao and Zhou 2019) and on employees' sense of identification with the organization (e.g., Park and Levy 2014).

Organizational citizenship behavior (OCB) is defined as a set of discretionary behaviors in the workplace that exceed basic job requirements and are often described as behaviors that go beyond the call of duty (Smith et al. 1983). For Organ (1988), OCBs are discretionary behaviors—not directly or explicitly recognized by the formal reward system—and which, as a whole, promote the effective functioning of the organization (Organ 1988). Such behaviors include voluntary acts of creativity and innovation designed to improve the organization’s task or performance (Podsakoff et al. 2000). In other words, it can be understood as discretionary individual behavior that is advantageous to the organization (van Dick et al. 2008). Due to its obvious advantages for the organization, OCB has become an appealing construct, both for academics as well as practitioners, insofar as it focuses on aspects of work that lead the individual to attempt to go the extra mile in order to favor the organization. Accordingly, several studies have sought to understand what makes individuals want to be good organizational citizens (Coyle-Shapiro et al. 2004). One explanation focuses on the logic of reciprocity, in which employees engage in this type of behavior in order to reciprocate for the way the organization acts and treats them. Blau’s (1964) theory, based on the logic of reciprocity, can serve as a theoretical framework to explain the influence of organizational policies on the behavior of organizational members, constituting a good starting point to explain this link. The reasons underlying this need experienced by individuals to give back to the organization are associated with a sense of identification.

Organizational identification has been considered by the literature to be “a significant driver of group members’ attitudinal and behavioral support” (Park and Levy 2014, p. 336), reflecting the quality of employee-organization relationships (Bhattacharya et al. 2009). Consequently, Ashforth et al. (2008) have posed important research questions, such as: “How does identification occur?”; more specifically, “How do individuals bring attributes of the organization’s identity into their own identities?”; and also, “Why does identification matter?”

Faced with the question of what factors lead to identification with the organization, the response provided by the literature has been diverse, pointing to “self-enhancement” and “self-consistency” (Ashforth et al. 2008). Above all, responses reveal that individuals basically seek to establish bonds with others, in the sense that they feel they belong to a group (Ashforth and Mael 1989; Ashforth et al. 2008). The answer to the last of the aforementioned questions seems to be that organizational identification (OI) matters when one considers individual outcomes: according to the authors, it “helps capture the essence of who people are and, thus, why they do what they do—it is at the core of why people join organizations and why they voluntarily leave, why they approach their work the way they do and why they interact with others the way they do during that work. Identification matters because it is the process by which people come to define themselves, communicate that definition to others, and use that definition to navigate their lives, work-wise or other” (Ashforth et al. 2008, p. 334). However, despite individual outcomes, the literature has also pointed to an extensive list of relevant positive organizational outcomes, such as job satisfaction and work adjustment (e.g., Carmeli et al. 2007), as well as the intention to stay and absenteeism, extra-role behavior, work involvement (e.g., Carmeli et al. 2007; Riketta 2005), and organizational citizenship behaviors (e.g., van Dick et al. 2006; Freire and Pieta 2022). Accordingly, studies indicate that if there is identification with the organization, workers show more favorable attitudes and behaviors toward the organization and seek to increase their efforts in order to respond positively to the needs of the organization. Within this context, one is then able to understand why identification matters for organizations—it is due to the fact that, when employees “wear the company t-shirt,” they are more predisposed to making sacrifices and giving more for its sake, thus developing extra-role efforts toward the organization (Freire and Pieta 2022).

Despite the importance of OI, few studies have explored its mediating role in explaining how employees perceive CSR activities and how they manifest a predisposition to develop OCBs. Based on these previous considerations, this study aims to explore the

role of OI as a mediating mechanism in the relationship between perceptions of CSR and OCB. Accordingly, this study aims to contribute to the ongoing reflection on CSR regarding the importance of the employee's perceptions of CSR practices, and how it impacts on positive behaviors toward the organization. Thus, this study seeks to provide insights into the mediating mechanisms through which CSR perceptions—based on the environment, employees, or the customer—influence OCB.

This study begins with a review of the literature on corporate social responsibility activities and then explores the relationship between perceptions of CSR on OCB and perceptions of CSR on OI, to anchor the study's hypotheses. The following section presents the methods, including the study context, measures used, procedures, and sample. The following section presents the results obtained in the statistical analysis. The discussion of the results obtained follows, and finally, the conclusions of the study are presented.

2. Literature Review

2.1. Corporate Social Responsibility Activities

The definition of the CSR concept has evolved over decades of research (e.g., Rodríguez-Gomez et al. 2020) and is associated with various objectives for companies. These include promoting its reputation, company image and products/services, as well as value creation through stakeholders (Fernández-Guadaño and Sarria-Pedroza 2018), or even as a fundamental element of the company's sustainability strategy (Dey et al. 2018). Investment in socially responsible initiatives can contribute to a closer relationship between employees and organizations (Sen et al. 2006; Kim et al. 2010) in different ways: when socially responsible activities contribute to the well-being of employees; when measures are taken to protect the environment (Su and Swanson 2019); or when companies are actively involved in their community (Peterson 2004; Helming et al. 2016; Gursoy et al. 2019; Su and Swanson 2019).

Individuals who are more aware of the importance of CSR present more positive associations with the organization (Sen et al. 2006; Gaudencio et al. 2020). Seen as a long-term strategy (Rhou and Singal 2020), the adoption of social responsibility practices is an investment that promotes stakeholders' satisfaction, additionally providing greater commitment to organizations (Gursoy et al. 2019). Social responsibility initiatives are rather diverse, and include activities such as: collaborating in social projects in the local area; adapting facilities to accommodate people with disabilities; implementing good team practices in terms of equality and non-discrimination; developing training programs; and encouraging customers to consume local products (Suárez-Cebador et al. 2018). Environmental impact is reflected, for example, in the choice of ecological suppliers and ecological products, and communicating this practice to the customer. Socially responsible management can generate countless benefits when well implemented: it guarantees sustainability; provides a good organizational climate; and adds value to the company's image and products, as well as to the brand itself. Though less explored but equally beneficial is the issue of the impact and perception of these responsible management practices on employees' behavior and attitudes, namely in the creation of bonds and their identification with the organization, as well as on OCB.

2.2. Perceptions of Corporate Social Responsibility and Organizational Citizenship Behavior

Understanding the relationship between the perception of social responsibility and OCB is an issue that the literature has recently begun to dedicate itself to with greater determination. In order to analyze this relationship, the theories of social identity (Tajfel 1974) and social exchange (Blau 1964) are particularly relevant as they enable a better understanding of the influence of the perception of corporate social responsibility practices on employees' positive behavior. The results of the study by Jones (2010) revealed that employees reciprocate through organizational citizenship behavior when they perceive socially responsible business practices. Using Blau's (1964) theory of social exchange, more specifically the notion of reciprocity, one can consider that organizational members may perceive that social responsibility is also in their interest, as the main stakeholders of

organizations, seeking to repay the organization's investments in practices of this nature (Glavas 2016). This exchange is sustained by reciprocity: when organizations guarantee good working conditions and benefits for their employees, the latter, in turn, reciprocate through extra efforts (Story and Neves 2015; Glavas 2016). Similarly, Hansen et al. (2011) also use social exchange theory (Blau 1964) to explain why employees engage in discretionary behavior when they wish to "repay" their organization for its benevolence toward them, or in exchange for the organization's commitment or positive relationship with them. According to this theory, when employees perceive that their organization adopts socially responsible practices, they are more likely to exert extra effort in performing their duties and are less likely to consider leaving the company (Hansen et al. 2011).

Perceptions of social responsibility and organizational citizenship behavior are more pronounced in employees with high levels of moral identity (Rupp et al. 2013). From this perspective, employees who share the same ethical values adopted by the organization generally show more organizational citizenship behaviors (Baker et al. 2006). For example, the perceptions of organizational support in relation to the environment are significantly related to the attitudes and behaviors of employees, namely through behaviors that go beyond what is stipulated in favor of sustainability (Lamm et al. 2015). Noteworthy is another form of response to social responsibility initiatives by employees; that is, discretionary CSR actions, such as community donations, which do not provide direct benefits to employees; however, they, as members of the community (and of society in general), tend to reciprocate these activities in the form of positive organizational behaviors (Kim et al. 2017). That is, when employees perceive that their organization invests in social responsibility practices, either intrinsically or extrinsically (when seeking to obtain some benefit), they tend to exercise extra effort in their work (Story and Neves 2015).

Thus, when employees perceive the organization to be socially responsible, they will tend to reciprocate and develop OCBs. As such, hypothesis 1 was elaborated on:

Hypothesis 1 (H1). *Frontline employees' perceptions regarding social responsibility practices (H1a: Environment-related CSR; H1b: Employee-related CSR; H1c: Customer-related CSR) will be positively related to OCB.*

2.3. Perceptions of Corporate Social Responsibility and Organizational Identification

Organizational identification is a concept that is commonly defined and based on a relationship that the individual establishes with the organization. Studies have resorted to Tajfel's theory of social identity (1974); this is grounded in the importance of belonging to certain social groups, and the emotional and evaluative meaning of that belonging. According to Ashforth and Mael (1989), the concept of organizational identity is based on this notion of belonging, but extends to the existence of a "oneness with" or "unity" to an organization, whereby the experience of the organization's successes and failures are experienced as if they were the individual's own. Or simply stated: organizational identification is a kind of "psychological attachment" that occurs "when members adopt the defining characteristics of the organization as defining characteristics of themselves" (Dutton et al. 1994, p. 242). From this perspective, when organizational identification is strong, it means that there is an incorporation of what is "distinctive, central, and enduring" in the organization (Dutton et al. 1994, p. 242). Therefore, people tend to truly identify with the organization when their identity as an organizational member is more important than other identities, and concept of self possesses many of the same characteristics that define the organization as a social group (Dutton et al. 1994).

OI has been defined in different ways in the literature, thus pointing to broader or narrower conceptualizations (e.g., Edwards 2005; Dutton et al. 1994; Dutton et al. 2010; Ashforth and Mael 1989; Ashforth et al. 2008). For example, in a broader perspective, Ashforth and Mael (1989, p. 21) define the concept as "the perception of oneness or belongingness to some human aggregate". In this same broad approach, Dutton et al. (1994, p. 239) define it as the moment when "a person's self-concept contains the same attributes

as those in the perceived organizational identity". This theoretical reference in the literature is important insofar as it allows one to understand why certain members of organizations show a greater sense of identification than others.

Similarly, the model proposed by Rousseau (1998) also enables an understanding of why people identify with the organization and proposes two types of identification: situational and deep structure. The first, situational identification, is more likely to occur when individuals and the organization have common interests, and the results of actions can be shared by both. This type of identification is expected to end as soon as the task is completed and can be formed rather quickly. In this context, it is related to the success of temporary jobs, and may prove relevant to new forms of work. When situational identification occurs, the individual's interaction with the organization may become deeper over time, giving rise to deep structure identification. The identification of deep structure occurs when what is experienced by the individual in the organization is significant. This then leads to the formation of mental models, which are capable of exerting influence on the way individuals come to see themselves. As organizations are subjected to many alterations, the second form of identification may encounter barriers due to the constant changes in values, objectives, and incentive systems present in contemporary organizations (Rousseau 1998).

Individuals' identification is also influenced by others' perceptions of the organization (Dutton et al. 1994). The model presented by the previous authors focuses on two key images, namely those of perceived organizational identity and the interpreted organizational image obtained from external members. According to the authors, these images "shape the strength of members' identification with the organization, serving as important cognitive reference points that connect or disconnect a member of the organization" (Dutton et al. 1994, p. 258). The first is related to the members' evaluation of the organization's character ("members' beliefs about the organization's distinctive, central, and enduring attributes"), while the second concerns members' beliefs as to how outsiders evaluate the organization. An example of this assumption is when employees have a sense of how customers (external stakeholders) perceive their organization (Glavas and Godwin 2013).

From these ties that members establish with the organization they are a part of, several relevant consequences can ensue, both for individuals as well as the organizations involved (Ashforth and Mael 1989). In this sense, organizations must pay special attention to the factors that can affect and determine them. For this purpose, the literature has explored various antecedents of the organizational identification construct. Ashforth and Mael (1989) consider that attributes such as personal interaction, similarity, preferences, proximity, shared goals and a common history increase the tendency for an individual to identify with the organization. Added to this background are its unique characteristics, more specifically what differentiates it from the others; its prestige; and the salience of other organizations (Ashforth and Mael 1989). Other antecedents of identification studied include leadership (Ehrhart 2004; Walumbwa et al. 2011), perceived organizational support (Sluss et al. 2008; Subba 2019), and social responsibility (He and Brown 2013).

Regarding the last antecedent mentioned, Farooq et al. (2014) used Tajfel's theory of social identity (1974) to explain that social responsibility measures promote organizational identification, both in the case of internal stakeholders and external parties (e.g., community and customers), as well as good deeds on the part of employees, due to the measures implemented. Identification with the organization can be strengthened by the importance employees have attributed to social responsibility activities (Glavas and Godwin 2013). In this context, this study aims to examine how employees perceive CSR practices and how these practices (centered on the environment, customers, or employees) influence their identification with the organization.

Based on this, we formulated the second hypothesis:

Hypothesis 2 (H2). *Frontline employees' perceptions regarding social responsibility practices (H2a: Environment-related CSR; H2b: Employee-related CSR; H2c: Customer-related CSR) will be positively related to OI.*

Employees are increasingly looking for organizations whose concerns are not restricted to the business itself. Namely, they wish to be part of companies whose concerns go beyond what is required, thus seeking companies that establish ties and good relationships with other stakeholders and the environment (Su and Swanson 2019). The truth is that social responsibility practices contribute to an organization's positive image, improving its reputation and prestige and, eventually, distinguishing it from other organizations (Ehrhart 2004; Carmeli et al. 2007; Doh et al. 2011; Park and Levy 2014), in this case in the hotel sector. From this perspective, organizations in the tourism sector that show responsible behavior ultimately benefit their reputation, thus improving their image with external stakeholders, as well as creating a favorable climate of trust and cooperation within the company (Camilleri 2016). Accordingly, social responsibility policies and practices are expected to serve as an example for the model of behavior valued by the organization and, consequently, influence the manifestation of identification and subsequent organizational citizenship behaviors.

As stakeholders, employees form perceptions regarding internal social responsibility practices (or initiatives related to social responsibility aimed at the environment, the employees and customers) (De Roeck and Maon 2018). Employees' perceptions of the company's social responsibility practices positively influence their attitudes and behaviors, namely organizational citizenship behavior (Rupp et al. 2006, Slack et al. 2014). Thus, according to the norm of reciprocity, if the organization exhibits social responsibility practices and if these practices benefit the environment, the individual or the customers; the employees will, in turn, feel a greater sense of identification with the organization and reciprocate through behaviors that are beneficial to the organization, such as OCB. As such, the third hypothesis was formulated:

Hypothesis 3 (H3). *Frontline employees' perceptions regarding social responsibility practices (H3a: Environment-related CSR; H3b: Employee-related CSR; H3c: Customer-related CSR) will be positively related to organizational citizenship behaviors through the mediating role of organizational identification.*

3. Method

This section presents the research method. Accordingly, the context, measures, procedure, and sample are presented as follows.

3.1. Research Context

Considered as one of the main industries of the 21st century (Aynalem et al. 2016), the hotel sector is gaining a real awareness of the significance of sustainability and, more specifically, the importance given to employees and their perception of this type of practice (Holcomb and Smith 2015). Despite existing studies, most research on this topic has focused on the company and customers' perspectives (Kim et al. 2018). The analysis of employees' perceptions of social responsibility activities is extremely pertinent for the management of the hotel industry since its employees, who are in direct contact with customers, play a decisive role in the success of these organizations (Kim et al. 2018).

The tourism sector is characterized by a high level of turnover, poorly paid work, job insecurity, seasonality, unpromising professional careers, and few development opportunities, among other aspects (Chytiri et al. 2018). In this context, typical features of the sector are the often-irregular working hours, which are usually poorly paid. In addition, these are subject to pressures inherent to the functions performed which, in many circumstances, can lead to burnout (Mansour and Tremblay 2016). Due to the unstable, transitory, and low-

skilled working conditions, there is a high turnover of staff, which represents unavoidable costs for these organizations (DiPietro and Bufquin 2018).

Investment in socially responsible initiatives by hotels can also be associated with the adoption of environmentally and socially responsible practices in the workplace (Su and Swanson 2019), such as: adapting facilities to accommodate people with disabilities; implementing good practices in terms of equal opportunities and non-discrimination; developing training programs; encouraging customers to consume local products (Suárez-Cebador et al. 2018) and restricting their use of natural resources, like water and electricity (Molina-Azorín et al. 2009); or even establishing a relationship with the local inhabitants (Gursoy et al. 2019), such as collaboration in social projects within the community (Rhou and Singal 2020).

3.2. Measures

In order to measure CSR perceptions, 22 items from Park and Levy (2014) were used, more specifically to assess employees' perceptions of socially responsible practices in the hotel industry. The original authors divided the scale into three dimensions: CSR-Environment and Community (eleven items), CSR-collaborators (six items), and CSR-Customers (five items). Some examples of the items are: "My hotel encourages guests to reduce their environmental impact through programs and initiatives" (CSR-Environment and Community), "My hotel encourages guests to reduce their environmental impact through programs and initiatives" (CSR-employees). "My hotel treats our employees fairly and respectfully," and "Customer satisfaction is very important to my hotel" (CSR-Customers). For each item, respondents were asked to indicate the degree of agreement using a Likert-scale consisting of five levels of agreement (where 1 corresponds to "Strongly Disagree" and 5 to "Strongly Agree").

In order to measure organizational identification, the 6-item organizational identification scale by Mael and Ashforth (1992) was used. Bearing in mind that organizational identification is the perception of unity or belonging to the organization (Mael and Ashforth 1992), this scale aims to assess the degree to which respondents identify with the organization they are a part of. Some of the items considered are: "When someone criticizes the hotel, I feel it as a personal insult," "I am really interested in what others think about the hotel," "The success of this hotel is my success." Using the study carried out by Lu et al. (2016) as a reference, some items were adapted, due to the context in which the study was carried out, so that the term "organization" was replaced by the term "hotel".

In order to measure organizational citizenship behavior (OCB) in relation to the organization, 5 items of the scale devised by Ma et al. (2013) were used. This organizational dimension of the scale describes the citizenship behaviors adopted by employees regarding the organization. Some examples are: 'I will give advance notice if I cannot come to work,' and "I protect our hotel's property." A 5-point Likert-scale was used to assess the respondent's level of agreement regarding organizational citizenship behaviors, based on the following response possibilities: 1, 'Strongly Disagree'; 2, 'Disagree'; 3, 'Do not agree or disagree'; 4, 'Agree' and 5, 'Strongly Agree'.

3.3. Procedures

In order to test the questionnaire after translating the scales into Portuguese and adapting it to the context of the study, the questionnaire application phase was preceded by a pre-test with 17 employees of three-star hotels. At this stage, whenever possible, we sought to directly question respondents about any doubts, criticisms, or suggestions to be introduced in the data collection instrument. Overall, the questionnaire proved to be well structured and understandable. Regarding the size of the questionnaire, it was considered unnecessary to reduce the number of items, especially since the average response time was around 10 min. After this stage, the final questionnaire pertaining to this study was applied. As the scale refers to the perception of social responsibility depending on the respondent's interaction with the organization's customers, the questionnaires were

answered by employees of the hotel sector who are in direct contact with customers. Prior to the application of the questionnaire, a formal collaboration request was prepared and sent via email to each of the hotels. Due to the difficulty in obtaining authorization from the Board, face-to-face contact was required so as to ensure a high number of responses. At this stage of delivery and collection of the analysis instrument, one had to access the site to obtain the answers and renew/remind respondents of the request to fill in the questionnaires.

The choice of providing a hard copy of the questionnaire ensued from the difficulty in contacting responsible staff via e-mail and obtaining answers, as well as the suggestion by some hotels that indicated a preference for this methodology. Despite this option, one also had to create a digital version of the questionnaire, disclosing the answer link in requests placed via e-mail. In total, six questionnaires were completed online, and the rest were returned on paper.

The introductory part of the questionnaire presented the study objective, and respondents were clearly informed as to the guarantees of confidentiality and anonymity of their answers. In this way, we sought to reinforce that this was a scientific study that had been authorized by the hotel's management, and we further appealed to the participants' sincere responses. Informed consent was obtained from the study participants. The email address and contact information were provided in the case of further queries about the study. After collecting data, a previous inspection allowed for the exclusion of some incomplete questionnaires, which would not be subjected to statistical treatment.

3.4. Sample

Questionnaires were obtained from 214 employees of the hotel sector. The study was applied to employees of four-star and five-star hotels in the North of Portugal. For the collection and calculation of the sample, the National Tourism Register (RNT) was used. The application of the questionnaires took place in the first three months of 2020. The implementation of social responsibility practices is considered to be increasingly relevant in this sector, namely with regard to the issue of compliance with sustainability requirements, so that hotels can be classified as four- and five-star accommodations. Questionnaires were received from four-star ($n = 169$, 79%) and five-star hotels ($n = 45$, 21%), from respondents aged over 17 and under 60, corresponding to an average of 32 years of age (Table 1). Concerning the gender of the respondents involved: of these 114 (53.5%) were female and 99 (46.5%) were male. Regarding the professional activity performed, 119 (55.6%) worked in the reception area, 68 (31.8%) in bars and restaurants, 9 (4.2%) worked in the cleaning and maintenance of facilities, 8 (3.7%) were involved in sports and recreational activities, 7 (3.3%) performed functions such as accommodation technician, operational management, group coordination, and head of the contracting department. In relation to the work schedule, 6.5% work part-time and 93.5% have full-time jobs. As for academic qualifications, participants are ranked as follows: 1 (0.5%) completed the 1st cycle of basic education, 1 (0.5%) completed the 2nd cycle of basic education, 13 (6.1%) completed the 3rd cycle of basic education, 79 (36.9%) completed secondary education, 12 (5.6%) possess a Bachelor's degree, 87 (40.7%) have an Honors' degree, and 20 (9.3%) have a Master's/Postgraduate degree.

Regarding seniority in the organization reported by the respondents, the answers indicated that about 50% of them had worked in the organization for less than 1 year, and the rest had worked for longer; of these, 6.6% had been with the organization for more than 10 years.

Table 1. Sample characterization.

	N (%)
Gender	
Female	114 (53.5%)
Male	99 (46.5%)
Age	
17–30	151 (74%)
31–40	34 (16.7%)
41–50	13 (6.4%)
51–60	6 (2.9%)
Academic qualifications	
1st cycle of basic education	1 (0.5%)
2nd cycle of basic education	1 (0.5%)
3rd cycle of basic education	13 (6.1%)
Secondary education	79 (36.9%)
Bachelor's degree	12 (5.6%)
Honors' degree	87 (40.7%)
Master's/Postgraduate degree	20 (9.3%)
Professional activity	
Reception area	119 (55.6%)
Bars and restaurants	68 (31.8%)
Cleaning and maintenance	9 (4.2%)
Sports and recreational activities	8 (3.7%)
Accommodation technician, operational management, etc.	7 (3.3%)
Work schedule	
Part-time	14 (6.5)
Full-time	200 (93.5)
Seniority in the organization	
<1 year	97 (45.5)
1–5 years	82 (38.5)
5–10 years	20 (9.4)
>10 years	14 (6.6)

4. Results

The scales that made up the questionnaire were submitted to an exploratory factor analysis of the principal components in order to use the resulting factor scores in subsequent statistical analyses. In this phase of the analysis, two of its main assumptions were considered; namely, the value obtained in the KMO test (Kaiser-Meyer-Olkin) and Bartlett sphericity test, both of which evaluate the feasibility of carrying out factor analysis. According to recommendations in the literature, for each scale, items with loadings greater than 0.50 were selected for each factor (Howell 1992). Components with internal consistency coefficients greater than 0.70 were the only ones considered from the selected components (Nunnally 1978).

Based on these assumptions, exploratory factor analysis was then undertaken, as can be seen in Table 2. The highest scores correspond to a higher level of perception of corporate responsibility practices (environment/community, employees, and hotel customers), organizational identification, and organizational citizenship behaviors.

Table 2. Exploratory factor analysis.

Variables	Items	Factor Loading
Environment-related CSR	"My hotel reports the hotel's environmental performance."	0.866
	"My hotel incorporates environmental concerns in its business decisions."	0.840
	"My hotel buys products and services locally, which minimizes environmental impact."	0.831
	"My hotel actively tries to reduce the environmental impact of its activities."	0.821
	"My hotel encourages guests to reduce their environmental impact through programs and initiatives."	0.818
	"My hotel helps to improve the quality of life of the local community."	0.790
	"My hotel encourages employees to become involved with community organizations."	0.769
	"My hotel financially supports the environmental initiatives of other organizations."	0.760
	"My hotel incorporates community interests in its business decisions."	0.740
	"My hotel actively works with national/international organizations that promote responsible business."	0.720
	"My hotel financially supports local charities through donations, wind sponsorships, and/or provides goods and services."	0.660
	Explained variance (%)	61.7
	Cronbach's Alpha	0.937
Employee-related CSR	"My hotel's policies promote a good work-life balance for employees."	0.867
	"My hotel incorporates employees' interests in its business decisions."	0.845
	"My hotel encourages employees to develop their skills and careers."	0.830
	"My hotel offers a safe and healthy working environment for all employees."	0.823
	"My hotel treats our employees fairly and respectfully."	0.798
	"My hotel offers fair and reasonable wages."	0.721
		Explained variance (%)
	Cronbach's Alpha	0.895
Customer-related CSR	"One of my hotel's main principles is to offer high-quality services and products to our customers."	0.840
	"My hotel incorporates customer interests in its business decisions."	0.834
	"My hotel is sensitive to our customers' complaints."	0.829
	"My hotel respects consumer rights beyond legal requirements."	0.774
	"Customer satisfaction is very important to my hotel."	0.753
	Explained variance (%)	65.09
	Cronbach's Alpha	0.863

Table 2. *Cont.*

Variables	Items	Factor Loading
Organizational Identification	“I am genuinely interested in what others think about the hotel.”	0.796
	“The success of this hotel is my success.”	0.765
	“When someone praises my hotel, I feel it to be a personal compliment.”	0.743
	“If a media story criticized the hotel, I would be embarrassed.”	0.733
	“When I talk about this hotel, I say “us” more often than “them.”	0.709
	“When someone criticizes the hotel, I feel it to be a personal insult.”	0.683
	Explained variance (%)	54.60
	Cronbach’s Alpha	0.822
Organizational citizenship behaviors— Organization	“I say good things about our hotel when talking to outsiders.”	0.712
	“I protect our hotel’s property.”	0.705
	“I actively promote the hotel’s products and services.”	0.688
	“I follow informal rules in order to maintain order in the hotel.”	0.574
	“I will give advance notice if I cannot come to work.”	0.561
	Explained variance (%)	32.88
	Cronbach’s Alpha	0.950

All the scale items had loadings greater than 0.50, so none were excluded from the analysis (Nunnally 1978); the internal consistency values for all the scales and the explained variance were also above what is recommended in the literature (Nunnally 1978).

The correlational matrix (Table 3) presents the mean values, standard deviation, and correlation coefficients of the study variables. The average values indicate that employees consider social responsibility practices to be directed mainly at the hotel’s customers. Practices which target the protection of the environment, or working conditions, are less valued if one considers the mean value. The results of the correlations indicate that organizational identification is positively correlated with the Environment-related CSR variable ($r = 0.303$; $p < 0.001$), Employee-related CSR variable ($r = 0.260$; $p < 0.001$), and Customer-related CSR ($r = 0.269$; $p < 0.001$). The results also indicate that OCB is positively correlated with the Environment-related CSR variable ($r = 0.307$; $p < 0.001$), Employee-related CSR variable ($r = 0.205$; $p < 0.001$), Customer-related CSR variable ($r = 0.227$; $p < 0.001$) and OI ($r = 0.513$; $p < 0.001$). This suggests that, when employees in the hotel sector perceive CSR practices, they will tend to develop a sense of greater identification with the organization they work for and are, subsequently, likely to develop organizational citizenship behaviors. These results will be explored in the next step, which deals with the estimation of subsequent regression models.

Table 3. Means, standard deviations and correlations of construct-related variables.

Variable	Mean	STD.DEV.	1	2	3	4	5
Environment-related CSR	3.405	0.874	(0.937)				
Employee-related CSR	3.673	0.847	0.589 ***	(0.895)			
Customer-related CSR	4.428	0.595	0.581 ***	0.591 ***	(0.863)		
OI	3.972	0.710	0.303 ***	0.260 ***	0.269 ***	(0.822)	
OCB	4.330	0.435	0.307 ***	0.205 ***	0.227 ***	0.513 ***	(0.950)

Note: N = 214 *** Significant at $p < 0.001$ (2-tailed). Cronbach alpha (appear along the diagonal in italics).

In order to test the hypotheses formulated and consider the effects of mediation, a bootstrapping method was performed using model 4 of the Process Macro (Hayes 2017), thus allowing for the analysis of the direct and indirect effects of a single mediator. The purpose of this analysis is to verify if OI mediated the relationship between perceptions of CSR (Environment-related CSR; Employee-related CSR; Customer-related CSR) and OCB. Firstly, regression testing for mediation was conducted to verify whether OI mediated the relationship between Environment-related CSR and OCB. The regression of Environment-related CSR (X) on OCB (Y) was significant ($\beta = 0.1926$, $t(214) = 3.2660$; $p < 0.01$), thus confirming H1a (Table 4). The results of the regression analysis also indicated that Environment-related CSR (as an independent variable) was a significant predictor of OI ($\beta = 0.2214$, $t(214) = 3.3331$; $p < 0.01$), thus confirming H2a. Results of the regression analysis showed that, when controlling for OI (mediator), Environment-related CSR was significant as a predictor of OCB ($\beta = 0.5077$, $t(214) = 8.3492$; $p < 0.001$). The mediator, OI, accounted for approximately 57% of the total effect on OCB. Based on 5000 bootstrap samples, the results of the indirect effect showed a significant indirect relationship between Environment-related CSR and OCB ($a*b = 0.1124$, Bootstrap $CI_{95} = 0.0406$ and 0.2019), thus allowing one to confirm the mediation effect of OI on the relationship between the perception of CSR based on the environment and OCB (confirming H3a). In sum, the mediation analysis revealed that OI partially explains the effect of Environment-related CSR on OCB; in addition, Environment-related CSR influences OCB, regardless of the proposed mediation mechanism ($\beta = 0.1926$, $p < 0.01$). Given that the direct effect is smaller than the total effect (Baron and Kenny 1986), one can infer that there is complementary partial mediation (Zhao et al. 2010).

Table 4. Regression Coefficients, Standard Errors, and Model Summary Information (Mediation Model_Environment-related CSR).

Variable/Effect	β	SE	t-Value	CI 95% (LL-UL)
Environment-related CSR→OCB	0.1926	0.0590	3.2660 **	0.0763–0.3089
Employee-related CSR→OI	0.2214	0.0664	3.3331 **	0.0904–0.3524
Environment-related CSR→OI→OCB	0.5077	0.0608	8.3492 ***	0.3878–0.6276
Direct effect	0.1926	0.0590	3.2660 **	0.0763–0.3089
Indirect effect	0.1124	0.0406		0.0406–0.2019
Total effect	0.3050	0.0665	4.5891 ***	0.1740–0.4361

Notes: Based on a bootstrap test (5,000 re-samples). When the bootstrap of 95% CI (LL: lower levels; UL: upper level (JS)s) contains zero for one of the values. It indicates that the effect was not significant. β = Regression Coefficients; SE = Standard Error; CI = Confidence Interval; ** $p < 0.01$; *** $p < 0.001$.

Secondly, regression testing for mediation was conducted to verify whether OI mediated the relationship between the perception of CSR based on employees' practices and OCB. The regression of Employee-related CSR (X) on OCB (Y) was significant ($\beta = 0.1180$, $t(214) = 1.9963$; $p < 0.05$), thus confirming H1b (Table 5). The results of the regression analysis showed that Employee-related CSR (as an independent variable) was a significant predictor of OI ($\beta = 0.1602$, $t(214) = 2.3831$; $p < 0.05$), thus confirming H2b. While controlling for OI (mediator), Employee-related CSR was significant as a predictor of OCB ($\beta = 0.5329$, $t(214) = 8.7363$; $p < 0.001$). The mediator, OI, accounted for approximately 30% of the total effect on OCB. The results of the indirect effect pointed to a significant indirect relationship between Employee-related CSR and OCB ($a*b = 0.0854$, Bootstrap $CI_{95} = 0.0012$ and 0.1835), thus confirming H3b, i.e., the mediation effect of OI on the relationship between the perception of CSR focusing on the employee and OCB. Based on the same assumptions for the mediation mechanism (Baron and Kenny 1986; Zhao et al. 2010), the analysis showed that OI partially mediates the effect of Employee-related CSR on OCB ($\beta = 0.1180$, $p < 0.05$).

Table 5. Regression Coefficients, Standard Errors, and Model Summary Information (Mediation Model_Employee-related CSR).

Variable/Effect	β	SE	t-Value	CI 95% (LL-UL)
Employee-related CSR→OCB	0.1180	0.0591	1.9963 *	0.0014–0.2345
Employee-related CSR→OI	0.1602	0.0672	2.3831 *	0.0277–0.2927
Employee-related CSR→OI→OCB	0.5329	0.0610	8.7363 ***	0.4126–0.6531
Direct effect	0.1180	0.0591	1.9963 *	0.0014–0.2345
Indirect effect	0.0854	0.0461		0.0012–0.1835
Total effect	0.2033	0.0683	2.9777 **	0.0687–0.3380

Notes: Based on a bootstrap test (5,000 re-samples). When the bootstrap of 95% CI (LL: lower levels; UL: upper level (JS)s) contains zero for one of the values, it indicates that the effect was not significant. β = Regression Coefficients; SE = Standard Error; CI = Confidence Interval; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

In order to test the mediating role of OI in the relationship between hotel employees' perceptions of internal social responsibility practices regarding customers and OCB, a third model was estimated (Table 6). Results obtained indicated that the regression of Customer-related CSR (X) on OCB (Y) was significant ($\beta = 0.1328$, $t(214) = 2.2346$; $p < 0.05$), thus confirming H1c. The results showed that Customer-related CSR was a significant predictor of OI ($\beta = 0.1775$, $t(214) = 2.6346$; $p < 0.05$) (confirming H2c). Controlling for OI (as a mediator), Customer-related CSR was significant as a predictor of OCB ($\beta = 0.5281$, $t(214) = 8.6539$; $p < 0.001$). The mediator, OI, accounted for approximately 31% of the total effect on OCB. The results of the indirect effect pointed to a significant indirect relationship between Customer-related CSR and OCB ($a*b = 0.0938$, Bootstrap CI95 = 0.0002 and 0.1814), thus confirming H3c. Results indicated that OI partially mediates the relationship between the perception of CSR based on the customer and OCB ($\beta = 0.1328$, $p < 0.05$).

Table 6. Regression Coefficients, Standard Errors, and Model Summary Information (Mediation Model_Customer-related CSR).

Variable/Effect	β	SE	t-Value	CI 95% (LL-UL)
Customer-related CSR→OCB	0.1328	0.0594	20.2346 *	0.0156–0.2501
Customer-related CSR→OI	0.1775	0.0674	20.6346 **	0.0447–0.3104
Customer-related CSR→OI→OCB	0.5281	0.0610	80.6539 ***	0.4078–0.6485
Direct effect	0.1328	0.0594	20.2346 *	0.0156–0.2501
Indirect effect	0.0938	0.0460		0.0002–0.1814
Total effect	0.2266	0.0683	30.3172 **	0.0919–0.3613

Notes: Based on a bootstrap test (5,000 re-samples). When the bootstrap of 95% CI (LL: lower levels; UL: upper level (JS)s) contains zero for one of the values, it indicates that the effect was not significant. β = Regression Coefficients; SE = Standard Error; CI = Confidence Interval; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

5. Discussion

In this study, we explored how employees perceive the socially responsible activities of their organizations, how these perceptions influence their level of organizational identification and, consequently, how they behave as good organizational citizens. In order to analyze these relationships, a model was tested, which uses the mediating role of OI in the relationship between CSR perceptions and OCB.

The answers obtained in this research constitute theoretical and empirical contributors to the analysis of the quality of employee-organization relationships (Bhattacharya et al. 2009; Lee et al. 2012). Accordingly, and in order to further our knowledge on this topic, which was mainly explored in the hotel sector (e.g., Camilleri 2016; Gursoy et al. 2019)

with frontline employees (e.g., Park and Levy 2014; Freire and Gonçalves 2021), this study concludes that frontline employees' perceptions regarding internal social responsibility practices (based on the environment, employees and customer) influenced OCB, and that this relationship was mediated by OI.

The results of this study indicated that, despite the fact that frontline employees consider hotel CSR practices to be directed mainly at the hotel's customers, the truth is that all the dimensions (environment, employees, and customers) contribute to the staff's identification with the organization (confirming H1a, b and c and H2a, b and c). As such, OI contributes to the development of OCB (confirming H3a, b and c).

This study expands on the existing literature (e.g., Park and Levy 2014; Oh et al. 2021; George et al. 2021) and seeks to contribute to the study of CSR as a company activity aimed at various stakeholders, including employees and customers, as well as the environment and the community (Postel and Sobel 2019). Considering the purpose of CSR—that companies repay society responsibly for what they receive from it—then, in line with this logic, and as internal stakeholders, employees “are essential for the existence and sustainability of the business” (George et al. 2021, p. 1094). The results indicated that hotel CSR practices directed at employees, the environment, or the customers, contribute to their “wearing the organizational t-shirt.” In this sense, hotels must improve their CSR-related practices and communication with employees if they are to enhance the quality of the employee-organization relationship.

The results of this study pointed out that CSR practices are created in the hotel sector to address the interests of clients, the environment, and employees. Employees' CSR perceptions influence the staff's level of organizational identification, ultimately resulting in citizenship behavior. These results reveal employees' altruistic values (Chen and Choi 2008) because, when they feel they identify with the organization's CSR practices, they tend to reveal a predisposition toward defending the organization's interests and go further in the performance of their duties.

In sum, and in line with other studies in the literature, the results of this research indicate that managers are likely to “go green” (Park and Levy 2014). However, the results obtained in this study showed that organizations should implement CSR practices for their employees due to their role as “primary internal stakeholders” (Bhattacharya et al. 2009; Park and Levy 2014; George et al. 2021). In this sense, those in management must improve communication, and implement ways of listening to employees, if they wish to understand what staff expect in terms of participation and social intervention, what they consider to be a priority, and which stakeholders should be involved. In this regard, De Roeck and Maon (2018) emphasize the idea that company leaders should consider their employees to be a link between internal CSR activity and the external environment. As such, staff members should be involved in the sustainability strategies designed by the company and, in this sense, the training of employees must be provided to ensure they will become the company's “ambassadors” abroad. Furthermore, CSR activities contribute to the creation of a positive organizational image, which has been considered to be a determining aspect of employees' pride and willingness to belong to the organization (De Roeck and Delobbe 2012). In addition, employees should also contribute to the definition of a communication policy and digital marketing strategy for the CSR activities developed by the company.

We believe to have contributed to the advancement of knowledge in this field, mainly by presenting empirical evidence regarding the mediation mechanism between the perceptions of CSR and OI in the hospitality sector. However, future studies should seek to include other sectors, namely education or even industry and services. Despite these contributions, we have found some limitations in the study. First of all, the sample may not fully represent the opinion of frontline hotel employees. Secondly, the procedures followed in the application of the questionnaires (on paper and/or in digital format) may have somehow influenced the effect of the social desirability of the responses obtained. Future studies should thus seek to implement different forms of the application of the questionnaires to counter this potential effect. Moreover, future analyses should seek to

include other variables in the model in order to extend it and, for example, detect variables that may have an additional mediating effect on the relationship between the perceptions of CSR and OCB.

6. Conclusions

In short, the empirical evidence presented in this study shows that an increase in identification with the organization based on environmental-related activities, employee-related activities, or customer-related activities, impact on OCB. As such, employees in the hospitality sectors studied perceived socially responsible practices which, subsequently contributed to the enhancement of their “attachment” to the organization. In this context, they are more predisposed to going the extra mile in favor of the organization. To this end, organizations should focus their intervention on CSR practices if they wish to potentiate a sense of attachment to the organization, as well as the enhancement of citizenship behaviors.

Author Contributions: Conceptualization, C.F., J.G. and M.R.C.; methodology, C.F., J.G. and M.R.C.; software, C.F., J.G. and M.R.C.; validation, C.F., J.G. and M.R.C.; formal analysis, J.G. and M.R.C.; writing—original draft preparation, C.F.; writing—review and editing, C.F., J.G. and M.R.C.; supervision, C.F. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: Ethical review and approval were waived for this study because anonymity, privacy, and confidentiality were guaranteed to the survey participants.

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

Data Availability Statement: The data will be made available on request from the corresponding author, Carla Freire, cfreire@eeg.uminho.pt.

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

References

- Ashforth, Blake, and Fred Mael. 1989. Social Identity Theory and the Organization. *Academy of Management Review* 14: 20–39. [CrossRef]
- Ashforth, Blake, Spence Harrison, and Kevin Corley. 2008. Identification in Organizations: An Examination of Four Fundamental Questions. *Journal of Management* 34: 325–74. [CrossRef]
- Aynalem, Sintayehu, Kassegn Birhanu, and Sewent Tesefay. 2016. Employment Opportunities and Challenges in Tourism and Hospitality Sectors. *Journal of Tourism & Hospitality* 5: 257–62.
- Baker, Thomas L., Tammy G. Hunt, and Martha C. Andrews. 2006. Promoting ethical behavior and organizational citizenship behaviors: The influence of corporate ethical values. *Journal of Business Research* 59: 849–57. [CrossRef]
- Baron, Reuben M., and David A. Kenny. 1986. The Moderator–Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology* 51: 1173–82. [CrossRef]
- Bhattacharya, Chitra, Daniel Korschun, and Sankar Sen. 2009. Strengthening stakeholder-company relationships through mutually beneficial corporate social responsibility initiatives. *Journal of Business Ethics* 85: 257–72. [CrossRef]
- Blau, Peter. 1964. *Exchange and Power in Social Life*. New York: Academic Press.
- Camilleri, Mark. 2016. Responsible tourism that creates shared value among stakeholders. *Tourism Planning & Development* 13: 219–35.
- Carmeli, Abraham, Gershon Gilat, and David Waldman. 2007. The Role of Perceived Organizational Performance in Organizational Identification, Adjustment and Job Performance. *Journal of Management Studies* 44: 972–92. [CrossRef]
- Chen, Po-Ju, and Youngsoo Choi. 2008. Generational differences in work values: A study of hospitality management. *International Journal of Contemporary Hospitality Management* 20: 595–615. [CrossRef]
- Chytiri, Alexandra-Paraskevi, Fragkiskos Filippaios, and Leonidas Chytiris. 2018. Hotel Recruitment and Selection Practices: The Case of the Greek Hotel Industry. *International Journal of Organizational Leadership* 7: 324–39. [CrossRef]
- Clarkson, Max. 1995. A stockholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review* 20: 92–117. [CrossRef]
- Coyle-Shapiro, Jacqueline, Ian Kessler, and John Purcell. 2004. Exploring Organizationally Directed Citizenship Behaviour: Reciprocity or ‘It’s my Job’?*. *Journal of Management Studies* 41: 85–106. [CrossRef]
- De Roeck, Kenneth, and François Maon. 2018. Building the Theoretical Puzzle of Employees’ Reactions to Corporate Social Responsibility: An Integrative Conceptual Framework and Research Agenda. *Journal of Business Ethics* 149: 609–25. [CrossRef]
- De Roeck, Kenneth, and Nathalie Delobbe. 2012. Do environmental CSR initiatives serve organizations’ legitimacy in the oil industry? Exploring employees’ reactions through organizational identification theory. *Journal of Business Ethics* 110: 397–412. [CrossRef]

- Dey, Prasanta, Nikolaos Petridis, Konstantinos Petridis, Chrisovalantis Malesios, Jonathan D. Nixon, and Kumar Ghosh. 2018. Environmental management and corporate social responsibility practices of small and medium-sized enterprises. *Journal of Cleaner Production* 195: 687–702. [CrossRef]
- DiPietro, Robin, and Diego Bufquin. 2018. Effects of work status congruence and perceived management concern for employees on turnover intentions in a fast-casual restaurant chain. *Journal of Human Resources in Hospitality & Tourism* 17: 38–59.
- Doh, Jonathan, Stephen Stumpf, and Walter Tymon. 2011. Responsible Leadership Helps Retain Talent in India. *Journal of Business Ethics* 98: 85–100. [CrossRef]
- Dutton, Jane, Janet Dukerich, and Celia Harquail. 1994. Organizational images and member identification. *Administration Science Quarterly* 39: 239–63. [CrossRef]
- Dutton, Jane, Laura Roberts, and Jeffrey Bednar. 2010. Pathways for Positive Identity Construction at Work: Four Types of Positive Identity and the Building of Social Resources. *Academy of Management Review* 35: 265–93.
- Edwards, Martin. 2005. Organizational identification: A conceptual and operational review. *International Journal of Management Reviews* 7: 207–30. [CrossRef]
- Ehrhart, Mark. 2004. Leadership and procedural justice climate as antecedents of unit-level organizational citizenship behavior. *Personnel Psychology* 57: 61–94. [CrossRef]
- Farooq, Omer, Marielle Payaud, Dwight Merunka, and Pierre Valette-Florence. 2014. The Impact of Corporate Social Responsibility on Organizational Commitment: Exploring Multiple Mediation Mechanisms. *Journal of Business Ethics* 125: 563–80. [CrossRef]
- Fernández-Guadaño, Josefina, and Jesús H. Sarria-Pedroza. 2018. Impact of corporate social responsibility on value creation from a stakeholder perspective. *Sustainability* 10: 2062. [CrossRef]
- Freire, Carla, and Joana Gonçalves. 2021. The relationship between Responsible Leadership and Organizational Citizenship Behavior in the hospitality industry. *Sustainability* 13: 4705. [CrossRef]
- Freire, Carla, and Pietra Pieta. 2022. The Impact of Green Human Resource Management on Organizational Citizenship Behaviors: The Mediating Role of Organizational Identification and Job Satisfaction. *Sustainability* 14: 7557. [CrossRef]
- Gaudencio, Pedro, Arnaldo Coelho, and Neuza Ribeiro. 2020. The impact of CSR perceptions on workers' turnover intentions. *Social Responsibility Journal* 17: 543–61. [CrossRef]
- George, Nimmy, Nimitha Aboobaker, and Manoj Edward. 2021. Corporate social responsibility, organizational trust and commitment: A moderated mediation model. *Personnel Review* 50: 1093–111. [CrossRef]
- Glavas, Ante, and Lindsey Godwin. 2013. Is the Perception of 'Goodness' Good Enough? Exploring the Relationship Between Perceived Corporate Social Responsibility and Employee Organizational Identification. *Journal of Business Ethics* 114: 15–27. [CrossRef]
- Glavas, Ante. 2016. Corporate Social Responsibility and Organizational Psychology: An Integrative Review. *Frontiers in Psychology* 7: 144. [CrossRef]
- Gursoy, Dogan, Erhan Boğan, Bekir Dedeoğlu, and Caner Çalışkan. 2019. Residents' perceptions of hotels' corporate social responsibility initiatives and its impact on residents' sentiments to community and support for additional tourism development. *Journal of Hospitality and Tourism Management* 39: 117–28. [CrossRef]
- Hansen, S. Duane, Benjamin B. Dunford, Allan D. Boss, R. Wayne Boss, and Ingo Angermeier. 2011. Corporate Social Responsibility and the Benefits of Employee Trust: A Cross-Disciplinary Perspective. *Journal of Business Ethics* 102: 29–45. [CrossRef]
- Hayes, Andrew. 2017. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford Publications.
- He, Hongwei, and Andrew Brown. 2013. Organizational Identity and Organizational Identification: A Review of the Literature and Suggestions for Future Research. *Group & Organization Management* 38: 3–35.
- Helming, Bernd, Katharina Spraul, and Diana Ingenhoff. 2016. Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation. *Business & Society* 55: 151–87.
- Holcomb, Judy, and Scott Smith. 2015. Hotel general managers' perceptions of CSR culture: A research note. *Tourism and Hospitality Research* 7: 434–49. [CrossRef]
- Howell, David. 1992. *Statistical Methods for Psychology*. Belmont: Wadsworth.
- Jones, David. 2010. Does serving the community also serve the company? Using organizational identification and social exchange theories to understand employee responses to a volunteerism program. *Journal of Occupational and Organizational Psychology* 83: 857–78. [CrossRef]
- Kim, Hae-Ryong, Moonkyu Lee, and Na-Min Kim. 2010. Corporate social responsibility and employee-company identification. *Journal of Business Ethics* 95: 557–69. [CrossRef]
- Kim, Hyelin Lina, Eunju Woo, Muzaffer Uysal, and Nakyung Kwon. 2018. The effects of corporate social responsibility (CSR) on employee well-being in the hospitality industry. *International Journal of Contemporary Hospitality Management* 30: 1584–600. [CrossRef]
- Kim, Hyelin Lina, Yinyoung Rhou, Muzaffer Uysal, and Nakyung Kwon. 2017. An examination of the links between corporate social responsibility (CSR) and its internal consequences. *International Journal of Hospitality Management* 61: 26–34. [CrossRef]
- Lamm, Eric, Jennifer Tosti-Kharas, and Cynthia King. 2015. Empowering Employee Sustainability: Perceived Organizational Support Toward the Environment. *Journal of Business Ethics* 128: 207–20. [CrossRef]

- Lee, Yong-Ki, Kyung Hee Lee, and Dong-Xin Li. 2012. The impact of CSR on relationship quality and relationship outcomes: A perspective of service employees. *International Journal of Hospitality Management* 31: 745–56. [CrossRef]
- Lu, Vinh, Alessandra Capezio, Simon Restubog, Patrick Garcia, and Lu Wang. 2016. In pursuit of service excellence: Investigating the role of psychological contracts and organizational identification of frontline hotel employees. *Tourism Management* 56: 8–19. [CrossRef]
- Ma, Emily, Hailin Qu, Marie Wilson, and Ken Eastman. 2013. Modeling OCB for Hotels Don't Forget the Customers. *Cornell Hospitality Quarterly* 54: 308–17. [CrossRef]
- Mael, Fred, and Blake Ashforth. 1992. Alumni and Their Alma Mater: A Partial Test of the Reformulated Model of Organizational Identification. *Journal of Organizational Behavior* 13: 103–23. [CrossRef]
- Malik, Mahfuja. 2015. Value-Enhancing Capabilities of CSR: A Brief Review of Contemporary Literature. *Journal of Business Ethics* 127: 419–38. [CrossRef]
- Mansour, Sari, and Diane-Gabrielle Tremblay. 2016. How the need for “leisure benefit systems” as a “resource passageways” moderates the effect of work-leisure conflict on job burnout and intention to leave: A study in the hotel industry in Quebec. *Journal of Hospitality and Tourism Management* 27: 4–11. [CrossRef]
- Molina-Azorin, José, Enrique Claver-Cortés, Jorge Pereira-Moliner, and Juan Tari. 2009. Environmental practices and firm performance: An empirical analysis in the Spanish hotel industry. *Journal of Cleaner Production* 17: 516–24. [CrossRef]
- Nunnally, Jum. 1978. *Psychometric Theory*, 2nd ed. New York: McGraw-Hill.
- Oh, Kum-Sik, Juyeon Han, and So Park. 2021. The Influence of Hotel Employees' Perception of CSR on Organizational Commitment: The Moderating Role of Job Level. *Sustainability* 13: 12625. [CrossRef]
- Organ, Dennis. 1988. *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington: Lexington Books.
- Park, Sun-Young, and Stuart Levy. 2014. Corporate social responsibility: Perspectives of hotel frontline employees. *International Journal of Contemporary Hospitality Management* 26: 332–48. [CrossRef]
- Peterson, Dane. 2004. Benefits of Participation in Corporate Volunteer Programs: Employees' Perceptions. *Personnel Review* 33: 615–27. [CrossRef]
- Podsakoff, Philip M., Scott B. MacKenzie, Julie Beth Paine, and Daniel G. Bachrach. 2000. Organizational Citizenship Behaviors: A Critical Review of the Theoretical and Empirical Literature and Suggestions for Future Research. *Journal of Management* 26: 513–63. [CrossRef]
- Porter, Michael, and Mark Kramer. 2011. Creating shared value. *Harvard Business Review* 89: 62–77.
- Postel, Nicolas, and Richard Sobel. 2019. Corporate social responsibility (CSR): An institutionalist Polanyian analysis. *Society and Business Review* 14: 381–400. [CrossRef]
- PwC—PricewaterhouseCoopers. 2011. *Millennials at Work: Reshaping the Workplace*. Available online: www.pwc.com/gx/en/managing-tomorrows-people/future-of-work/download.jhtml (accessed on 30 June 2022).
- Rhou, Yinyoung, and Manisha Singal. 2020. A review of the business case for CSR in the hospitality industry. *International Journal of Hospitality Management* 84: 102330. [CrossRef]
- Riketta, Michael. 2005. Organizational identification: A meta-analysis. *Journal of Vocational Behavior* 66: 358–84. [CrossRef]
- Rodríguez-Gomez, Sara, Maria Arco-Castro, Maria Lopez-Perez, and Lazaro Rodríguez-Ariza. 2020. Where Does CSR Come from and Where Does It Go? A Review of the State of the Art. *Administrative Sciences* 10: 60. [CrossRef]
- Rousseau, Denise. 1998. Why workers still identify with organizations. *Journal of Organizational Behavior* 19: 217–33. [CrossRef]
- Rupp, Deborah, Jyoti Ganapathi, Ruth Aguilera, and Cynthia Williams. 2006. Employee reactions to corporate social responsibility: An organizational justice framework. *Journal of Organizational Behavior* 27: 537–43. [CrossRef]
- Rupp, Deborah, Ruodan Shao, Meghan A. Thornton, and Daniel P. Skarlicki. 2013. Applicants' and Employees' Reactions to Corporate Social Responsibility: The Moderating Effects of First-Party Justice Perceptions and Moral Identity. *Personnel Psychology* 66: 895–933. [CrossRef]
- Sen, Sankar, Chitra Bhattacharya, and Daniel Korschun. 2006. The Role of Corporate Social Responsibility in Strengthening Multiple Stakeholder Relationships: A Field Experiment. *Journal of the Academy of Marketing Science* 34: 158–66. [CrossRef]
- Slack, Richard, Sandra Corlett, and Rachael Morris. 2014. Exploring Employee Engagement with (Corporate) Social Responsibility: A Social Exchange Perspective on Organisational Participation. *Journal of Business Ethics* 127: 537–48. [CrossRef]
- Sluss, David, Malayka Klimchak, and Jeanne Holmes. 2008. Perceived organizational support as a mediator between relational exchange and organizational identification. *Journal of Vocational Behavior* 73: 457–64. [CrossRef]
- Smith, Ann, Dennis Organ, and Janet P. Near. 1983. Organizational Citizenship Behavior: Its Nature and Antecedents. *Journal of Applied Psychology* 68: 653–63. [CrossRef]
- Song, Wenhao, Shengce Ren, and Jun Yu. 2019. Bridging the gap between corporate social responsibility and new green product success: The role of green organizational identity. *Business Strategy and the Environment* 28: 88–97. [CrossRef]
- Story, Joana, and Pedro Neves. 2015. When corporate social responsibility (CSR) increases performance: Exploring the role of intrinsic and CSR attribution. *Business Ethics: A European Review* 24: 111–24. [CrossRef]
- Su, Lujun, and Scott Swanson. 2019. Perceived corporate social responsibility's impact on the well-being and supportive green behaviors of hotel employees: The mediating role of the employee-corporate relationship. *Tourism Management* 72: 437–50. [CrossRef]

- Suárez-Cebador, Manuel, Juan Rubio-Romero, Joaquim Pinto-Contreiras, and Gemar German. 2018. A model to measure sustainable development in the hotel industry: A comparative study. *Corporate Social Responsibility and Environmental Management* 25: 722–32. [CrossRef]
- Subba, Deepack. 2019. Antecedent and consequences of organizational identification: A study in the tourism sector of Sikkim. *Future Business Journal* 5: 4. [CrossRef]
- Tajfel, Henri. 1974. Social identity and intergroup behaviour. *Social Science Information* 13: 65–93. [CrossRef]
- van Dick, Rolf, Daan van Knippenberg, Rudolf Kerschreiter, Guido Herte, and Jan Wieseke. 2008. Interactive effects of workgroup and organizational identification on satisfaction and extra-role behavior. *Journal of Vocational Behavior* 72: 388–99. [CrossRef]
- van Dick, Rolf, Michael Grojean, and Oliver Christ. 2006. Identity and the Extra Mile: Relationships between Organizational Identification and Organizational Citizenship Behaviour. *British Journal of Management* 17: 283–301. [CrossRef]
- Walumbwa, Fred, David Mayer, Peng Wang, Hui Wang, Kristina Workman, and Amanda Christensen. 2011. Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes* 115: 204–13. [CrossRef]
- Zhao, Hongdan, and Qiongyao Zhou. 2019. Exploring the Impact of Responsible Leadership on Organizational Citizenship Behavior for the Environment: A Leadership Identity Perspective. *Sustainability* 11: 944. [CrossRef]
- Zhao, Xinchu, John Lynch, and Qimei Chen. 2010. Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research* 37: 197–206. [CrossRef]

Green Human Resource Management: A Bibliometric Analysis

Jéssica Fachada ¹, Teresa Rebelo ^{1,2,*}, Paulo Lourenço ^{1,2}, Isabel Dimas ² and Helena Martins ^{3,4,5}

¹ Faculty of Psychology and Educational Sciences, University of Coimbra, 3004-531 Coimbra, Portugal; fachadajessica@gmail.com (J.F.); prenatal@fpce.uc.pt (P.L.)

² Centre for Business and Economics Research (CeBER), Faculty of Economics, University of Coimbra, 3004-531 Coimbra, Portugal; idimas@fe.uc.pt

³ CEOS.PP, ISCAP, Porto Polytechnic, 4200-465 Porto, Portugal; helenagmartins@gmail.com

⁴ School of Economic and Organizational Sciences, Lusófona University, 1749-024 Lisbon, Portugal

⁵ NOVA School of Business and Economics, 2775-405 Carcavelos, Portugal

* Correspondence: teresa.rebelo@fpce.uc.pt

Abstract: Despite the growing attention which green human resource management (GHRM) has been gaining, the field is still remarkably young, and conceptual clarity is yet to be attained. A bibliometric review of GHRM from 2010 to 2020 was conducted on the Web of Science and analyzed using the VOSviewer software package, version 1.6.16 developed by Van Eck and Waltman (Leiden, The Netherlands). The results show the exponential growth of this topic, although there seems to be no consensus regarding its definition, conceptualization and measurement. Concerning its conceptual development, GHRM seems to currently fit the second stage of development (evaluation and augmentation) of Reichers and Schneider's three-stage model of the evolution of constructs. Future research seems to point in the direction of establishing the barriers separating GHRM from other human resource management topics, defining green practices and determining the antecedents and consequences of GHRM.

Keywords: green human resource management; bibliometric analysis; sustainability; green practices; corporate social responsibility

Citation: Fachada, Jéssica, Teresa Rebelo, Paulo Lourenço, Isabel Dimas, and Helena Martins. 2022. Green Human Resource Management: A Bibliometric Analysis. *Administrative Sciences* 12: 95. <https://doi.org/10.3390/admsci12030095>

Received: 28 June 2022

Accepted: 30 July 2022

Published: 3 August 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The economic growth of the last two centuries has represented prosperity and longevity for humanity. However, the impact of various industrial practices, reflected in pollution and the accumulation of waste and residues, is increasingly evident (IPCC 2018; Jackson et al. 2011). Climate change represents a new set of challenges, altering competitive and regulatory spheres, indirectly through global policy efforts to curb carbon emissions, and directly as a means of combating the unravelling consequences of extreme weather events (IPCC 2018). By invoking unprecedented changes in socio-economic systems, climate change makes it urgent for society to prepare and adapt in the face of new contingencies (Winn et al. 2011). With increasing regulatory and public pressure, more and more business entities are proactively implementing practices and strategic changes, such as investing in low-CO₂ technologies and renewable energy, in order to transition to environmental sustainability (González-Benito and González-Benito 2006; IPCC 2018).

The multidisciplinary required to reduce organizational environmental footprints challenges the vision that this theme is restricted to environmental sciences, causing new fields of study to emerge in the areas of social research and management (Shrivastava and Berger 2010). In this sense, several related topics have been increasingly emphasized: corporate social responsibility (CSR), environmental management (EM), business ethics, socially responsible consumption and sustainability strategies, among others (Schuler et al. 2017; Shrivastava and Berger 2010).

One topic increasingly referred to in the literature in addressing environmental challenges is green human resource management (GHRM) (Ari et al. 2020; Renwick et al. 2016;

Singh et al. 2020). The first work that interconnects human resource management (HRM) and environmental management (EM) concerns the book by Wehrmeyer (1996), entitled: “Greening People: Human Resources and Environmental Management”. The author first characterizes this type of HRM as “green”, which later became established in the literature as GHRM. GHRM is sometimes used interchangeably with sustainable human resource management (Gholami et al. 2016). Nevertheless, sustainable HRM (Kramar 2014) is a broader concept in its approach, referring to the Triple Bottom Line (Correia 2019): the simultaneous consideration of people, planet and profit. GHRM focuses, in turn, on the ecological dimension of organizational activities (Ren et al. 2018). Ren et al. (2018) define GHRM as “phenomena relevant to understanding relationships between organizational activities that impact the natural environment and the design, evolution, implementation and influence of HRM systems” (p. 10).

HRM can thus be conceptualized as the organizational tool that integrates human beings into environmental sustainability through a set of practices which are focused on human resources and are transversal to the different functions of an organization (Martínez-del-Río et al. 2012; Renwick et al. 2013). This is implicit throughout the employee life cycle, from hiring to exit (Benn et al. 2015; Jabbour et al. 2010; Zibarras and Coan 2015). Green practices often referred to by the literature are, according to Benevene and Buonomo (2020), training and development, performance management and appraisal, reward systems and recruitment and selection. Green teams are also a frequent green practice (Jabbour 2013).

Regarding the theoretical foundations of GHRM, the abilities, motivation and opportunities (AMO) model (Harrell-Cook et al. 2001) predominates as a guiding compass for these practices. Performance therefore results from the interaction of employees’ ability to perform tasks (competencies), willingness to perform (motivation) and opportunities to act on environmental sustainability (opportunities) (Renwick et al. 2013). Additionally, the resource-based theory is a widely used theoretical framework when integrating HRM with other organizational areas, such as green supply chains (GSC) (Jabbour and Jabbour 2016).

GHRM contributes to reducing energy and natural resource consumption (Opatha and Arulrajah 2014), reducing travel (Opatha and Arulrajah 2014), building a sustainable work environment (Opatha and Arulrajah 2014), reducing CO₂ emissions (Mehta and Chugan 2015) and promoting a sustainable culture and lifestyle in society (Jabbour and Jabbour 2016; Milliman 2013). In addition to reducing environmental impacts, GHRM contributes to employee development, wellbeing, health and satisfaction (Ari et al. 2020; Ehnert 2009) by enhancing employees’ creativity and capacity for change (Shipton et al. 2012) and attracting and retaining skilled employees due to the sustainable image of the organization in the community (Jabbour and Jabbour 2016; Renwick et al. 2013, 2016).

Considering the growing attention and relevance GHRM has been attaining, this study aims to map the literature through a bibliometric analysis that provides a reflection on the evolution of GHRM during the period 2010–2020. Bibliometric analysis refers to the use of statistical tools that allow for a quantitative analysis of scientific production (Ellegaard and Wallin 2015). By focusing on different aspects of interest that contribute to the characterization of a field of study, such as publications, journals, countries, languages and organizations, they introduce a quantitative rigor to the subjective assessment of the literature (Ellegaard and Wallin 2015; Zupic and Čater 2015). With the current digital age, new metrics have been developed (download statistics, page ranks . . .) that allow for analyzing scientific production in a multitude of ways (Ellegaard and Wallin 2015). These bibliometric methods have the potential to introduce a systematic, transparent and reproducible review process, improving the quality of reviews. They are a useful tool in literature reviews by guiding the researcher to the most influential works and mapping the research field, buffering the subjective bias. They also allow researchers to base their findings on aggregated bibliographic data produced by other scientists, whether that be through citation, collaboration or writing (Zupic and Čater 2015). The analysis of this aggregate data allows researchers to explore the field’s structure, the social networks and the main topics (Zupic and Čater 2015).

The bibliometric analysis will be supported in this work by the visualization of similarities (VOS) mapping technique of the VOSviewer software package. Thus, the main objectives of this study are: (1) to identify literature streams; (2) to map the topics studied; (3) to observe and analyze the temporal evolution of the construct; and (4) to identify the stage of development of the construct as a useful tool for the professional community and not just an academic tool for bibliometricians.

The next section of this paper is the method where the steps required to collect and analyze the data are discussed. Then, the results section is divided into the data collected from the keyword search and from the bibliometric maps, describing the results obtained from both methods. Finally, the conclusion section reinforces the objectives of the paper, the main findings as well as the limitations of the study, and suggests future research directions on GHRM.

2. Method

To meet the stated objectives, a sample of publications from the Web of Science (WOS) produced between 2010 and 2020 was used. The WOS was selected because it brings together the journals with the highest impact in the social sciences (Crossan and Guatto 1996), namely in the SSCI (Social Sciences Citation Index) and the ESCI (Emerging Sources Citation Index).

The first step consisted of a descriptive survey of all publications of the last decade (2010–2020) of the WOS, through a keyword search with the term “green human resource* management”. This was the keyword with the highest number of associated publications, by comparison with the keywords “GHRM”, “green HRM” or “green hr”, i.e., the sample of these last three keywords was already included in the chosen keyword “green human resource* management” sample. The choice of the selected time period (2010–2020) was reinforced by the fact that the first article in WOS with the selected keyword dates back to 2011 (Jackson et al. 2011). The search was restricted to SSCI and ESCI, since the former belongs to the WOS Core Collections and the latter gathers journals under final evaluation to integrate them. The search engine criterion was “TOPIC”, allowing for recognizing the keyword in the (1) title, (2) abstract, (3) author’s keywords and (4) “keyword plus”, a tool that expands the search engine by including articles in the WOS with a significant frequency of the term being in the titles of the bibliographic references.

Then, in the second step, the sample was analyzed using VOSviewer. The visualization of bibliometric networks, often referred to as the “mapping of science”, constitutes an advanced tool in the analysis of bibliometric networks. Visualization software packages, such as VOSviewer, represent an advance in the analysis of these networks by allowing a large volume of data to be processed (Van Eck and Waltman 2014). The spatial representation of bibliometric networks includes different types of analysis, from keyword co-occurrence networks to co-citation and co-authorship networks (Van Eck and Waltman 2010, 2014). The VOSviewer maps are considered distance bibliometric maps, that is, the distance between two items reflects the strength of their relationship: a small distance indicates a strong relationship and vice versa (Van Eck and Waltman 2010). In this way, the identification of groups of related items is facilitated (Van Eck and Waltman 2010).

Similarly, to the procedure adopted by Bellucci et al. (2020), the bibliometric maps used in this study were from the keyword co-occurrence network, which depicts the proximity of the keywords in the sample, as well as bibliographic coupling, representing the relationship between the publications in the sample based on the bibliographic references they share. While the first is aimed at mapping potential lines of research in GHRM, the second is intended to identify the main topics that build them. As we will see later in the results, the two maps complement each other, allowing us to perform a joint analysis.

The analysis of the keyword co-occurrence network determines the frequency with which terms are repeated in the sample. This analysis results in a map illustrating the interrelationships between the conceptual structures of the sample under study (Zupic and Čater 2015). The size of the circle and the links are proportional to the frequency

in the sample and the strength of the keywords' relationship with others, respectively. More central terms show more links with different clusters. The bibliographic coupling of publications measures the similarity between two articles from the references they share (Kessler 1963). The smaller the distance between two items, the more references they share and, therefore, the more content they share (Li and Hale 2015). The size of the spheres is proportional to the citations received in WOS. Thus, the intention is to identify the intellectual structure of GHRM. Finally, to achieve the last objective of this paper—identify the development stage of the GHRM construct—the three-stage model of the evolution of constructs, developed by Reichers and Schneider (1990), was adopted as a framework. In line with this model, constructs, from their introduction to their acceptance into mainstream literature, evolve according to a predictable and developmental sequence that follows three main phases: (1) introduction and elaboration; (2) evaluation and augmentation; and (3) consolidation and accommodation (Reichers and Schneider (1990)). In the discussion section, the three stages of the model are described, as is the one that fits into the current stage of development of the GHRM field.

The step-by-step method of the current paper is described in Figure 1.

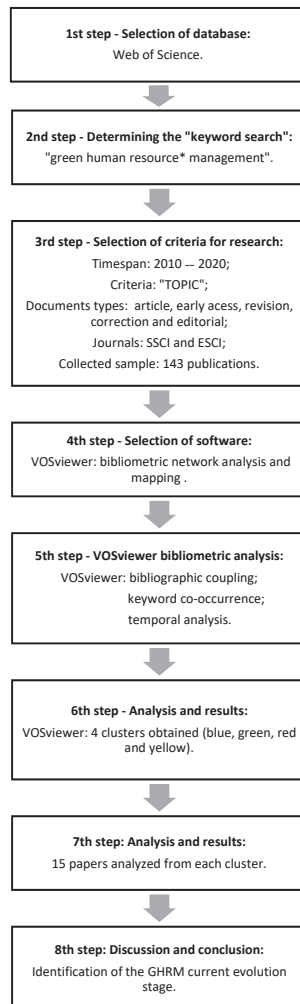


Figure 1. Workflow of this Bibliometric Review.

3. Results

The results are divided into two sections: firstly, a characterization of the keyword search sample is presented, and secondly, the VOSviewer bibliometric maps are highlighted.

3.1. Keyword Search

The keyword search conducted on 19 January 2021 resulted in a total of 143 publications. Of the 143 publications, 127 (88.81%) are empirical articles, 14 (9.79%) are literature reviews, one is (0.69%) a correction article and one (0.69%) an editorial.

3.1.1. Evolution of the Number of Publications

Figure 2 depicts the evolution of the number of publications per year between 2010 and 2020. The highest volume of publications occurred in the year 2020 (N = 68), which represents 47.55% of the sample.

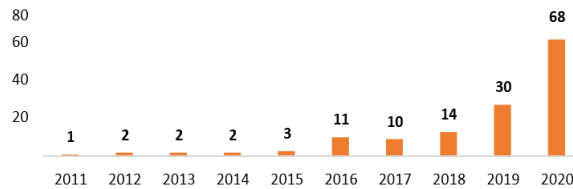


Figure 2. Evolution of the Number of Publications per Year.

3.1.2. Evolution of the Number of Citations

The 143 publications present a total of 3445 citations (see Figure 3). Of note is the evolution curve, which depicts an almost non-existent scientific dialogue at the beginning of the decade, transitioning to a marked growth from approximately 2017.

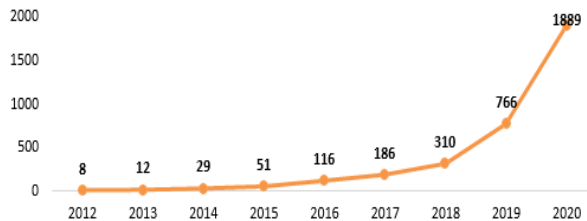


Figure 3. Evolution of the Number of Citations per Year.

3.1.3. Authors Affiliation

The scientific production related to GHRM is mainly represented by China, Malaysia and England (Table 1). Please note that the table only includes the ten most active authors' affiliations.

Table 1. Authors affiliation.

Countries/Regions	Record Count	% of 143
China	30	20.979%
Malaysia	24	16.783%
England	22	15.385%
France	20	13.986%
Brazil	18	12.587%
India	17	11.888%
Pakistan	17	11.888%
Australia	13	9.091%
Italy	10	6.993%
USA	9	6.294%

3.1.4. Most Cited Publications

According to WoS criteria “Highly cited papers”, these are the most-cited publications (Table 2).

Table 2. Highly cited publications.

Title	Authors	Year	Journal *	Number of Citations	Subject Area
1. Green Human Resource Management: A Review and Research Agenda.	Renwick et al.	2013	IJMR	331	Business & Economics.
2. The Impact of Human Resource Management on Environmental Performance: An Employee-Level Study.	Paillé et al.	2014	JBE	178	Psychology Business & Economics.
3. Green Human Resource Management and Green Supply Chain Management: linking two emerging agendas.	Jabbour and Jabbour	2016	JCP	158	Science & Technology; Engineering; Environmental Sciences & Ecology.
4. Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values.	Dumont et al.	2017	HRM	107	Psychology Business & Economics.
5. Green human resource management practices: scale development and validity.	Tang et al.	2018	APJHR	82	Business & Economics.
6. Green human resource management research in emergence: A review and future directions.	Ren et al.	2018	APJM	67	Business & Economics.
7. The effect of green human resource management on hotel employees’ eco-friendly behavior and environmental performance.	Kim et al.	2019	IJHM	82	Social Sciences.
8. Role of big data analytics in developing sustainable capabilities.	Singh and El-Kassar	2019	JCP	71	Science & Technology; Engineering; Environmental Sciences & Ecology.
9. Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study.	Pham et al.	2019b	TM	64	Environmental Sciences & Ecology Social Sciences—Other Topics Business & Economics
10. Who is in charge? A review and a research agenda on the ‘human side’ of the circular economy.	Jabbour et al.	2019	JCL	56	Science & Technology—Other Topics; Engineering; Environmental Sciences & Ecology.
11. Green human resource management and the enablers of green organisational culture: Enhancing a firm’s environmental performance for sustainable development.	Roscoe et al.	2019	BSE	47	Business & Economics; Environmental Sciences & Ecology
12. Promoting employee’s proenvironmental behavior through green human resource management practices	Saeed et al.	2019	CRSOM	41	Business & Economics; Environmental Sciences & Ecology
13. Green innovation and environmental performance: The role of green transformational leadership and green human resource management.	Singh et al.	2020	TFSC	53	Business & Economics; Public Administration
14. Green human resource management and environmental cooperation: An ability-motivation-opportunity and contingency perspective.	Yu et al.	2020	IJPE	20	Engineering Operations; Research & Management Science
15. Leveraging Green Human Resource Practices to Enable Environmental and Organizational Performance: Evidence from the Qatari Oil and Gas Industry.	Obeidat et al.	2020	JBE	14	Business & Economics; Social Sciences—Other Topics.
16. The role of green human resource management in driving hotel’s environmental performance: Interaction and mediation analysis.	Pham et al.	2020	IJHM	11	Social Sciences.

* International Journal of Management Reviews, Journal of Business Ethics, Journal of Cleaner Production, Human Resources Management, Asia Pacific Journal of Human Resources, Asia Pacific Journal of Management, International Journal of Hospitality Management, Tourism Management, Business Strategy and the Environment, Corporate Social Responsibility and the Environment, Technological Forecasting and Social Change, International Journal of Production Economics.

3.2. Bibliometric Maps

Next, the VOSviewer bibliometric maps resulting from the bibliographic reference coupling analysis (see Figure 4 and Tables A1–A4 in Appendix A) and the keyword co-occurrence network analysis (see Figure 5 and Table A5 in Appendix B) are presented. The 143 papers published between 2010 and 2020 were subjected to this analysis.

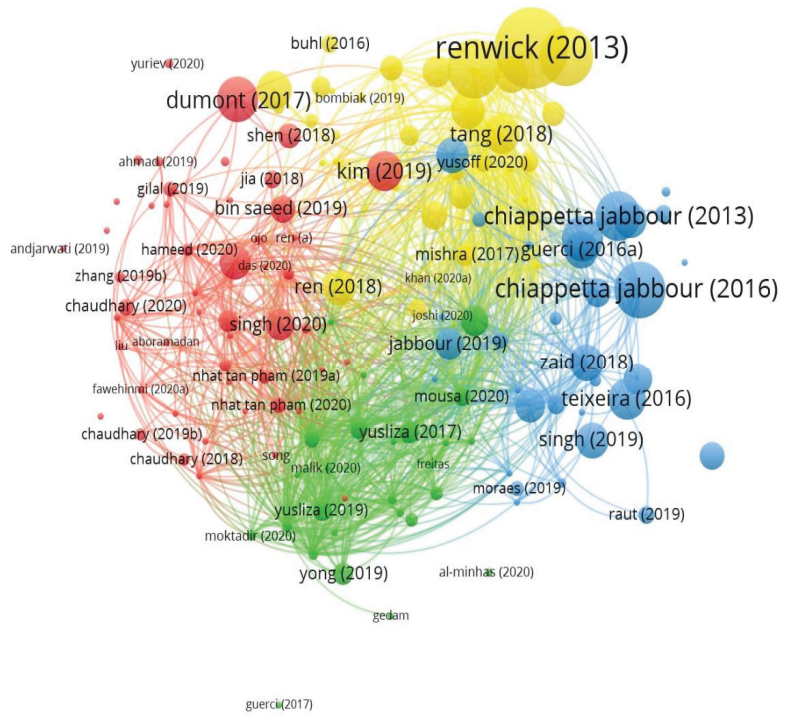


Figure 4. Bibliographic coupling.

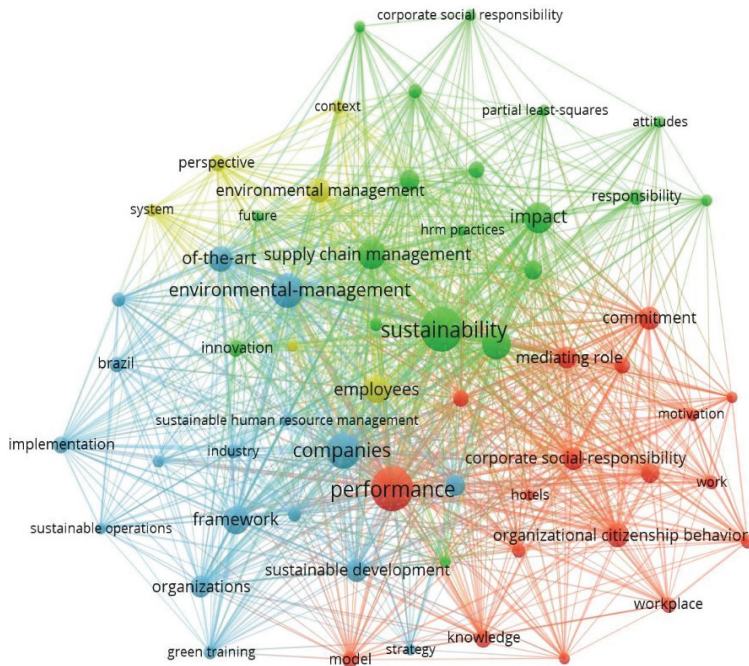


Figure 5. Keyword co-occurrence network.

Both maps were submitted to chronological processing between 2010 and 2020 (see Figures 6 and 7). The color gradation identifies the average date of co-occurrence of the keywords for the former, and for the latter, it identifies the year of publication.

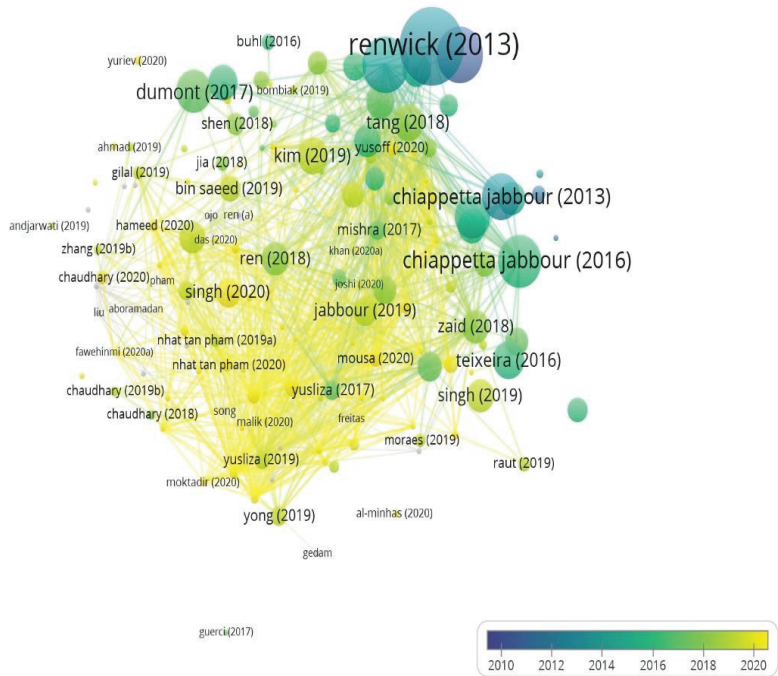


Figure 6. Bibliographic coupling with temporal analysis.

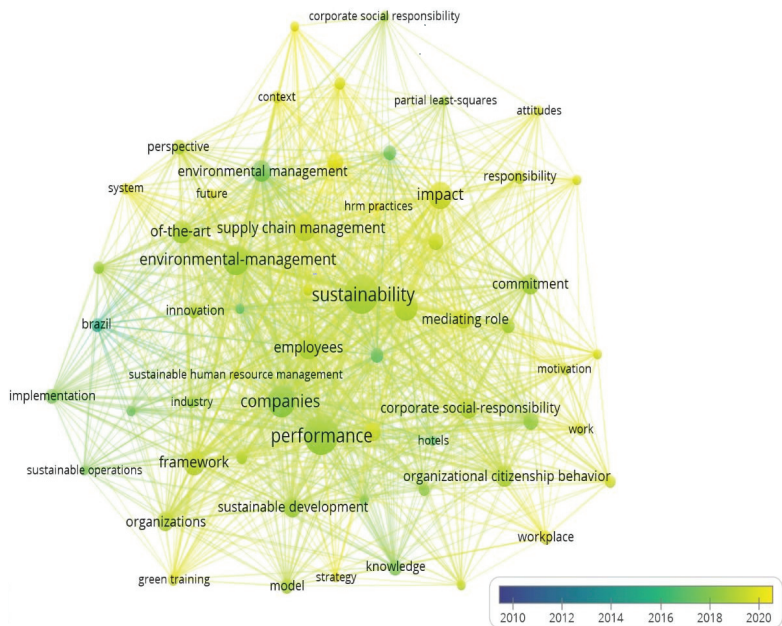


Figure 7. Keyword co-occurrence network with temporal analysis.

3.2.1. Bibliographic Coupling

Four distinct clusters emerged in this analysis (yellow, blue, green, red), as shown in Figure 4. These represent publications which are strongly linked through the references they share, thus suggesting different streams of literature (Bellucci et al. 2020). All papers present links to each other, with the exception of the correction article by Guerci et al. (2016). Note that some links are not visible as they are rather weak.

3.2.2. Co-Occurrence of Keywords

Of the 683 keywords identified, 57 are presented, resulting from the standard VOSViewer criterion that selects keywords repeated at least five times in the sample (see Figure 5). Note that this analysis included keywords plus an option provided by VOSViewer, which includes terms that occur frequently in the title of the bibliographical references of the sample. This selection was based on the fact that the resulting bibliometric map is richer in information, thus allowing for a more complete analysis of the sample.

3.3. Cluster Analysis

The map of the keyword analysis reflects the map of the bibliographic linkage of references. More specifically, the clusters of the keywords (see Figure 5) correspond to the clusters of the bibliographic linkage of references (see Figure 4). For instance, the keyword “Brazil” in the blue cluster is associated with the articles in the blue cluster of the bibliographic reference coupling map. As we will see below, the four colored clusters (blue, yellow, green and red) represent four distinct research lines.

The identification and analysis of the clusters (see Figures 4 and 5) was performed, similarly to the procedure adopted by Bellucci et al. (2020), with the selection of the 15 most cited articles in each cluster of the bibliographic coupling of references for analysis. Tables A1–A4 (in Appendix A) present the selected articles of each cluster, and Table A5 (in Appendix B) describes the frequency of occurrence of the keywords per cluster. By the reading and the analyses of the 15 most cited articles in each cluster, and by correlating the main themes founded on those articles with the most prominent keywords in each cluster, it was possible to identify the literature streams that characterize the clusters.

3.3.1. Blue Cluster: Implementation of GHRM as a Facet of Environmental Management

This cluster gathers 32 articles. The keywords “companies”, “environmental management”, “implementation”, “green management”, “strategy”, “sustainable operations”, “industry” and “organizations” are highlighted: the cluster highlights the implementation of environmental sustainability in HRM in light of environmental management (EM), (Jabbour et al. 2012; Teixeira et al. 2016). EM entails a tool in the pursuit of environmental goals that advocate sustainable development. One of the first empirical contributions reveals that when EM is an emerging goal, HRM practices tend to incorporate this environmental goal (Jabbour et al. 2012), such as training (“green training”), (Jabbour 2015; Nejati et al. 2017; Teixeira et al. 2016) or practices concerning GSC (Teixeira et al. 2016). Of note is the highlighting of the keyword “Brazil”, since authors, such as Jabbour, have Brazilian companies as the sample of their studies.

Importantly, the cluster includes articles that bring EM closer to employees, highlighting their influence on environmental change. Pinzone et al. (2016) view EM as an organizational change which is dependent on employee support. The authors support the effectiveness of green practices to foster voluntary green behaviors. On the other hand, Obeidat et al. (2020) support the mediating role of GHRM in the relationship between management support, internal environmental orientation and environmental performance. With the intention of expanding the relationship of GHRM with other stakeholders, Guerci et al. (2016) conclude that green practices act as mediators in the relationship between environmental pressures and environmental performance.

Finally, the proximity of this cluster to the green cluster, which is also connected to EM, is highlighted, as we shall see below.

3.3.2. Red Cluster: Consequences for Employees

This cluster, composed of 50 articles, is dedicated to the study of HRM consequences for employees, mainly in the workplace. The attitudinal approach is represented by the terms “organizational citizenship behavior”, “commitment”, “knowledge”, “pro-environmental behavior”, “motivation”, “employee green behavior” and “empowerment”.

The analysis of the impact of green practices on employees is often carried out by performance outcomes. As an example, Kim et al. (2019) highlight that GHRM increases employees’ organizational commitment in the hospitality industry, their green behavior and their environmental performance. Focusing on this industry as well, Pham et al. (2019b) observe that GHRM directly influences environmental organizational citizenship behaviors (OCB), i.e., behaviors not required by the organization or not listed as a job requirement and which impact environmental performance.

This cluster also contains multiple articles focusing on GHRM without exploring the environmental performance aspect. For example, the study by Saeed et al. (2019) suggests that green practices increase employees’ pro-environmental behaviors through pro-environmental psychological capital. Two terms with high co-occurrence are notably “environmental sustainability” and “corporate social responsibility”. The former is highlighted in the sample as the ultimate goal of GHRM (Chaudhary 2020), while the latter is related to GHRM in the sense that this HRM model “motivates employees to participate in an important aspect of CSR, green activities and initiatives” (Shen et al. 2018, p. 595).

3.3.3. Green Cluster: Consequences for Organizations

This cluster groups 26 articles associating organizational-level GHRM outcomes above all, mirrored in the map of keywords by the high occurrence of terms such as “sustainability”, “environmental performance”, “impact”, “financial performance”, “firm performance” and “innovation” (see Table A5 in Appendix B). The focus on the consequences of GHRM is particularly dedicated to organizational environmental performance; however, the financial facet is not neglected (Yong et al. 2020). It is relevant to point out that this cluster is also associated with EM, reflected by the proximity of “environmental performance” and “environmental management” to the blue cluster (see Figure 5). The keyword “sustainability” is also operationalized as an organizational outcome (Mousa and Othman 2020).

The empirical approach to GHRM implies measuring its implementation through green practices. Gupta (2018), after identifying the most important green practices through a literature review and consultation with experts, contributed to the field with an organizational environmental performance measurement grid.

From the articles analyzed (see Tables A1–A4 in Appendix A), it was found that there are also publications in this cluster focusing on the employees’ attitudinal sphere (“attitudes”). Yong et al. (2019c), for example, suggest that green intellectual capital (GIC) and green relational capital (CRV) influence HRM. According to Chen (2008), green intellectual capital agglomerates the “totality of knowledge, skills, relationships and intangible assets related to environmental protection and green innovation” (p. 277), while green relational capital is the “totality of interactive relationships with customers, suppliers, network members and partners in corporate environmental management and green innovation” (p. 278).

Lastly, the state of the art according to Amrutha and Geetha (2020), which contributes to future directions of research on green practices, stands out. The authors explore a theoretical model that proposes a mediating role of green workplace behaviors in the relationship between HRM and social sustainability.

3.3.4. Yellow Cluster: Reviews, Models and Measurement

Bringing together 35 articles, this cluster is marked by bringing together reviews, models and measures of GHRM. Note the overlap of the blue cluster’s “of-the-art” term and proximity to the green cluster, as both also include literature reviews. Of the 15 articles targeted for analysis, there are four literature reviews of GHRM (Ahmad 2015; Jackson

et al. 2011; Ren et al. 2018; Renwick et al. 2013) and one literature review of green employee empowerment in GHRM (Tariq et al. 2016). It is also worth mentioning the measurement of GHRM in the work of Tang et al. (2018), in which they contributed to the development and validation of a GHRM measurement instrument.

EM is also relevant in this cluster (see Table A5 in Appendix B), reflected in the proximity and overlap of the keyword “environmental management” in the blue cluster with this one. This is the least represented cluster in the map of keywords (see Figure 5). This is probably due to the fact that its content includes keywords from the other clusters. In other words, literature reviews, by recognizing different perspectives and literature streams, represent a more comprehensive view of the literature field, neutralizing the tendency in the reviews, models and measurement cluster to emphasize certain keywords associated with specific literature streams.

3.3.5. Evolution over Time

From the chronological bibliometric maps presented in Figures 6 and 7, it can be concluded that most of the keywords are present in more recent publications. The keywords circling 2016 and 2018 approximately are “Brazil”, “environmental management” and “implementation”. These keywords predominate in the blue cluster, resulting from works by Jabbour (2013, 2015), Jabbour and Jabbour (2016), Nejati et al. (2017) and Teixeira et al. (2016). These works connect GHRM to CFV, green product development and the environmental maturity of companies.

In older publications, we observed some references to the yellow cluster, such as the works of Jackson et al. (2011), Renwick et al. (2013, 2016) and Paillé et al. (2014). The bibliographic coupling map allows us to see that the blue and yellow clusters are less recent compared to the red and green clusters. Note that the latter two explore the consequences of GHRM on environmental performance and employees. A temporal transition centered on the organizational system to a more employee-focused approach can also be observed. The most represented keywords between 2019 and 2020 are “responsibility”, “attitudes”, “motivation”, “impact”, “workplace”, “employee green behavior” and “pro-environmental behavior”. It should also be noted that environmental training, despite being a highlighted term in the blue cluster, continues to be represented in more recent publications.

4. Discussion

By performing bibliometric mapping of the keyword search sample of publications, this study explored the evolution of GHRM during the 2010s, focusing mainly on the investigation of literature streams and the most recurring topics.

Then, the main contributions of the keyword search and VOSviewer are discussed, and finally, the stage of evolution of GHRM will be characterized.

The keyword search allowed the recent boom of the construct to be ascertained, namely from 2018 onwards (see Figures 2 and 3). GHRM is a topic attracting increasing attention from researchers from various scientific domains (e.g., management, environmental engineering and psychology). The fact that it is often described as a strategic element of EM applied to HRM leads to the conclusion that this is already a consolidated aspect in the definition of the construct. Despite this, there is still no consensual definition of GHRM (Benevene and Buonomo 2020; Ren et al. 2018). While, on one hand, there are proposals to redefine the construct suggesting a more holistic consideration that takes into account other facets of sustainability, such as the circular economy, on the other hand, a definition that focuses on the ecological dimension is proposed (Ren et al. 2018).

Regarding the results of the analyses carried out in VOSviewer, we highlight the fact that the map for the bibliographic coupling of references represents an almost perfect circular figure. This suggests that GHRM is a multidisciplinary research area and does not yet present totally clear and differentiated literature streams. Nevertheless, four groups of items related to each other emerged from the analyses, according to the similarity criterion assumed by the software (Van Eck and Waltman 2010, 2014). It was possible to identify a

differentiating theme in each of the four clusters: blue (implementation of GHRM as a facet of EM), red (consequences on employees), green (consequences at the organizational level) and yellow (reviews, models and measures). It should be noted, however, that all clusters present some publications that deviate from their main topic. As an example, the article by Moktadir et al. (2019), exploring the antecedents of GHRM, belongs to the green cluster and is mostly devoted to the organizational-level consequences of GHRM. This may be justified by the fact that there is still no representativeness of the study of antecedents in the GHRM literature; conversely, the exploration of GHRM consequences at the organizational and individual levels predominates (Benevene and Buonomo 2020). Although all clusters show some overlap, the yellow cluster is particularly ambiguous. While, on one hand, it brings together literature reviews (Jackson et al. 2011; Ren et al. 2018; Renwick et al. 2013; Tariq et al. 2016) and theoretical developments (Renwick et al. 2016), on the other hand, it also includes quantitative or qualitative empirical studies. These focus on the validation of HRM measurement scales (Tang et al. 2018) on the assessment of implemented green practices (Masri and Jaaron 2017) and on green behaviors in the workplace (Rayner and Morgan 2018) or outside the workplace (Bombiak and Marciniuk-Kluska 2018).

The temporal evolution maps reveal that the publications referring to the red and green clusters are the most recent ones, compared to the blue and yellow clusters. Although the map of keywords does not reveal a very clear temporal transition, it does show that the latest articles tend to focus on the attitudinal dimension, while the “older” terms (e.g., implementation, EM, sustainable operations) represent the initial conception of GHRM, which is more restricted to its implementation in organizations as an environmental management system or tool. Furthermore, it is important to note that by the middle of the decade, authors such as Jabbour, Renwick and Teixeira dominated the literature on GHRM, viewing it as a tool to achieve environmental sustainability. Thus, the efforts made were mainly focused on the analysis and understanding of the benefits of GHRM practices in relation to environmental performance. Contrastingly, authors who have recently stood out belong to a line of research that recognizes GHRM as an end in itself, capable of promoting attitudinal and behavioral changes, which also impact the performance of organizations. Authors such as Yusliza, Pham, Singh and Dumont represent this line of research. Another relevant aspect is the fact that most empirical studies are conducted in emerging economies, such as Malaysia and India. GHRM thus seems to acquire a more evident role in these contexts, since the large-scale industrial sector predominant in these countries requires a huge demand for natural resources and generates high CO₂ emissions. The implementation of GHRM will contribute to natural resource conservation, a reduction in greenhouse gas emissions and protection of the ecosystem (Yong et al. 2019a).

Ren et al.’s (2018) GHRM definition, which reinforces HRM as a relevant phenomenon to understand the relationships between the environmental impact of organizational activities and HRM systems, has, in our view, contributed to the delimitation of boundaries of the construct vis-à-vis other HRM specialties. These include Sustainable HRM, which refers to the triple bottom line approach and moves away from the environmental dimension (Ahmad 2015).

The delimitation of boundaries in relation to other HRM specialties, such as Sustainable HRM, seems to be a relevant path for future research. In this sense, it can be seen that the lack of a consensual definition of the construct is mirrored in the plurality of HRM measures. For example, we observe authors who resort to strategic HRM measurement instruments (Paillé et al. 2014). Let us note, in this scope, the contribution of the scale by Tang et al. (2018), focused on the ecological component of HRM practices. However, it will be important in the future to validate the instrument outside the Chinese context.

From our analysis, we could observe that there is no consensual definition within each cluster, but there is a strong tendency to integrate GA into the definition. It is prevalent for clusters to use the definition of Renwick et al. (2013), particularly in the red cluster (Dumont et al. 2017; Kim et al. 2019; Pham et al. 2019b, 2020; Saeed et al. 2019; Singh et al. 2020). However, in the yellow (Roscoe et al. 2019; Tang et al. 2018), blue (Obeidat

et al. 2020; Yu et al. 2020), and green clusters (Longoni et al. 2018), this definition is also used. Based on our study we could not conclude that GHRM practices are exclusively associated with a particular cluster. For example, green recruitment and selection practices are present in the yellow cluster (Masri and Jaaron 2017; Tang et al. 2018; Ren et al. 2018; Renwick et al. 2016; Roscoe et al. 2019), blue cluster (Guerci et al. 2016; Nejati et al. 2017), green cluster (Yong et al. 2020; Yusliza et al. 2017, 2019) and red cluster (Saeed et al. 2019; Singh et al. 2020). Other practices, such as green training and development, performance appraisal, reward and compensation, and employee empowerment, are also present in the different clusters. Rather than the green practices associated with specific clusters, we emphasize what appears to be the main differentiator of these clusters: the study of the influence of organizational antecedents and consequents on green practices and GHRM implementation. Concerning the methods used, empirical articles are mainly distributed across the blue, red and green clusters, with quantitative studies prevailing over qualitative studies. Mixed-method papers such as Paillé et al. (2014) from the yellow cluster, Pham et al. (2019b) from the red cluster and Yu et al. (2020) from the blue cluster make use of data from questionnaires and also from interviews. Regarding review articles, based on our literature review, only one bibliometric analysis paper on GHRM was found (Khan and Muktar 2020), and it also uses VOSviewer bibliometric maps.

In agreement with our findings, Benevene and Buonomo (2020) state that most studies are published from 2018 onwards, and they report a geographical trend, namely, an increasing number of publications in emerging countries over time. An interesting aspect highlighted by other papers is the fact that the number of articles addressing GHRM over time, as well as their geographical distribution, have been strongly influenced by regulations on sustainability and green standards across organizations (Amrutha and Geetha 2020; Benevene and Buonomo 2020). Comparing our results with Yong et al.'s (2019a) work, which identifies the streams of the GHRM literature from a sample of publications from 2007 to 2019, we observe that the themes identified in the present analysis are not far from their classification: (1) Reviews, models and concepts; (2) Implementation of GHRM; (3) Determinants of GHRM adoption (at the organizational level); (4) Consequences of GHRM adoption (at the organizational level); and (5) Outcomes of GHRM adoption (at the individual level). The yellow cluster (Reviews, models and measurement) coincides with theme 1 (Reviews, models and concepts), the red cluster (Consequences for employees) with theme 5 (Outcomes of GHRM adoption at the individual level), the green cluster (Consequences for organizations) with theme 4 (Consequences of GHRM adoption at the organizational level) and the blue cluster with theme 2 (Implementation of Green HRM). That leaves, of course, theme 3 (Determinants of GHRM adoption at the organizational level) without a cluster fit. This theme includes the articles presented in the blue cluster (Obeidat et al. 2020; Teixeira et al. 2016) and the green cluster (Yusliza et al. 2017). It is worth noting that the authors analyzed a sample of 70 articles, published in a distinct time span of the present review, which naturally limits our analysis when comparing the two results. Our findings also converge with Khan and Muktar's (2020) review that focused on the period 2008–2020 and used the Scopus database. This convergence is reflected in the focus of empirical studies on emerging economies and on the industrial sector, and it can be seen in the transition from the emphasis on environmental performance resulting from an EM at the organizational level, to an approach that returns importance to the agents of organizations, the employees, reflected in the emergence of studies focused on attitudinal variables.

According to the objectives proposed for this work, based on the literature reviewed and analyzed, and using Reichers and Schneider's (1990) model as a framework, it can be concluded that the GHRM construct is currently at the second stage of development, i.e., the assessment and augmentation stage. While it is true that there are studies focused on its antecedents and consequents, a condition of the first stage of development—introduction and elaboration—by contrast, there are already literature reviews, such as those by Benevene and Buonomo (2020), Ren et al. (2018) and Yong et al. (2019a), focused on the

research gaps, both in terms of GHRM's definition and conceptualization, and in terms of its measurement. These authors also suggest future research agendas in order to advance the topic at the level of the theoretical and research field. As the concept does not present an unambiguous definition and there is ambiguity in the distinction between GHRM and other HRM specialties, the contributions and suggestions of various authors, in an attempt to clarify, delimit, distinguish and link the construct to others that are close to it, are very relevant contributions to the development of the GHRM literature. Thus, the current debate on what GHRM is and how it is conceptualized and assessed, in our view, justifies the characterization of the construct at the assessment and augmentation stage. The increasing research focus on the topic of GHRM suggests that the next stage of development of the construct—consolidation and accommodation (Reichers and Schneider 1990)—may be reached in the medium term. In this phase, a clear prevalence of a reduced number of definitions and a predominant way of operationalizing GHRM, as well as the establishment of construct boundaries and the recognition of associated antecedents and consequents, will be observed. The emergence of meta-analyses that portray the results and compare contradictions between works are also expected.

5. Conclusions and Future Directions

The bibliometric analysis of the literature produced between 2010 and 2020 highlights the importance of GHRM today as an expanding field, particularly from the second half of the decade. The purpose of GHRM is to actively participate in the creation of greener societal paths and respond to environmental and ecological issues from the organizational context. This HRM specialty refers to one of the most important challenges faced by humanity.

By mapping the existing literature streams—implementation of GHRM as a strand of EM, consequences at the organizational level and consequences at the employee level—tracing their contributions and development in the last decade, and identifying the construct development stage, this paper has met its objectives. In short, the results obtained suggest that the implementation of green practices in organizations will be reflected in lower levels of environmental pollution and contamination. Despite the emphasis on the repercussions of GHRM at work, it goes beyond the labor sphere, since green environmental values are transferable from context to context, i.e., green behaviors applied at work are reflected in personal life and vice versa. The fact that the evolution of the construct has been going beyond a concept focused only on EM demonstrates the consideration of employees endowed with unique strategic value and their decisive role in organizational sustainability. The resource-based view (Barney 1991) is a theoretical contribution that points in this direction (Yusliza et al. 2017).

Despite the contributions of this work, it is also important to highlight some limitations and the attempts to overcome them. By using only one database, the WOS, we limited access to the universe of publications on GHRM, and therefore, the information that we extrapolated may contain some biases. However, in the category of bibliometric reviews, we found the work of Khan and Muktar (2020), which used the Scopus database, revealed results which are convergent with ours, a fact that suggests the reliability of the results obtained. In addition, we consider that the present bibliometric review extends the work of Khan and Muktar (2020), insofar as it crosses two similarity maps that allow the lines of research in GHRM to be mapped and the topics that build them to be identified, as it also aims to identify the stage of evolution of the construct. The last limitation refers to the fact that only the 15 most cited articles of each cluster obtained through VOSviewer were analyzed, resulting in a total of 60 articles compared to the 143 of the sample obtained. Although Bellucci et al. (2020) defend the credibility of this method, we feel we should mention this limitation.

Despite the growing interest of the scientific community in studying the topic of GHRM, we found that a high research potential remains. Thus, based on the discussion of the results, we suggest some recommendations for future work. It is important to achieve a

more consensual definition of GHRM (Ari et al. 2020) and to develop a more universal and unambiguous language for the construct. Thus, emphasis is placed on the need to study the relationship of GHRM with other related concepts, accessing the different approaches that have been proposed so that commonalities and differentiating aspects of the various constructs can be more accurately observed. We recall something which was already mentioned by Renwick et al. (2013), who produced one of the first systematic reviews of the construct. They highlight GHRM as an approach that allows for going beyond the strict conception of the economic side and includes the wellbeing of the various stakeholders at the heart of HRM. By delimiting boundaries with other HRM specialties, the definition, conceptualization and measurement of GHRM will be more approachable. On the other hand, it is relevant to highlight that the need for further studies on the contextualization of GHRM is important, as it is not only influenced by the most obvious organizational actors, such as leaders and employees, but by multiple stakeholders, such as teams, municipalities, regulators and legislators, which exert pressures and constraints on the implementation of GHRM (Ren et al. 2018). We also highlight the need to delve deeper into the antecedents of GHRM, in particular the antecedents at the employee level (Obeidat et al. 2020). The study of GHRM in developed countries should also receive attention, as they are less represented by current studies focusing on emerging economies.

Pursuit of the analysis of the relationship between GHRM and other organizational features, such as GSC and environmental certification systems, is also an important way forward. In organizational practices, the existence of complex performance agendas and objectives that transcend HRM objectives must be assumed. In this sense, understanding how GHRM relates and responds to the different aspects of the organization will allow us to study the impact of this specific way of managing human resources in real organizational circumstances. Finally, we highlight the fact that artificial intelligence and big data have come to dominate the way we work, and the benefit of the intersection of these areas constitutes an interesting direction in the study of GHRM.

Author Contributions: Conceptualization, J.F., T.R., P.L., I.D. and H.M.; methodology, J.F., T.R. and P.L.; data collection, J.F.; data analysis: J.F., T.R. and P.L.; writing—original draft preparation, J.F.; writing—review and editing, J.F., T.R., P.L., I.D. and H.M.; supervision, T.R. All authors have read and agreed to the published version of the manuscript.

Funding: This work is financed by portuguese national funds through FCT—Fundação para a Ciência e Tecnologia, under the projects UIDB/05037/2020 and UIDB/05422/2020.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

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

Appendix A

Table A1. Publications from the bibliographic coupling analysis—yellow cluster.

Yellow Cluster	Authors and Date	Title	Citation Frequency	TBF
	Renwick et al. (2013)	Green Human Resource Management: A Review and Research Agenda.	331	678
	Jackson et al. (2011)	State-of-the-art and future directions for green human resource management: Introduction to the special issue.	182	380
	Paillé et al. (2014)	Impact of Human Resource Management on Environmental Performance: An Employee-Level Study.	178	1083
	Tang et al. (2018)	Green human resource management practices: scale development and validity.	82	1180

Table A1. *Cont.*

Yellow Cluster	Authors and Date	Title	Citation Frequency	TBF
	Renwick et al. (2016)	Contemporary developments in Green (environmental) HRM scholarship.	79	586
	Masri and Jaaron (2017)	Assessing green human resources management practices in Palestinian manufacturing context: An empirical study.	73	1525
	Ahmad (2015)	Green Human Resource Management: Policies and practices.	72	891
	Ren et al. (2018)	Green human resource management research in emergence: A review and future directions.	67	1229
	Haddock-Millar et al. (2016)	Green human resource management: a comparative qualitative case study of a United States multinational corporation.	51	773
	Roscoe et al. (2019)	Green human resource management and the enablers of green organisational culture: Enhancing a firm’s environmental performance for sustainable development.	43	860
	Bombiak and Marciniuk-Kluska (2018)	Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience.	34	994
	Guerci et al. (2016)	Corrigendum.	34	310
	Tariq et al. (2016)	Green employee empowerment: a systematic literature review on state-of-art in green human resource management.	33	609
	Mishra (2017)	Green human resource management: a framework for sustainable organizational development in an emerging developing economy.	25	1256
	Rayner and Morgan (2018)	An empirical study of ‘green’ workplace behaviours: ability, motivation and opportunity.	22	664

TBF-total binding force.

Table A2. Publications from the bibliographic coupling analysis—blue cluster.

Blue Cluster	Authors and Date	Title	Citation Frequency	TBF
	Jabbour and Jabbour (2016)	Green Human Resource Management and Green Supply Chain Management: linking two emerging agendas.	159	1145
	Jabbour (2013)	Environmental training in organisations: From a literature review to a framework for future research.	125	791
	Jabbour et al. (2015)	Green product development and performance of Brazilian firms: measuring the role of human and technical aspects.	107	837
	Teixeira et al. (2016)	Green training and green supply chain management: evidence from Brazilian firms.	89	628
	Guerci et al. (2016)	Translating stakeholder pressures into environmental performance—the mediating role of green HRM practices.	70	960
	Zaid et al. (2018)	The impact of green human resource management and green supply chain management practices on sustainable performance: An empirical study.	69	1412
	Jabbour (2015)	Environmental training and environmental management maturity of Brazilian companies with ISO 14001: empirical evidence.	68	812
	Singh and El-Kassar (2019)	Role of big data analytics in developing sustainable capabilities.	68	370
	Nejati et al. (2017)	Envisioning the invisible: Understanding the synergy between green human resource management and green supply chain management in manufacturing firms in Iran in light of the moderating effect of employees’ resistance to change.	55	1063
	Pinzone et al. (2016)	Progressing in the change journey towards sustainability in healthcare: the role of ‘Green’ HRM.	64	1105
	Bhardwaj (2016)	Role of green policy on sustainable supply chain management.	40	20
	Yu et al. (2020)	Green human resource management and environmental cooperation: An ability-motivation-opportunity and contingency perspective.	19	1142
	Jabbour et al. (2012)	Environmental development in Brazilian companies: The role of human resource management.	17	456

Table A2. *Cont.*

Blue Cluster	Authors and Date	Title	Citation Frequency	TBF
	Raut et al. (2019)	Examining the performance-oriented indicators for implementing green management practices in the Indian agro sector.	16	310
	Obeidat et al. (2020)	Leveraging “Green” Human Resource Practices to Enable Environmental and Organizational Performance: Evidence from the Qatari Oil and Gas Industry.	14	1214
TBF-total binding force.				

Table A3. Publications from the bibliographic coupling analysis—green cluster.

Green Cluster	Authors and Date	Title	Citation Frequency	TBF
	Gupta (2018)	Assessing organizations performance on the basis of GHRM practices using BWM and Fuzzy TOPSIS.	49	1408
	Longoni et al. (2018)	Deploying Environmental Management Across Functions: The Relationship Between Green Human Resource Management and Green Supply Chain Management.	44	1055
	Yusliza et al. (2017)	Deciphering the implementation of green human resource management in an emerging economy.	26	1135
	Yong et al. (2019c)	Nexus between green intellectual capital and green human resource management.	25	857
	Yusliza et al. (2019)	Top management commitment, corporate social responsibility and green human resource management.	24	1443
	Yong et al. (2020)	Pathways towards sustainability in manufacturing organizations: Empirical evidence on the role of green human resource management.	21	1434
	Mousa and Othman (2020)	The impact of green human resource management practices on sustainable performance in healthcare organisations: A conceptual framework.	18	1633
	Amrutha and Geetha (2020)	A systematic review on green human resource management: Implications for social sustainability.	15	1878
	Al Kerdawy (2019)	The Role of Corporate Support for Employee Volunteering in Strengthening the Impact of Green Human Resource Management Practices on Corporate Social Responsibility in the Egyptian Firms.	10	754
	Ogbeibu et al. (2020)	Technological turbulence and greening of team creativity, product innovation, and human resource management: Implications for sustainability.	10	1013
	Yong et al. (2019a)	Green human resource management: A systematic review from 2007 to 2019.	7	1500
	Pham et al. (2019a)	Green human resource management: a comprehensive review and future research agenda.	7	1659
	Moktadir et al. (2019)	Antecedents for greening the workforce: implications for green human resource management.	6	869
	Raut et al. (2020)	Analysing green human resource management indicators of automotive service sector.	5	1107
	Yong et al. (2019b)	Exploratory cases on the interplay between green human resource management and advanced green manufacturing in light of the Ability-Motivation-Opportunity theory.	4	989
TBF-total binding force.				

Table A4. Publications from the bibliographic coupling analysis—red cluster.

Red Cluster	Authors and Date	Title	Citation Frequency	TBF
	Dumont et al. (2017)	Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values.	108	796
	Kim et al. (2019)	The effect of green human resource management on hotel employees’ eco-friendly behavior and environmental performance.	82	626

Table A4. *Cont.*

Red Cluster	Authors and Date	Title	Citation Frequency	TBF
	Pham et al. (2019b)	Greening the hospitality industry: how do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study.	62	1172
	Singh et al. (2020)	Green innovation and environmental performance: The role of green transformational leadership and green human resource management.	53	768
	Saeed et al. (2019)	Promoting employee’s proenvironmental behavior through green human resource management practices.	41	953
	Shen et al. (2018)	Employees’ Perceptions of Green HRM and Non-Green Employee Work Outcomes: The Social Identity and Stakeholder Perspectives.	31	592
	Pinzone et al. (2016)	Effects of ‘green’ training on pro-environmental behaviors and job satisfaction: Evidence from the Italian healthcare sector.	26	940
	Jia et al. (2018)	The Continuous Mediating Effects of GHRM on Employees’ Green Passion via Transformational Leadership and Green Creativity.	16	641
	Chaudhary (2020)	Green Human Resource Management and Employee Green Behavior: An Empirical Analysis.	14	658
	Gilal et al. (2019)	Promoting environmental performance through green human resource management practices in higher education institutions: A moderated mediation model.	13	923
	Pham et al. (2020)	The role of green human resource management in driving hotel’s environmental performance: Interaction and mediation analysis.	12	1223
	Pham et al. (2019c)	Greening Human Resource Management and Employee Commitment Towards the Environment: An Interaction Model.	11	1047
	Hameed et al. (2020)	Do green HRM practices influence employees’ environmental performance?	9	1177
	Chaudhary (2019)	Green human resource management and job pursuit intention: Examining the underlying processes.	8	629
	Anwar et al. (2020)	Green Human Resource Management for organisational citizenship behaviour towards the environment and environmental performance on a university campus.	8	1195

TBF-total binding force.

Appendix B

Table A5. Keywords from the keyword co-occurrence analysis.

Yellow Cluster		Blue Cluster		Green Cluster		Red Cluster	
Keyword	Frequency	Keyword	Frequency	Keyword	Frequency	Keyword	Frequency
Employees	25	companies	44	sustainability	66	performance	67
environmental management	22	environmental-management	42	environmental performance	33	organizational citizenship behavior	21
Perspective	11	framework	28	impact	33	commitment	19
Context	8	of-the-art	24	supply chain management	30	corporate social-responsibility	19
System	7	environmental management	22	financial performance	15	mediating role	18
behaviors	6	sustainable development	20	competitive advantage	14	knowledge	12
		organizations	17	firm performance	11	environmental sustainability	11
		behavior	16	innovation	10	Model	10
		implementation	10	responsibility	9	Systems	10
		Brazil	9	manufacturing firms	8	Workplace	9
		determinants	8	Malaysia	7	pro-environmental behavior	8
		green supply chain management	8	corporate social responsibility	6	Strategies	8
		green training	8	advantage	5	Work	8
		industry	8	attitudes	5	motivation	7
		sustainable human resource management	6	corporate	5	employee green behavior	6
		green management	6	future	5	Empowerment	6
		strategy	5	hrm practices	5	hotels	5
		sustainable operations	5	partial least-squares	5		
				pls-sem	5		

References

- Ahmad, Shoeb. 2015. Green Human Resource Management: Policies and practices. *Cogent Business & Management* 2: 1030817.
- Al Kerdayy, Mostafa Mohamed Ahmed. 2019. The Role of Corporate Support for Employee Volunteering in Strengthening the Impact of Green Human Resource Management Practices on Corporate Social Responsibility in the Egyptian Firms. *European Management Review* 16: 1079–95. [CrossRef]
- Amrutha, V. N., and S. N. Geetha. 2020. A Systematic Review on Green Human Resource Management: Implications for Social Sustainability. *Journal of Cleaner Production* 247: 119131. [CrossRef]
- Anwar, Nosheen, Nik Hasnaa Nik Mahmood, Mohd Yusoff Yusliza, T. Ramayah, Juhari Noor Faezah, and Waqas Khalid. 2020. Green Human Resource Management for Organisational Citizenship Behaviour towards the Environment and Environmental Performance on a University Campus. *Journal of Cleaner Production* 256: 120401. [CrossRef]
- Ari, Engin, Osman M. Karatepe, Hamed Rezapouraghdam, and Turgay Avci. 2020. A Conceptual Model for Green Human Resource Management: Indicators, Differential Pathways, and Multiple Pro-Environmental Outcomes. *Sustainability* 12: 7089. [CrossRef]
- Barney, Jay B. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management* 17: 99–120. [CrossRef]
- Bellucci, Marco, Giacomo Marzi, Beatrice Orlando, and Francesco Ciampi. 2020. Journal of Intellectual Capital: A Review of Emerging Themes and Future Trends. *Journal of Intellectual Capital* 22: 744–67. [CrossRef]
- Benevene, Paula, and Ilaria Buonomo. 2020. Green Human Resource Management: An Evidence-Based Systematic Literature Review. *Sustainability* 12: 5974. [CrossRef]
- Benn, Suzanne, Stephen T. T. Teo, and Andrew Martin. 2015. Employee Participation and Engagement in Working for the Environment. *Personnel Review* 44: 492–510. [CrossRef]
- Bhardwaj, Broto Rauth. 2016. Role of Green Policy on Sustainable Supply Chain Management: A Model for Implementing Corporate Social Responsibility (CSR). *Benchmarking: An International Journal* 23: 456–68. [CrossRef]
- Bombiak, Edyta, and Anna Marciniuk-Kluska. 2018. Green Human Resource Management as a Tool for the Sustainable Development of Enterprises: Polish Young Company Experience. *Sustainability* 10: 1739. [CrossRef]
- Chaudhary, Richa. 2019. Green Human Resource Management and Job Pursuit Intention: Examining the Underlying Processes. *Corporate Social Responsibility and Environmental Management* 26: 929–37. [CrossRef]
- Chaudhary, Richa. 2020. Green Human Resource Management and Employee Green Behavior: An Empirical Analysis. *Corporate Social Responsibility and Environmental Management* 27: 630–41. [CrossRef]
- Chen, Yu-Shan. 2008. The Positive Effect of Green Intellectual Capital on Competitive Advantages of Firms. *Journal of Business Ethics* 77: 271–86. [CrossRef]
- Correia, Maria Salome. 2019. Sustainability: An Overview of the Triple Bottom Line and Sustainability Implementation. *International Journal of Strategic Engineering* 2: 29–38. [CrossRef]
- Crossan, Mary, and Tracy Guatto. 1996. Organizational Learning Research Profile. *Journal of Organizational Change Management* 9: 107–12. [CrossRef]
- Dumont, Jenny, Jie Shen, and Xin Deng. 2017. Effects of Green HRM Practices on Employee Workplace Green Behavior: The Role of Psychological Green Climate and Employee Green Values: Effect of Green HRM on Employee Workplace Green Behavior. *Human Resource Management* 56: 613–27. [CrossRef]
- Ehnert, Ina. 2009. Sustainability and Human Resource Management: Reasoning and Applications on Corporate Websites. *European Journal of International Management* 3: 419. [CrossRef]
- Ellegaard, Ole, and Johan A. Wallin. 2015. The Bibliometric Analysis of Scholarly Production: How Great Is the Impact? *Scientometrics* 105: 1809–31. [CrossRef]
- Gholami, Hamed, Ghasem Rezaei, Muhamad Zamri Mat Saman, Safian Sharif, and Norhayati Zakuan. 2016. State-of-the-Art Green HRM System: Sustainability in the Sports Center in Malaysia Using a Multi-Methods Approach and Opportunities for Future Research. *Journal of Cleaner Production* 124: 142–63. [CrossRef]
- Gilal, Faheem Gul, Zubaida Ashraf, Naeem Gul Gilal, Rukhsana Gul Gilal, and Nisar Ahmed Chaana. 2019. Promoting Environmental Performance through Green Human Resource Management Practices in Higher Education Institutions: A Moderated Mediation Model. *Corporate Social Responsibility and Environmental Management* 26: 1579–90. [CrossRef]
- González-Benito, Javier, and Óscar González-Benito. 2006. A Review of Determinant Factors of Environmental Proactivity. *Business Strategy and the Environment* 15: 87–102. [CrossRef]
- Guerci, Marco, Fabrizio Montanari, Annachiara Scapolan, and Antonella Epifanio. 2016. Green and Nongreen Recruitment Practices for Attracting Job Applicants: Exploring Independent and Interactive Effects. *The International Journal of Human Resource Management* 27: 129–50. [CrossRef]
- Gupta, Himanshu. 2018. Assessing Organizations Performance on the Basis of GHRM Practices Using BWM and Fuzzy TOPSIS. *Journal of Environmental Management* 226: 201–16. [CrossRef] [PubMed]
- Haddock-Millar, Julie, Chandana Sanyal, and Michael Müller-Camen. 2016. Green Human Resource Management: A Comparative Qualitative Case Study of a United States Multinational Corporation. *The International Journal of Human Resource Management* 27: 192–211. [CrossRef]
- Hameed, Zahid, Ikram Ullah Khan, Tahir Islam, Zaryab Sheikh, and Rana Muhammad Naeem. 2020. Do Green HRM Practices Influence Employees' Environmental Performance? *International Journal of Manpower* 41: 1061–79. [CrossRef]

- Harrell-Cook, Gloria, Eileen Appelbaum, Thomas Bailey, Peter Berg, and Arne L. Kalleberg. 2001. Manufacturing Advantage: Why High-Performance Work Systems Pay Off. *The Academy of Management Review* 26: 459. [CrossRef]
- Intergovernmental Panel on Climate Change (IPCC). 2018. *An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty*. Edited by Valérie Masson-Delmotte, Hans-Otto Pörtner, Jim Skea, Panmao Zhai, Debra Roberts, Priyadarshi R. Shukla, Anna Pirani, Wilfran Moufouma-Okia, Clotilde Péan, Roz Pidcock and et al. Geneva: IPCC, *in press*.
- Jabbour, Charbel José Chiappetta. 2013. Environmental Training in Organisations: From a Literature Review to a Framework for Future Research. *Resources, Conservation and Recycling* 74: 144–55. [CrossRef]
- Jabbour, Charbel José Chiappetta. 2015. Environmental Training and Environmental Management Maturity of Brazilian Companies with ISO14001: Empirical Evidence. *Journal of Cleaner Production* 96: 331–38. [CrossRef]
- Jabbour, Charbel José Chiappetta, and Ana Beatriz Lopes de Sousa Jabbour. 2016. Green Human Resource Management and Green Supply Chain Management: Linking Two Emerging Agendas. *Journal of Cleaner Production* 112: 1824–33. [CrossRef]
- Jabbour, Charbel José Chiappetta, Ana Beatriz Lopes de Sousa Jabbour, Adriano Alves Teixeira, and Wesley Ricardo S. Freitas. 2012. Environmental Development in Brazilian Companies: The Role of Human Resource Management. *Environmental Development* 3: 137–47. [CrossRef]
- Jabbour, Charbel José Chiappetta, Daniel Jugend, Ana Beatriz Lopes de Sousa Jabbour, Angappa Gunasekaran, and Hengky Latan. 2015. Green Product Development and Performance of Brazilian Firms: Measuring the Role of Human and Technical Aspects. *Journal of Cleaner Production* 87: 442–51. [CrossRef]
- Jabbour, Charbel José Chiappetta, Fernando César Almada Santos, and Marcelo Seido Nagano. 2010. Contributions of HRM throughout the Stages of Environmental Management: Methodological Triangulation Applied to Companies in Brazil. *The International Journal of Human Resource Management* 21: 1049–89. [CrossRef]
- Jackson, Susan E., Douglas W. S. Renwick, Charbel José Chiappetta Jabbour, and Michael Muller-Camen. 2011. State-of-the-Art and Future Directions for Green Human Resource Management: Introduction to the Special Issue. *German Journal of Human Resource Management: Zeitschrift Für Personalforschung* 25: 99–116. [CrossRef]
- Jia, Jianfeng, Huanxin Liu, Tachia Chin, and Dongqing Hu. 2018. The Continuous Mediating Effects of GHRM on Employees' Green Passion via Transformational Leadership and Green Creativity. *Sustainability* 10: 3237. [CrossRef]
- Kessler, Maxwell Mirton. 1963. Bibliographic Coupling between Scientific Papers. *American Documentation* 14: 10–25. [CrossRef]
- Khan, Muhammad Hamza, and Syaharizatul Noorizwan Muktar. 2020. A Bibliometric Analysis of Green Human Resource Management Based on Scopus Platform. *Cogent Business & Management* 7: 1831165.
- Kim, Yong Joong, Woo Gon Kim, Hyung-Min Choi, and Kullada Phetvaroon. 2019. The Effect of Green Human Resource Management on Hotel Employees' Eco-Friendly Behavior and Environmental Performance. *International Journal of Hospitality Management* 76: 83–93. [CrossRef]
- Kramar, Robin. 2014. Beyond Strategic Human Resource Management: Is Sustainable Human Resource Management the next Approach? *The International Journal of Human Resource Management* 25: 1069–89. [CrossRef]
- Li, Jie, and Andrew Hale. 2015. Identification of, and Knowledge Communication among Core Safety Science Journals. *Safety Science* 74: 70–78. [CrossRef]
- Longoni, Annachiara, Davide Luzzini, and Marco Guerici. 2018. Deploying Environmental Management Across Functions: The Relationship Between Green Human Resource Management and Green Supply Chain Management. *Journal of Business Ethics* 151: 1081–95. [CrossRef]
- Martínez-del-Río, Javier, José Céspedes-Lorente, and Eva Carmona-Moreno. 2012. High-Involvement Work Practices and Environmental Capabilities: How HIWPS Create Environmentally Based Sustainable Competitive Advantages. *Human Resource Management* 51: 827–50. [CrossRef]
- Masri, Hiba A., and Ayham A. M. Jaaron. 2017. Assessing Green Human Resources Management Practices in Palestinian Manufacturing Context: An Empirical Study. *Journal of Cleaner Production* 143: 474–89. [CrossRef]
- Mehta, Kathak, and Pawan Kumar Chugan. 2015. Green HRM in Pursuit of Environmentally Sustainable Business. *Universal Journal of Industrial and Business Management* 3: 74–81. [CrossRef]
- Milliman, John. 2013. Leading-Edge Green Human Resource Practices: Vital Components to Advancing Environmental Sustainability: Leading-Edge Green Human Resource Practices. *Environmental Quality Management* 23: 31–45. [CrossRef]
- Mishra, Pavitra. 2017. Green Human Resource Management: A Framework for Sustainable Organizational Development in an Emerging Economy. *International Journal of Organizational Analysis* 25: 762–88. [CrossRef]
- Moktadir, Md. Abdul, Ashish Dwivedi, Syed Mithun Ali, Sanjoy Kumar Paul, Golam Kabir, and Jitender Madaan. 2019. Antecedents for Greening the Workforce: Implications for Green Human Resource Management. *International Journal of Manpower* 41: 1135–53. [CrossRef]
- Mousa, Sharifa K., and Mohammed Othman. 2020. The Impact of Green Human Resource Management Practices on Sustainable Performance in Healthcare Organisations: A Conceptual Framework. *Journal of Cleaner Production* 243: 118595. [CrossRef]
- Nejati, Mehran, Soodabeh Rabiee, and Charbel José Chiappetta Jabbour. 2017. Envisioning the Invisible: Understanding the Synergy between Green Human Resource Management and Green Supply Chain Management in Manufacturing Firms in Iran in Light of the Moderating Effect of Employees' Resistance to Change. *Journal of Cleaner Production* 168: 163–72. [CrossRef]

- Obeidat, Shatha M., Anas A. Al Bakri, and Said Elbanna. 2020. Leveraging “Green” Human Resource Practices to Enable Environmental and Organizational Performance: Evidence from the Qatari Oil and Gas Industry. *Journal of Business Ethics* 164: 371–88. [CrossRef]
- Ogbeibu, Samuel, Jude Emelifeonwu, Abdelhak Senadjki, James Gaskin, and Jari Kaivooja. 2020. Technological Turbulence and Greening of Team Creativity, Product Innovation, and Human Resource Management: Implications for Sustainability. *Journal of Cleaner Production* 244: 118703. [CrossRef]
- Opatha, Hhdnp, and A. Anton Arulrajah. 2014. Green Human Resource Management: Simplified General Reflections. *International Business Research* 7: 101. [CrossRef]
- Paillé, Pascal, Yang Chen, Olivier Boiral, and Jiafei Jin. 2014. The Impact of Human Resource Management on Environmental Performance: An Employee-Level Study. *Journal of Business Ethics* 121: 451–66. [CrossRef]
- Pham, Nhat Tan, Hung Trong Hoang, and Quyen Phu Thi Phan. 2019a. Green Human Resource Management: A Comprehensive Review and Future Research Agenda. *International Journal of Manpower* 41: 845–78. [CrossRef]
- Pham, Nhat Tan, Tan Vo Thanh, Zuzana Tučková, and Vo Thi Ngoc Thuy. 2020. The Role of Green Human Resource Management in Driving Hotel’s Environmental Performance: Interaction and Mediation Analysis. *International Journal of Hospitality Management* 88: 102392. [CrossRef]
- Pham, Nhat Tan, Zuzana Tučková, and Charbel José Chiappetta Jabbour. 2019b. Greening the Hospitality Industry: How Do Green Human Resource Management Practices Influence Organizational Citizenship Behavior in Hotels? A Mixed-Methods Study. *Tourism Management* 72: 386–99. [CrossRef]
- Pham, Nhat Tan, Zuzana Tučková, and Quyen Phu Thi Phan. 2019c. Greening Human Resource Management and Employee Commitment Towards the Environment: An Interaction Model. *Journal of Business Economics and Management* 20: 446–65.
- Pinzone, Marta, Marco Guerci, Emanuele Lettieri, and Tom Redman. 2016. Progressing in the Change Journey towards Sustainability in Healthcare: The Role of “Green” HRM. *Journal of Cleaner Production* 122: 201–11. [CrossRef]
- Raut, Rakesh D., Bhaskar Gardas, Sunil Luthra, Balkrishna E. Narkhede, and Sachin Kumar Mangla. 2020. Analysing green human resource management indicators of automotive service sector. *International Journal of Manpower* 41: 925–44. [CrossRef]
- Raut, Rakesh D., Sunil Luthra, Balkrishna E. Narkhede, Sachin K. Mangla, Bhaskar B. Gardas, and Pragati Priyadarshinee. 2019. Examining the Performance Oriented Indicators for Implementing Green Management Practices in the Indian Agro Sector. *Journal of Cleaner Production* 215: 926–43. [CrossRef]
- Rayner, Julie, and Damian Morgan. 2018. An Empirical Study of “Green” Workplace Behaviours: Ability, Motivation and Opportunity. *Asia Pacific Journal of Human Resources* 56: 56–78. [CrossRef]
- Reichers, Arnon, and Benjamin Schneider, eds. 1990. Climate and culture: An evolution of constructs. In *Organizational Climate and Culture*. San Francisco: Jossey-Bass, pp. 5–39.
- Ren, Shuang, Guiyao Tang, and Susan E. Jackson. 2018. Green Human Resource Management Research in Emergence: A Review and Future Directions. *Asia Pacific Journal of Management* 35: 769–803. [CrossRef]
- Renwick, Douglas W. S., Charbel José Chiappetta Jabbour, Michael Muller-Camen, Tom Redman, and Adrian Wilkinson. 2016. Contemporary Developments in Green (Environmental) HRM Scholarship. *The International Journal of Human Resource Management* 27: 114–28. [CrossRef]
- Renwick, Douglas W. S., Tom Redman, and Stuart Maguire. 2013. Green Human Resource Management: A Review and Research Agenda*: Green Human Resource Management. *International Journal of Management Reviews* 15: 1–14. [CrossRef]
- Roscoe, Samuel, Nachiappan Subramanian, Charbel José Chiappetta Jabbour, and Tao Chong. 2019. Green Human Resource Management and the Enablers of Green Organisational Culture: Enhancing a Firm’s Environmental Performance for Sustainable Development. *Business Strategy and the Environment* 28: 737–49. [CrossRef]
- Saeed, Bilal Bin, Bilal Afsar, Shakir Hafeez, Imran Khan, Muhammad Tahir, and Muhammad Asim Afridi. 2019. Promoting Employee’s Proenvironmental Behavior through Green Human Resource Management Practices. *Corporate Social Responsibility and Environmental Management* 26: 424–38. [CrossRef]
- Schuler, Douglas, Andreas Rasche, Dror Etzion, and Lisa Newton. 2017. Guest Editors’ Introduction: Corporate Sustainability Management and Environmental Ethics. *Business Ethics Quarterly* 27: 213–37. [CrossRef]
- Shen, Jie, Jenny Dumont, and Xin Deng. 2018. Employees’ Perceptions of Green HRM and Non-Green Employee Work Outcomes: The Social Identity and Stakeholder Perspectives. *Group & Organization Management* 43: 594–622.
- Shipton, Helen, Pawan S. Budhwar, and Jonathan Crawshaw. 2012. HRM, Organizational Capacity for Change, and Performance: A Global Perspective. *Thunderbird International Business Review* 54: 777–90. [CrossRef]
- Shrivastava, Paul, and Stephanie Berger. 2010. Sustainability Principles: A Review and Directions. *Organization Management Journal* 7: 246–61. [CrossRef]
- Singh, Sanjay Kumar, and Abdul-Nasser El-Kassar. 2019. Role of Big Data Analytics in Developing Sustainable Capabilities. *Journal of Cleaner Production* 213: 1264–73. [CrossRef]
- Singh, Sanjay Kumar, Manlio Del Giudice, Roberto Chierici, and Domenico Graziano. 2020. Green Innovation and Environmental Performance: The Role of Green Transformational Leadership and Green Human Resource Management. *Technological Forecasting and Social Change* 150: 119762. [CrossRef]
- Tang, Guiyao, Yang Chen, Yuan Jiang, Pascal Paillé, and Jin Jia. 2018. Green Human Resource Management Practices: Scale Development and Validity. *Asia Pacific Journal of Human Resources* 56: 31–55. [CrossRef]

- Tariq, Sanober, Farzand Ali Jan, and Muhammad Shakil Ahmad. 2016. Green Employee Empowerment: A Systematic Literature Review on State-of-Art in Green Human Resource Management. *Quality & Quantity* 50: 237–69.
- Teixeira, Adriano Alves, Charbel Jose Chiappetta Jabbour, Ana Beatriz Lopes de Sousa Jabbour, Hengky Latan, and Jorge Henrique Caldeira de Oliveira. 2016. Green Training and Green Supply Chain Management: Evidence from Brazilian Firms. *Journal of Cleaner Production* 116: 170–76. [CrossRef]
- Van Eck, Nees Jan, and Ludo Waltman. 2010. Software Survey: VOSviewer, a Computer Program for Bibliometric Mapping. *Scientometrics* 84: 523–38. [CrossRef]
- Van Eck, Nees Jan, and Ludo Waltman. 2014. Visualizing Bibliometric Networks. In *Measuring Scholarly Impact*. Edited by Ying Ding, Ronald Rousseau and Dietmar Wolfram. Cham: Springer International Publishing, pp. 285–320.
- Wehrmeyer, Walter. 1996. *Greening People: Human Resources and Environmental Management*. Abingdon: Routledge.
- Winn, Monika, Manfred Kirchgeorg, Andrew Griffiths, Martina K. Linnenluecke, and Elmar Günther. 2011. Impacts from Climate Change on Organizations: A Conceptual Foundation. *Business Strategy and the Environment* 20: 157–73. [CrossRef]
- Yong, Jing Yi, Mohd-Yusoff Yusliza, and Olawole Olanre Fawehinmi. 2019a. Green Human Resource Management: A Systematic Literature Review from 2007 to 2019. *Benchmarking: An International Journal* 27: 2005–27. [CrossRef]
- Yong, Jing Yi, Mohd-Yusoff Yusliza, Charbel Jose Chiappetta Jabbour, and Noor Hazlina Ahmad. 2019b. Exploratory Cases on the Interplay between Green Human Resource Management and Advanced Green Manufacturing in Light of the Ability-Motivation-Opportunity Theory. *Journal of Management Development* 39: 31–49. [CrossRef]
- Yong, Jing Yi, Mohd-Yusoff Yusliza, Thurasamy Ramayah, and Olawole Fawehinmi. 2019c. Nexus between Green Intellectual Capital and Green Human Resource Management. *Journal of Cleaner Production* 215: 364–74. [CrossRef]
- Yong, Jing Yi, Mohd-Yusoff Yusliza, Thurasamy Ramayah, Charbel Jose Chiappetta Jabbour, Simone Sehnem, and Venkatesh Mani. 2020. Pathways towards Sustainability in Manufacturing Organizations: Empirical Evidence on the Role of Green Human Resource Management. *Business Strategy and the Environment* 29: 212–28. [CrossRef]
- Yusliza, Mohd-Yusoff, Nur Zahiyah Othman, and Charbel Jose Chiappetta Jabbour. 2017. Deciphering the Implementation of Green Human Resource Management in an Emerging Economy. *Journal of Management Development* 36: 1230–46. [CrossRef]
- Yusliza, Mohd-Yusoff, Nurul Aimi Norazmi, Charbel José Chiappetta Jabbour, Yudi Fernando, Olawole Fawehinmi, and Bruno Michel Roman Pais Seles. 2019. Top Management Commitment, Corporate Social Responsibility and Green Human Resource Management: A Malaysian Study. *Benchmarking: An International Journal* 26: 2051–78. [CrossRef]
- Yu, Wantao, Roberto Chavez, Mengying Feng, Chee Yew Wong, and Brian Fynes. 2020. Green Human Resource Management and Environmental Cooperation: An Ability-Motivation-Opportunity and Contingency Perspective. *International Journal of Production Economics* 219: 224–35. [CrossRef]
- Zaid, Ahmed A., Ayham A. M. Jaaron, and Abdul Talib Bon. 2018. The Impact of Green Human Resource Management and Green Supply Chain Management Practices on Sustainable Performance: An Empirical Study. *Journal of Cleaner Production* 204: 965–79. [CrossRef]
- Zibarras, Lara D., and Phillipa Coan. 2015. HRM Practices Used to Promote Pro-Environmental Behavior: A UK Survey. *The International Journal of Human Resource Management* 26: 2121–42. [CrossRef]
- Zupic, Ivan, and Tomaž Čater. 2015. Bibliometric Methods in Management and Organization. *Organizational Research Methods* 18: 429–72. [CrossRef]

MDPI
St. Alban-Anlage 66
4052 Basel
Switzerland
www.mdpi.com

Administrative Sciences Editorial Office
E-mail: admsci@mdpi.com
www.mdpi.com/journal/admsci



Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.



Academic Open
Access Publishing

[mdpi.com](https://www.mdpi.com)

ISBN 978-3-7258-1472-5