

Article



Use of Social Media Platforms among Adults in the United States—Behavior on Social Media

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Abstract: Social media has evolved over the last decade to become an important driver for acquiring and spreading information in different domains such as business, entertainment, crisis management, and politics. The increasing popularity of social media raises a number of questions regarding why we use it so much and what aspects influence this activity. What about gender? What about education, income, age or social status? This paper answers some of these questions using statistical analyses and by dividing overall social media use into selected social media, i.e., Facebook, Instagram, Snapchat, YouTube, and Twitter. The analysis used a dataset that contains information related to 2002 respondents from the U.S. and their social media activity. The results show that people with high household incomes and high education use social media the most. As age increases, social media use decreases, while bigger household income means that social media are used more. Overall, understanding where and at what frequency users are on social media can be a key competitive advantage. When using social networks correctly for marketing, companies can significantly improve their brand awareness, customer satisfaction, quality, reach, and profit.

Keywords: social media; behavior; adults; United States; digital societies

1. Introduction

Social media has evolved over the last decade to become an important driver for acquiring and spreading information in different domains, such as business, entertainment, science, crisis management, and politics [1]. One reason for the popularity of social media is the opportunity to receive or create and share public messages at a low cost. Social media serves as an important context in the lives of emerging adults. Emerging adults spend approximately 6 hours using social media every day, and frequently use multiple platforms simultaneously [2].

In today's globally interconnected world, we draw on the benefits of the ubiquitous networks which provide unparalleled opportunities of economic as well as cultural growth. At the same time, the recent phenomenon of deglobalization has exposed the inadequacies and lapses manifested in the interdependent networks connecting the economic, social, political, and other spheres. Extraordinary circumstances, such as the immigration issue, have contributed to widening the gaps in hyperconnected networks and to highlight the underlying flaws, resulting in social radicalization, continuing inequality, and economic downturns.

The subject of social science is not only the nature of connections among people, but also the interdependency of human connections and the socio-economic sphere [3], an interdependency which may prove beneficial for businesses [4], social organizations, and others [5]. A deglobalizing society brings about an upturn of complex social systems based on an intricate network of relations. The social behavior and organization of people have grown so complicated [6] that they cannot be adequately modeled by conventional tools [7]. The theory of complex systems helps to model hyperconnected

social systems by analyzing their individual parts, but also to consider their interdependencies, which are more than simply a sum of the individual components [6].

The growth of social media usage opens up new opportunities for analyzing several aspects of, and patterns in, communication. For example, social media data can be analyzed in order to gain insights into issues, trends, influential actors, and other kinds of information [1,8]. The term "Social Media Analytics" has gained a great deal of attention. It is defined as "an emerging interdisciplinary research field that aims at combining, extending, and adapting methods for the analysis of social media data" [9]. On social media, participants are able to "obtain guidance and recommendations from others, share experiences, locate goods and services, and make purchases" [10]. "Social media is how people communicate, look for events, notice stores, and brands, and find the weather" (Josh Loewen, digital marketing director of The Status Bureau). It's how people are aided in their daily life. Social media is part of people's routines and is an essential way to communicate, shop, find things to do, and check the news. Young adults are heavy users of social media (i.e., social networking sites, including Facebook, Twitter, YouTube, Twitter, Instagram, Snapchat, and Tumblr). In total, 88% of 18 to 29 year olds report using social media (compared to 78% to 37% of older age groups), and young adults spend more time (averaging over 3 hours daily) on social media than older adults [11].

If companies and different organizations know their target customer, they can use this information to select the social networks that are likely to be most successful. This information can also help companies decide which social networks to avoid for more effective marketing, promotion, and feedback. Businesses can use this report to learn how customers use social media and how to appeal to them through social networking.

Facebook and other social media have opened up an excellent platform for marketers and companies to increase their product promotion through viral marketing that is viewed by more than one billion connected consumers [5,6].

Since the rise of social media usage in the last decade, people have been seeking to gain information from the public as an additional information source to traditional media [12,13]. We use the term social media to refer to "Internet-based applications that build on the ideological and technological foundations of Web 2.0", where Web 2.0 means that "content and applications are no longer created and published by individuals, but instead, are continuously modified by all users in a participatory and collaborative fashion" [14].

Many studies have touted the advantages that social media can bring to individuals and firms [13–15]. For firms, this means that social media could improve marketing, public relations, customer service, product development, personnel decision-making, feedback, and other business activities that rely on information exchanges and engagement with consumers and employees. Many of these advantages have materialized, resulting in almost 50% of all EU firms using at least one form of social media in 2017 [16].

The emergence of social media platforms (e.g., Twitter and Facebook) has fundamentally altered the marketing landscape. Social media allows consumers to create and exchange user-generated content (UGC), thereby enabling them to connect with firms and other consumers. Consumers are no longer passive recipients of marketing messages, but rather, they actively engage with firms and other consumers in order to share their own insights and to learn from others' experiences [13,17]. Monitoring social media may help firms to generate more effective promotional materials and social media content and improve business operations if the information acquired is assessed properly and acted on within an appropriate time frame. Understanding what the gathered data mean, and making decisions about whether, how, and when to respond to online activity, are essential to successful social media marketing [18,19].

Firms are surrounded by a multitude of social media websites (e.g., Facebook, Twitter, Myspace, and LinkedIn) and spend significant resources understanding their social media ecology. Executives are under constant pressure to engage their audiences and motivate them to follow, like, or share their company's marketing messages with their friends in an effort to influence consumer purchasing

decisions [13]. Brands such as Coca-Cola, Starbucks, Red Bull, and Converse each boast over 35 million fans on Facebook alone, and spend significant organizational resources managing them. Firms have created specialized positions to handle their social media marketing. Social media, in fostering communication and connecting people and companies, represent "a vehicle for developing customer insights, accessing knowledge, co-creating ideas and concepts with users, and supporting new product launches" [20].

Among many types of organizations, enterprises are the most active users of social media analytics. Analyzing social media data in order to better understand why customers purchase a product or service plays an important role in sustaining competitive advantages [21]. Social media analytics equipped with advanced techniques have significantly affected companies' abilities to leverage otherwise unattainable social media intelligence. Enterprises can better understand customer behavior by combining the intelligence that is acquired by social media platforms with traditional customer intelligence [22]. Social media can be defined as relatively cheap and easily accessible electronic tools that enable the sharing of and access to information, cooperation towards a common goal, or creation of new friendships or relations [23].

Lurking behaviors on social networking sites seem to be increasing. In addition, people are using social media news websites more frequently and at increasing rates [24,25]. This is a cause for concern since it is much easier for people to fall victim to online deception, given the number of users who exist on social media and the ease of creating an account [26]. Another problem that is associated with the heavy use of social media is how difficult it can be to decipher the difference between trustworthy and untrustworthy information [24].

While almost every user shares some information, the type of information that is shared is not equal but is determined by the personality traits of the users. Furthermore, the proportion of the population using cellphones for Internet access has increased from 85.8% to 90.1% [19]. It is clear that the use of social media has increased in the last few years, but how does social media use differ across varying age, income, or gender groups? Zheng's study shows how males and females differ when posting pictures, which is closely connected to social media activity. For example, female users more often post a picture of their faces than male users, while both males and females post similar numbers of photos with family.

Individuals often use social media to seek and obtain social support [27,28]; however, the nature of the support that is afforded by social media may vary according to the intensity of relationships. Several studies have suggested that the levels of social support are related to emotional closeness in social relationships and that the intensity of social media use is related to the degree of intimacy in relationships [29]. This paper will focus on the following research questions.

RQ1: How are adults active on major social media (Facebook, Twitter, Instagram, Snapchat, and YouTube) in terms of frequency categories (several times a day, about once a day, a few times a week, every few weeks, less often).

RQ2: How does gender, age, education, and income affect the use of social media, and what are the opportunities for marketers?

The answers to these questions will help to understand the actual trends and future development of social media. Understanding the frequency of social media use across groups can be used by companies and their marketers to expand to other markets, find new customers, find new employees, improve their company's image, or get quality feedback on products or services. There are also a few hypotheses in this paper connected to research questions. Understanding the structure of human interconnections and their impact on economic and social activities are crucial for social sciences [30].

One of them is the hypothesis regarding whether or not there is a significant difference in the usage of social media across different education levels or if education has no influence on social media activity. A similar hypothesis regards whether household income, gender, and age significantly affect social media activity.

According to Adweek [31], people tend to spend almost 2 hours a day on social media platforms. This means that social media is probably currently the best tool for customer communication, product promotion, and feedback. The establishment of connections and interdependencies may yield benefits and opportunities both for businesses and social organizations, among others [23].

2. Methods

2.1. Study Design

The analysis in this report is based on telephone interviews that were conducted on 3–10 January 2018. The national sample included 2002 adults who were 18 years of age or older and lived in one of the 50 U.S. states or the District of Columbia. (500 respondents were interviewed via a landline telephone, and 1,502 were interviewed via a cellphone, including 1,071 who had no landline telephone.) The survey was conducted by interviewers under the direction of ABT Associates, Inc. A combination of landline and cell phone random-digit-dialed samples were used, and both samples were provided by Survey Sampling International. The interviews were conducted in English and Spanish. The respondents in the landline sample were selected by randomly asking for the youngest adult male or female who is now at home. The interviews in the cell sample were conducted with the person who answered the phone if that person was 18 years of age or older. The respondents were asked many questions that are not directly related to social media use, and therefore, these questions are not used in the paper. For detailed information about the Pew Research Center survey methodology, see the following link: http://www.pewresearch.org/methodology/u-s-survey-research/.

2.2. Data Analysis

The data from the data set were first analyzed, and the variables that were not relevant for this article were removed. Then, we created tables of users for selected social media, i.e., Facebook, Twitter, Instagram, YouTube, and Snapchat. To answer the research questions, we mostly used tables that were divided by the types of social media. To answer the hypotheses, we used statistical calculations that were conducted using specialized statistical software. For the statistical analysis, we used IBM SPSS statistical software, and the Pearson correlation coefficient was used to analyze the correlations.

ANOVA was used to determine whether the amount of social networks used differed significantly between different age groups, sex, education level, and income. For each group, the following hypothesis was tested:

Hypothesis 0 (H0). $\mu 1 = \mu 2 = \mu 3 \dots = \mu k$. **Hypothesis 1 (H1).** *Means are not all equal.*

Where μ k is the number of groups tested. In case of confirmation of H1 and the number of three or more groups, a Bonferroni post hoc test was run to find out which groups differed, and also, how big is the difference. In case of confirmation of H1 and number of two groups, the Mann-Whitney and Kolmorgorov-Smirnov tests were used.

3. Results

Across the 2002 respondents, 458 reported using Twitter, 627 used Instagram, 1336 used Facebook, 451 used Snapchat and 1450 used YouTube. Only 365 respondents indicated that they do not use any of these. A total of 921 of the respondents were female and 1081 were male. All of the respondents were over 18 years old.

The first test was to determine whether there is any difference in social media activity with respect to age. For this reason, the correlation between social media use and age was assessed. A strong negative correlation was detected when comparing age and social media use. A new variable "usage of social media" was created in order to represent these calculations. For example, if the respondent used only Facebook and YouTube, this variable will be 2. If the respondent uses Facebook, YouTube,

Twitter, Instagram, and Snapchat, the variable will be 5. The correlation is -0.492, with N = 1998, a significance level of 0.01 and a p-value of 0.000. As expected, the higher the age, the fewer social media the respondent uses. Older people do not follow social media trends as much, or they just stay on one of their favorite social media platforms.

The next test is to find the differences between education and social media presence. The ANOVA test provided unexpected results regarding the difference between education and social media use. There is an increasing trend of using many social media when someone has more education. It could be said that higher education leads to more social media use. The result of a Bonferroni post hoc test is shown in the table below.

As can be seen in Table 1, the lowest social media activity is for respondents with "less than high school". Then, the activity is higher but similar for the next three groups, which are "High school graduate (Grade 12 with a diploma or GED certificate)", "Two-year associate degree from a college or university" and "Some college but no degree (includes some community college)". Other significant increases were observed in the group of "Some postgraduate or professional schooling, but no postgraduate degree (e.g., some graduate school)" and "Postgraduate or professional degree, including master's, doctorate, medical or law degree", while "Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB)" had the highest social media use.

Table 1. ANOVA—Results of the Bonferroni post hoc test (Relationship between social media use and level of education. The answers "Don't know" and "Refused" are not shown, and the mean difference for "Less than high school" comes from our own research).

Social Media Activity and the Highes	t Edı	acation Level Attained
High school incomplete (Grades 9-11 or Grade 12 with NO diploma)	>	Less than high school (Grades 1–8 or no formal
Mean Difference: -0.36007		schooling)
High school graduate (Grade 12 with diploma or GED certificate) Mean Difference: -0.77532	>	High school incomplete (Grades 9–11 or Grade 12 with NO diploma)
Two-year associate degree from a college or university Mean Difference: -0.85041	>	High school graduate (Grade 12 with diploma or GED certificate)
Some college but no degree (includes some community college) Mean Difference: -0.86941	>	Two-year associate degree from a college or university
Some postgraduate or professional schooling, but no postgraduate degree (e.g., some graduate school) Mean Difference: -1.11476	>	Some college but no degree (includes some community college)
Postgraduate or professional degree, including master's, doctorate, medical, or law degree Mean Difference: -1.13018	>	Some postgraduate or professional schooling but no postgraduate degree (e.g., some graduate school)
Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB) Mean Difference: -1.20205	>	Postgraduate or professional degree, including master's, doctorate, medical or law degree

Another result was discovered when comparing social media use with respect to household income. There is a similar trend with those two variables, i.e., greater household income results in more social media use. However, this is not supported by the Bonferroni post hoc test, because this test is too conservative, and statistical significance was only found for the "Less than \$10,000" and "100,000 to under \$150,000" income groups, but the trend was visible across the 2002 respondents. The figure below (Figure 1) shows the means of social media use for the income categories.

When searching for differences between male and female social media use, the author tested the null hypothesis "The distribution is the same across men and women". These groups differ when categorized again by age, but when combined, they are almost the same.

The following tables (Tables 2–4) show how the amount of social media used varies by gender, marital status, and the number of people living in the house.





		Gender Male Female		Total	
	-	Male Female 184 181 206 139 294 234 172 139	Female	Total	
	0	184	181	365	
	1	206	139	345	
Number of a state of the state	2	294	234	528	
Number of social media used	3	172	139	311	
	4	140	137	277	
	5	85	91	176	
Total		1081	921	2002	

Table 2. Number of social media used by gender.

Table 3. Number of social media used by marital status.

		Marital Status					– Total	
		Married	Living with a Partner	Divorced	Separated	Widowed	Never Been Married	_ 10tai
	0	157	10	38	8	97	41	365
	1	202	17	35	12	28	41	345
Number of social	2	281	43	67	19	28	82	528
media used	3	144	16	28	10	16	89	311
	4	114	21	23	8	3	104	277
	5	59	16	11	1	3	85	176
Total		957	123	202	58	175	442	2002

Table 4. Number of social media used by number of people in the household.

		How	How Many People, Including Yourself, Live in Your Household?					ur Household?	Total	
		1	2	3	4	5	6	7	8 or More	10141
	0	134	127	30	20	9	6	3	4	365
	1	57	123	61	42	26	14	4	2	345
Number of social	2	103	168	97	78	47	12	5	7	528
media used	3	52	102	48	51	26	12	7	4	311
	4	40	74	50	58	36	7	3	2	277
	5	20	45	31	45	17	8	4	1	176
Total		406	639	317	294	161	59	26	20	2002

Respondents most often use two social media; this is true for both men and women.

The following tables (Table 5 below and Tables A1–A4 in Appendix A) describe the respondents who indicated that they use the selected social media. Among them, 1336 respondents use Facebook. The table compares those users based on age, gender, income, and education with respect to the frequency of their use of the selected social media platform. Each table addresses different social media. With respect to other social media, 1450 respondents use YouTube, 458 use Twitter, 627 use Instagram, and 451 use Snapchat.

	Facebook (N = 1336) **						
	Several Times a Day	About Once a Day	A Few Times a Week	Every Few Weeks	Less Often		
Age							
18–28	51.60%	18.80%	17.20%	4.40%	8.00%		
29–38	51.33%	24.34%	16.37%	2.65%	5.31%		
39–48	52.97%	19.18%	12.79%	4.57%	10.50%		
49–58	49.33%	27.35%	16.59%	1.79%	4.93%		
59+	40.98%	23.71%	22.16%	5.67%	7.47%		
Gender							
Men	45.10%	21.36%	20.03%	6.38%	7.12%		
Women	51.37%	24.39%	15.09%	3.05%	5.64%		
Income *							
<\$30,000	52.45%	20.75%	13.83%	3.75%	9.22%		
\$30,000-\$49,999	49.49%	25.25%	18.69%	3.54%	3.03%		
\$50,000-\$74,999	47.06%	25.49%	18.95%	5.23%	3.27%		
\$75,000+	45.39%	23.46%	20.39%	6.14%	4.61%		
Education ***							
High school or less	52.78%	21.67%	14.44%	3.61%	7.50%		
Some college	51.71%	20.00%	17.56%	5.37%	5.37%		
College+	45.22%	24.25%	19.53%	5.11%	5.90%		

Table 5. Overview of Facebook users (own elaboration).

"Living with a partner" and "Never been married". "Never been married" is the group that uses social media the most, and the group of "Widowed" uses social media the least; * Income is household income (not individual); ** The sum of the age, gender, income, or education groups is not equal to all respondents who marked that they use Facebook, YouTube, Snapchat, Twitter, or Instagram because a few respondents refused to answer the age/gender/income/education questions, and 6 respondents refused to answer the question about how often they use the selected social media; *** Possible answers for education were "(a) Less than high school (Grades 1-8 or no formal schooling); (b) High school incomplete (Grades 9-11 or Grade 12 with NO diploma); (c) High school graduate (Grade 12 with diploma or GED certificate); (d) Some college, but no degree (includes some community college); (e) Two-year associate's degree from a college or university; (f) Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB); (g) Some postgraduate or professional schooling, but no postgraduate degree (e.g., some graduate school); and (h) Postgraduate or professional degree, including master's, doctorate, medical or law degree (e.g., MA, MS, Ph.D., MD, JD)". In the tables, a, b and c were used for "High school 7or less"; d and e were used for "Some college"; and f, g, and h were used for "College+".

There were also differences that were confirmed by the Bonferroni post hoc test with respect to marital status. Married individuals use fewer social media.

In the Table 2 (and attachments), it can be seen that over 50% of the Facebook users in the 18–28, 29–38, and 39–48 age groups use this social media "Several times a day". Women are 6% more active than men on Facebook in the case of "Several times a day", and are 3% more active in the case of "About once a day".

With regard to YouTube, activity on this social media falls as age increases, i.e., 43.34% of the 18–28 age group and 13.86% of 59+ age group use it several times a day. Men are daily more active on YouTube than women by more than 10%. YouTube activity also decreases as income increases, given that 36.36% of those with household incomes less than \$30,000 and 19.92% of those with household incomes of \$75,000+ use it several times a day.

Twitter activity seems to be similar in the 18–28, 29–38, 39–48, and 49–58 age groups, but there is increasing activity with regard to income. Approximately 22.12% of the less than \$30,000 income group, 25.45% of the \$50,000-\$75,000 group, and 31.55% of the higher than \$75,000 group use Twitter several times a day.

Instagram activity is mostly about posting photos; it is clear that lower ages have higher Instagram activity. Approximately 54.5% of the 18–28 age group, 40.3% of the 29–38 age group, 30.10% of the 39–48 age group, 22.5% of the 49–58 age group, and only 9.5% of the 59+ age group use it several times a day. Activity across gender, income, and education groups are very similar with respect to using Instagram several times a day. Snapchat use is similar to Instagram use, in that Snapchat use decreases substantially as age increases; men and women use this social media similarly.

Opportunities for Marketing

Social media analytics have greatly improved over the past few years. Understanding where and at what frequency users are on social media can be a key competitive advantage. In fact, many market researchers believe that social media feedback is now a more efficient form of research than traditional surveys. This feedback can be more accurate if marketers correctly choose one or more social media. This is just one of the benefits of knowing the distribution of users on the major social media.

With the right combination of social media for marketing, the company also raises brand awareness, reach, and more profit. Every company, organization, or entrepreneur typically has a defined ideal customer, according to which, and according to the field of business, it must choose the social media where it will be active. The choice of social media for marketing will vary considerably, for example, for luxury watch companies, food delivery companies, or mobile phone companies. The tables and descriptions of the distribution of activities and frequency of social media use by adults in this work can facilitate this decision. The research was carried out on a large sample of respondents and describes how social media is used across age groups, gender, different income groups, or maximum educational attainment.

4. Discussion

This paper investigates the social media use of 2002 respondents in the United States. It has been shown that as age increases, the number of used social media decreases. As education and household income increase, social media use increases. This could be because people with higher household income have more free time, and they spend it on social media or they are using them for work. Social media presence increases as education increases. This may be because more educated people desire more information, which they try to find on social media. From the 2002 respondents, only 365 indicated that they do not use any of the selected social media. Across age, gender, income, and education groups for Facebook users (N = 1336), the majority of users indicated that they use Facebook "Several times a day". The results show that Facebook users are 50.68% male and 49.32% female. Activity on YouTube (N = 1450) differs from Facebook with respect to users who use YouTube as "A few times a week". Furthermore, 56.71% of YouTube users are male and 43.29% are female. Men use YouTube slightly more than women. Overall, in the case of YouTube, with respect to age, gender, income, and education, the majority of YouTube users use it "A few times a week". Twitter (N = 458) users are similarly distributed among "Several times a day", "About once a day", and "A few times a week". With respect to Twitter users, 55.7% are men and 44.3% are women. The last studied social media is Instagram, which is composed of 49.52% men and 50.48% women.

In comparison to other continents, according to the statistics portal Statista.com, North America has the largest social media activity. With respect to the percentage of the global population using Facebook by region, North America leads with 72.4%, followed by Latin America and the Caribbean with 57.3%, Australia with 48.1%, Europe with 41.7%, and the Middle East with 34.6%. In Asia and Africa, the number is below 15%. For comparison, Instagram was among Europe's fastest-growing

social networks in 2018 and 2019. Russia, Turkey, and the United Kingdom were all ranked among the top countries worldwide with respect to having the most Instagram users.

It is likely that the popularity of social media will continue to increase and, in the coming years, more people will use social media several times a day since users will be accustomed to them.

Comparing and contrasting the behavior of Generation X and Generation Y on Facebook with respect to their brand engagement on referral intentions and electronic word-of-mouth (e-WOM), an electronic questionnaire filled in by 332 respondents in Portugal showed that Generation Y tends to consume more brand content, is more likely to have an e-WOM referral intention, and engages more with brand campaigns. Furthermore, currently employed respondents showed more engagement than students [32].

Social media as the primary outlets of PR activities are becoming a must-have in the marketing strategy of companies worldwide. Research shows that the largest IGOs are massively exploring the opportunities provided by the globally interconnected networks of social media. The results of the research show that the main focus is on Facebook and Twitter; all but one IGO actively use these two networks, while the one nonparticipating IGO is active on YouTube, the third most popular network. Ultimately, all the IGOs under research have an online presence on at least one of the three major social platforms [33].

Social media are an essential component not only for businesses but also for other organizations; the health sector, for example, makes use of online campaigns as well as digital tools to provide their services, such as health consultations via Skype [32].

As to the perceived importance of social media users, employees who are active on social media are regarded as the most important group (58.1%), followed by influencers (53.2%), and bloggers and community administrators (51.4%) [34].

The data and information in this study are valuable for marketers and companies who want to use the power of social media all around the world, but especially in the USA. There is power in social media. By understanding how social media works, how people use them, and how often, marketers and businesses can better target their campaigns, help start businesses, improve brand awareness, expand into other markets, increase the number of customers, and obtain quality feedback [10,21].

As to the personality type of avid social media users, research indicates that individuals with a high level of extraversion and openness tend to be more active online. This finding is in keeping with the generally received notion that Generation Y turns to social media to experience a sense of belonging to a community and to socialize with other like-minded individuals [35,36]. Given Generation Y's heavy use of social media platforms, it is a priority for companies and organizations to gain insights into their behavior and personalities as they manifest online since these findings are essential for creating a marketing strategy to appeal to this target group [35]. Social media enable businesses to encourage users and customers to promote their brand simply by engaging with their content [37], thus raising brand awareness and reputation [38].

Companies still need to be aware of the negative aspects of social networks and be cautious. Many factors contribute to problematic social media use, including personality differences, psychosocial factors, and specific use motivations [39].

The increasing popularity of social media raises a number of questions regarding why we use them so much and what aspects influence this activity. What about gender? What about education, income, age or social status? This paper tries to answer some of these questions using statistical analyses and by dividing overall social media use into the selected social media, i.e., Facebook, Instagram, Snapchat, YouTube, and Twitter. As expected, as age increases, social media use decreases. It was also shown that as education increases, social media activity increases. This trend can also be seen with household income, that is, the bigger that household income, the more social media is used. Overall, it could be said that people with high household incomes and high levels of education use social media more than the other groups with lower values (less household income or lower level of education.

Peer interactivity is heightened in social media compared to other media channels due to its unique characteristics like the ability to create, share, critique, and endorse (e.g., likes, retweets, and comments) content [11]. While Facebook, Twitter, and YouTube are the most popular social media sites in which organizations engage, the participation of users was not limited to these three. This implies that companies should increasingly engage in different kinds of social networks.

Employees should be involved to influence how the company is presenting itself. By involving private profiles, greater success will be achieved. On social networks, based on not only algorithms but also user preferences, personal profiles of real users are always more visible than corporate ones [17,22].

Further research could analyze more aspects that can influence social media activity such as smartphone/tablet/desktop users, birthplace, employment, television use, Internet speed, or marital status. Why are women more active on Facebook and men more active on YouTube and Twitter? Why is the "several times a day" category smaller for YouTube and larger for Twitter? There are still many aspects that need further study.

5. Conclusions

Communication on social networks is highly effective. Social networks allow us to reach a specific target audience and get the results we want quickly and easily. Investment in social advertising is relatively low but is very effective. Communication takes place in a natural environment. The customer goes to social networks to relax and receives marketing messages much better. Content on social networks is primarily made up of people and is, therefore, more trustworthy. A business that is not active on social networks and has no references automatically feels less credible. The chance of succeeding on social networks is the same for everyone. However, managing social profiles and advertising requires quite a lot of time, the right strategy, considerable effort, and creative ideas.

This case study shows that when companies try to increase brand awareness, they should target users on Instagram and Facebook. It is shown in the table "Overview of Instagram users" that approximately 50% of Instagram users who are 18–38 years old use Instagram several times a day. In the case of the table "Overview of Facebook users", this number is even higher. Conversely, Snapchat and Twitter do not work in the same manner. Similar advice could be applied when companies want to increase their website traffic. In the case that the age of the ideal customer is approximately 30 or higher, companies should market on YouTube and Twitter, since the activity of those age groups are higher on those two social media.

Limitations of this work include focusing on a narrow set of variables and categories such as age, gender, household income, and education. In this respect, the work could be expanded and more information could be collected about social network users, which could then be used for better marketing and customer and user satisfaction. Furthermore, as mentioned in similar social science studies, it is not only the nature of connections among people but also the interdependency of human connections and the socio-economic sphere which may prove beneficial for businesses and social organizations. The quality of these connections should be analyzed.

The overall conclusion is that Facebook and Instagram were the dominant social media in 2018/2019, and that companies should focus their marketing mainly on those networks if they want to boost sales, promote content, go viral, learn more about their customers, or keep an eye on the competition.

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Appendix A. Overview of Users

	YouTube (N = 1450) **						
	Several Times a Day	About Once a Day	A Few Times a Week	Every Few Weeks	Less Ofter		
Age							
18-28	43.34%	19.45%	27.99%	5.80%	3.41%		
29-38	32.13%	18.07%	37.35%	7.23%	5.22%		
39-48	30.09%	19.91%	30.97%	11.95%	7.08%		
49-58	17.48%	12.60%	39.02%	17.48%	13.41%		
59+	13.86%	14.11%	38.12%	17.82%	16.09%		
Gender							
Men	30.49%	18.54%	33.17%	10.49%	7.32%		
Women	20.77%	14.22%	36.58%	15.18%	13.26%		
Income *							
<\$30,000	36.36%	17.61%	28.41%	8.81%	8.81%		
\$30,000-\$49,999	30.88%	14.71%	32.84%	11.76%	9.80%		
\$50,000-\$74,999	22.86%	16.00%	37.71%	14.29%	9.14%		
\$75,000+	19.92%	17.24%	38.51%	14.75%	9.58%		
Education ***							
High school or less	35.10%	15.40%	29.55%	8.84%	11.11%		
Some college	32.87%	15.74%	32.87%	9.72%	8.80%		
College+	20.38%	17.51%	37.53%	14.99%	9.59%		

Table A1. Overview of YouTube users (own elaboration).

* Income is household income (not individual); ** The sum of the age, gender, income, or education groups is not equal to all respondents who marked that they use Facebook, YouTube, Snapchat, Twitter, or Instagram because a few respondents refused to answer the age/gender/income/education questions, and 6 respondents refused to answer the question about how often they use the selected social media; *** Possible answers for education were "(a) Less than high school (Grades 1-8 or no formal schooling); (b) High school incomplete (Grades 9-11 or Grade 12 with NO diploma); (c) High school graduate (Grade 12 with diploma or GED certificate); (d) Some college, but no degree (includes some community college); (e) Two-year associate's degree from a college or university; (f) Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB); (g) Some postgraduate or professional schooling, but no postgraduate degree (e.g., some graduate school); and (h) Postgraduate or professional degree, including master's, doctorate, medical or law degree (e.g., MA, MS, Ph.D., MD, JD)". In the tables, a, b and c were used for "High school 7or less"; d and e were used for "Some college"; and f, g, and h were used for "College+".

		Twitter (N = 458) **							
	Several Times a Day	About Once a Day	A Few Times a Week	Every Few Weeks	Less Often				
Age									
18-28	31.97%	26.23%	19.67%	10.66%	11.48%				
29-38	25.97%	18.18%	23.38%	16.88%	15.58%				
39–48	26.58%	13.92%	34.18%	7.59%	17.72%				
49-58	29.11%	20.25%	17.72%	16.46%	16.46%				
59+	17.20%	13.98%	31.18%	17.20%	20.43%				
Gender									
Men	29.53%	20.08%	23.62%	11.02%	15.75%				
Women	22.28%	18.32%	26.73%	16.34%	16.34%				
Income *									
<\$30,000	22.12%	20.19%	24.04%	14.42%	19.23%				
\$30,000-\$49,999	20.37%	18.52%	29.63%	12.96%	18.52%				
\$50,000-\$74,999	25.45%	21.82%	23.64%	14.55%	14.55%				
\$75,000+	31.55%	17.11%	25.67%	11.76%	13.90%				
Education ***									
High school or less	21.36%	18.45%	31.07%	13.59%	15.53%				
Some college	33.33%	22.67%	25.33%	9.33%	9.33%				
College+	26.26%	18.71%	22.66%	14.39%	17.99%				

* Income is household income (not individual); ** The sum of the age, gender, income, or education groups is not equal to all respondents who marked that they use Facebook, YouTube, Snapchat, Twitter, or Instagram because a few respondents refused to answer the age/gender/income/education questions, and 6 respondents refused to answer the question about how often they use the selected social media; *** Possible answers for education were "(a) Less than high school (Grades 1-8 or no formal schooling); (b) High school incomplete (Grades 9-11 or Grade 12 with NO diploma); (c) High school graduate (Grade 12 with diploma or GED certificate); (d) Some college, but no degree (includes some community college); (e) Two-year associate's degree from a college or university (f) Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB); (g) Some postgraduate or professional schooling, but no postgraduate degree (e.g., some graduate school); and (h) Postgraduate or professional degree, including master's, doctorate, medical or law degree (e.g., MA, MS, Ph.D., MD, JD)". In the tables, a, b and c were used for "High school 7or less"; d and e were used for "Some college"; and f, g, and h were used for "College+".

Age 18–28 29–38 39–48 49–58 59+ Gender Men Women

Income³

<\$30.000

\$30,000-\$49,999

\$50,000-\$74,999

\$75,000+

Education ***

High school or less

Some college

College+

34.23%

42.11%

39.71%

32.33%

36.31%

43.96%

33.70%

Tuble AS. Overview of instagrant users (own elaboration).							
Instagram (N = 627) **							
Several Times a Day About Once a Day A Few Times a Week Every Few Weeks							
E4 E09/	25.00%	9.50%	2.50%	8.50%			
54.50% 40.32%	25.00%	9.50% 20.97%	2.50% 7.26%	8.50% 6.45%			
30.10%	15.53%	24.27%	14.56%	15.53%			
22.50%	18.75%	37.50%	15.00%	6.25%			
9.52%	17.14%	42.86%	15.24%	15.24%			
36.69%	21.43%	21.75%	11.36%	8.77%			
35.35%	20.70%	26.11%	7.01%	10.83%			

24.83%

25.26%

17.65%

23.71%

22.02%

23.08%

24.93%

6.04%

9.47%

8.82%

12.93%

8.33%

6.59%

10.14%

Table A3. Overview of Instagram users (own elaboration)

* Income is household income (not individual); ** The sum of the age, gender, income, or education groups is not equal to all respondents who marked that they use Facebook, YouTube, Snapchat, Twitter, or Instagram because a few respondents refused to answer the age/gender/income/education questions, and 6 respondents refused to answer the question about how often they use the selected social media; *** Possible answers for education were "(a) Less than high school (Grades 1-8 or no formal schooling); (b) High school incomplete (Grades 9-11 or Grade 12 with NO diploma); (c) High school graduate (Grade 12 with diploma or GED certificate); (d) Some college, but no degree (includes some community college); (e) Two-year associate's degree from a college or university; (f) Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB); (g) Some postgraduate or professional degree, including master's, doctorate, medical or law degree (e.g., MA, MS, Ph.D., MD, JD)". In the tables, a, b and c were used for "High school 7 less"; d and e were used for "Some college"; and f, g, and h were used for "College+".

19.46%

18.95%

23.53%

22.84%

17.26%

23.08%

22.19%

Table A4.	Overview	of Snapchat us	sers (own elab	oration).
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		Snapchat (N = 451) **							
	Several Times a Day	About Once a Day	A Few Times A Week	Every Few Weeks	Less Often				
Age									
18-28	64.68%	14.22%	11.93%	1.83%	7.34%				
29-38	34.52%	19.05%	32.14%	5.95%	8.33%				
39-48	30.19%	16.98%	26.42%	15.09%	11.32%				
49-58	19.05%	9.52%	40.48%	9.52%	21.43%				
59+	15.38%	10.26%	30.77%	20.51%	23.08%				
Gender									
Men	45.29%	17.04%	20.63%	7.17%	9.87%				
Women	45.05%	13.06%	23.87%	5.86%	12.16%				
Income *									
<\$30,000	50.00%	14.15%	18.87%	3.77%	13.21%				
\$30,000-\$49,999	52.00%	13.33%	25.33%	5.33%	4.00%				
\$50,000-\$74,999	35.42%	20.83%	22.92%	10.42%	10.42%				
\$75,000+	40.67%	14.67%	26.00%	6.67%	12.00%				
Education ***									
High school or less	56.52%	10.87%	18.84%	3.62%	10.14%				
Some college	61.25%	11.25%	12.50%	0.00%	15.00%				
College+	32.31%	18.78%	27.51%	10.48%	10.92%				

* Income is household income (not individual); ** The sum of the age, gender, income, or education groups is not equal to all respondents who marked that they use Facebook, YouTube, Snapchat, Twitter, or Instagram because a few respondents refused to answer the age/gender/income/education questions, and 6 respondents refused to answer the question about how often they use the selected social media; *** Possible answers for education were "(a) Less than high school (Grades 1-8 or no formal schooling); (b) High school incomplete (Grades 9-11 or Grade 12 with NO diploma); (c) High school graduate (Grade 12 with diploma or GED certificate); (d) Some college, but no degree (includes some community college); (e) Two-year associate's degree from a college or university; (f) Four-year college or university degree/Bachelor's degree (e.g., BS, BA, AB); (g) Some postgraduate or professional degree, including master's, doctorate, medical or law degree (e.g., MA, MS, Ph.D., MD, JD)". In the tables, a, b and c were used for "High school 70 less"; d and e were used for "Some college"; and f, g, and h were used for "College+".

15.44%

4.21%

10.29%

8.19%

16.07%

3.30%

9.04%

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