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für Sozialwissenschaften

# Factors Influencing Social Media Usage in the US 

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#### Abstract

Given the immense shifts the social networking sites and applications have brought about, a considerable number of researchers in the field of communication studies have turned to study different aspects of social media usage and factors influencing it. This study gathered data from 33,318 US non-institutionalized citizens over 18 including 17,079 females and 16,239 males; they were members of web panelists of Pew, and their answers revealed that a majority of this online participants used a kind of social media. The results of this study revealed women use social media more than men, and religious people more than non-religious people. In addition, the results indicated that married people are the least users of social media in comparison with other marital groups. Our results showed that all demographics are significantly related to social media usage. But this significance can be somehow misleading because of weak practical effect sizes. Except for marital status and age Cramer's $V$ values are too small and their significance may have nothing to say but sensitivity to the degree of freedom.


Keywords: Facebook, pew, social media, Twitter.
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## Introduction

Social media use is increasing among U.S. young adults (Liu et al., 2016). While in 2008 only $10 \%$ of Americans had used some sorts of "social media," ten years later this amount has been increased to 77\%. (Statistica, 2018). The most popular social media platform for adults in the United States is Facebook which has been used by $68 \%$ of people. The average use of the other platforms is about 25\%, which shows that Facebook continues to dominate. The number of Americans who use social media through their mobile phones has been increased which caused declining the rate of desktop use. This means people are constantly connected to social networks as they're on the go (Jantsch, 2018). We can think that smartphones, which provide user-friendly accessibility, are new devices enabling the use of social media more convenient. Based on Nielsen Media Tech Trender Survey in 2018, 64\% of adult Americans who use smartphones to watch online videos, use the social networking apps/sites at least once per day. That number increased to $72 \%$ among younger people whose ages range from 18 to 34 (Nielsen, 2018). In the first quarter of 2018, U.S. adults spent about 4 hours a day on computers, tablets and smartphones. This amount has increased by 13 minutes compared to the last quarter of 2017 , and $62 \%$ of that time is allocated to app/web browsing on smartphones (Nielsen, 2018).

It seems that Americans increasingly shift their perspectives towards life using social networks. Not only they take advantage of social media for entertainment and recreation, but also they invest money, learn and grow through it. They even make political participation and get their voices heard using social media. Political candidates use Facebook, Twitter and governmental agencies to disseminate information. Similarly, citizens have different uses of Social Networking Sites (SNS) to be engaged in politics, such as asking their Facebook friends to vote or to keep them informed about political candidates and elections by following politicians and journalists on Twitter (Bekafigo \& McBride, 2013). Existing research shows that social media has a considerable effect on political participation through several mechanisms, including cognitive elaboration, gaining information, and running political discussion (Halpern et al., 2017). Most studies on social media and political participation demonstrate a positive, but not very significant, relationship between the two (Valenzuela et al., 2018). In US presidential election campaign of 2016, social network platforms were increasingly used as direct channels for conveying news, leaving mainstream media behind (Enli, 2007). With the candidates' millions of followers, Twitter became a platform for mass communication and the candidate's main
online information conduit. As such, social media has provided a platform for debating and critiquing the mainstream media by the campaigns and their networks (Enli, 2007).

Moreover, the increasingly important role of celebrities in US politics has been another outcome of the spread of social media. New celebrities, like the Kardashians, utilize the massive number of social media to make themselves known and famous. Unlike traditional celebrities, who were required to have direct interactions with people in order to be famous and reputable, social media allows celebrities to avoid these kinds of interactions and still have access to their fans easily (Reynolds, 2018). As a result, we are witnessing that celebrities are getting more powerful in the US and the president of the United States is now a celebrity himself (Gabriel et al., 2018). This is why studying social media is no longer a subject in the entertainment industry or psychological studies; we should study social media to be aware of politics, economy, culture, sexuality and even geography. Therefore, we decided to study the factors influencing social media use in the US.

## Review of Literature

Researchers were fast to understand the importance of social media use in American people's lives, and started to study social media use among different demographics. We have now a good deal of studies examining different methodological, theoretical and even philosophical approaches on social networking sites' users.

Ellison, Steinfield \& Lampe (2007) examined the relationship between use of Facebook and the formation and maintenance of social capital. In addition to assessing bonding and bridging social capital, they explored a dimension of social capital that assessed one's ability to stay connected with members of a previously inhabited community, which they called maintained social capital. The authors conducted regression analyses on the results from a survey of undergraduate students ( $\mathrm{N}=$ 286) and found a strong association between use of Facebook and the three types of social capital, with the strongest relationship being bridging social capital. Furthermore, they found Facebook usage interacted with measures of psychological well-being, which suggests that it might provide greater benefits for users experiencing low selfesteem and low life satisfaction.

Chou et al. (2009) explored the sociodemographic and healthrelated factors influencing current adult social media users in the US. They used data from the 2007 study so they replicated the Health Information National Trends Study (HINTS, N=7674) which has been
a nationally representative cross-sectional survey on health-related communication trends and practices. Participants who had access to the Internet ( $\mathrm{N}=5078$ ) were asked whether, over the past year, they had (1) participated in an online support group, (2) written in a blog, (3) used a social networking site. Bivariate and multivariate logistic regression analyses were used to identify predictors of each type of social media use. They found that approximately $69 \%$ of US adults had had access to the Internet in 2007. Among these online participants, $5 \%$ participated in an online support group, $7 \%$ reported blogging, and $23 \%$ used a social networking platform or website. Multivariate analysis revealed that younger age was the only significant predictor of blogging and social network utilization; a statistically significant linear relationship was found, with younger categories were found to have more frequent use. Younger age, a personal cancer experience, and poorer subjective health predicted support group participation. Hence, Chou et al. (2009) concluded, social media are penetrating the US population independent of education, race/ethnicity, or health care access. Moreover, they came to the conclusion that the growth of social media is not uniformly distributed across age groups; therefore, health communication programs utilizing social media must first consider the age of their intended population to help ensure that messages reach the targeted audience.

Correa, Hinsley \& de de Zúñiga (2010) conducted a preliminary study on the literature of social media usage and found that factors such as extraversion, emotional stability and openness to experience are related to utilization of social media. Using a national sample of US adults, they investigated the relationship between these three dimensions of the BigFive model and social media use (defined as use of social networks and instant messaging applications). They also examined whether gender and age played roles in that dynamic. Their results indicated that while extraversion and openness to experiences were positively related to social media use, emotional stability was a negative factor, controlling socio-demographics and satisfaction with life. These findings differed from those of gender and age. While extraverted men and women were both inclined to be more frequent users of social media applications, only those males with greater degrees of emotional instability were more regular users. The relationship between extraversion and social media use was particularly crucial among the young adults. Conversely, being open to new experiences revealed to be as an important personality predictor of social media use for the elder participants of their sample.

In 2010, Lenhart et al. brought together recent findings about

Internet and social media use among young adults by situating it within comparable data for adolescents and adults older than 30. Their data were drawn from a survey Lenhart and her colleagues conducted between June 26 and September 24, 2009 in which 800 adolescents participated whose age between ranged from 12 to 17 . Most of the adult data were drawn from a survey conducted in late 2009 of 2,253 adults (age 18 and over). They concluded that 73\% of American teens used social networking websites, a significant increase from previous surveys. Just more than half of online teens (55\%) used SNS in November 2006 and $65 \%$ did so in February 2008. As the teen who used social networking had increased, the popularity of some sites' features had shifted. In mid-2009, compared to SNS activity in February 2008, a smaller proportion of teens had sent daily messages to friends via social networking applications and sites, or sent bulletins, group messages or private messages via SNS applications. They also found that $47 \%$ of online adults used social networking sites, up to 37\% in November 2008.

Hughes et al. (2012) used a population sample ( $\mathrm{N}=300$ ) to study correlations between personality types (Neuroticism, Extraversion, Openness-to-Experience, Agreeableness, Conscientiousness, Sociability and Need-for-Cognition) and social and informational use of the two largest social networking sites: Facebook and Twitter. They also studied age and Gender. Their results showed that personality was related to online socializing and information seeking/exchange, though not as important as some previous research had suggested. Furthermore, a preference for Facebook or Twitter was associated with differences in personality. Hughes et al. (2012) also revealed different relationships between personality and Facebook and Twitter use.

Rauniar et al. (2014) revisited the technology acceptance model (TAM) with regard to social media use in the US. They examined individual adoption behavior related to the users of Facebook which is currently the most popular SNS. The important factors in the intention of using social networking such as individual's perceived ease of use, the user's critical mass, social networking site capability, perceived playfulness, trustworthiness, and perceived usefulness were empirically studied with a primary data set. In their field study, Rauniar and his colleagues chose a total of 900 full-time students from two business schools (one public university and one private university) in the USA and asked them to participate in an online survey. These students were enrolled as full-time students in business programs. Their online survey asked respondents to answer the survey questions regarding their experiences as regular users of Facebook. A total of 405 responses were returned.

Their results demonstrated that the revised social media technology acceptance model proposed in their study supported all the hypotheses of social media use behavior. The results of this study provided evidence for the importance of additional key variables to technology acceptance model in considering user engagement on SNSs and other social-mediarelated business strategies.

## Method

The American Trends Panel (ATP) is a national, probability-based framework of research for US adults who participated in the Pew Research Center. A special Diary Study was conducted in early months of 2016, with web panelists. This study consisted of 14 short surveys deployed twice a day during seven consecutive days. In total, 33,318 (female $=17,079$, male $=16,239$ ) completed the survey. The survey was conducted in English and Spanish. Survey weights were provided to account for differential probabilities of selection into the panel, attrition, and differential nonresponse to the Diary Study. This research uses SPSS to study factors influencing American's usage of social media.

## Participants

A heterogeneous sample participated in this study. They were 33,318 participants (female=17,079; male=16,239) fromUSnon-institutionalized citizens over 18 who were members of web panels. Table 1 summarizes the variety of our participants in terms of age, income, internet usage, religiosity, ideology, education level, race, and marital status separated by gender.

Table 1. Demographic characteristics of sample

| Variable | Gender |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Male | Female | Total |
| Age | $18-29$ | 2628 | 2846 | 5474 |
|  | $30-49$ | 5615 | 5641 | 11256 |
|  | $50-64$ | 4627 | 5351 | 9978 |
|  | $65+$ | 3369 | 3201 | 6570 |
|  | Missing | 0 | 40 | 40 |
| Education level |  |  |  |  |
|  | College graduate+ | 9781 | 9140 | 18921 |
|  | Some college | 4731 | 5592 | 10323 |
|  | H.S. graduate or less | 1727 | 2347 | 4074 |


| Variable |  | Gender |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  |
| Marital status |  |  |  |  |
|  | Married | 10151 | 9313 | 19464 |
|  | Living with a partner | 1093 | 1228 | 2321 |
|  | Divorced | 1357 | 2223 | 3580 |
|  | Separated | 243 | 344 | 587 |
|  | Widowed | 371 | 1234 | 1605 |
|  | Never been married | 3011 | 2704 | 5715 |
|  | DK/Ref | 8 | 27 | 35 |
|  | Missing | 5 | 6 | 11 |
| Race |  |  |  |  |
|  | White non-Hispanic | 12766 | 13482 | 26248 |
|  | Black non-Hispanic | 1040 | 1216 | 2256 |
|  | Hispanic | 1319 | 1257 | 2576 |
|  | Other | 930 | 973 | 1903 |
|  | DK/Ref | 184 | 151 | 335 |
| Ideology |  |  |  |  |
|  | Very conservative | 1753 | 1326 | 3079 |
|  | Conservative | 4026 | 3811 | 7837 |
|  | Moderate | 5707 | 5926 | 11633 |
|  | Liberal | 3120 | 3862 | 6982 |
|  | Very liberal | 1597 | 2090 | 3687 |
|  | DK/Ref | 36 | 64 | 100 |
| Income |  |  |  |  |
|  | Less than \$10,000 | 650 | 794 | 1444 |
|  | 10 to under \$20,000 | 673 | 1382 | 2055 |
|  | 20 to under \$30,000 | 1030 | 1648 | 2678 |
|  | 30 to under \$40,000 | 1359 | 1794 | 3153 |
|  | 40 to under \$50,000 | 1471 | 1517 | 2988 |
|  | 50 to under \$75,000 | 2705 | 2867 | 5572 |
|  | 75 to under \$100,000 | 2583 | 2622 | 5205 |
|  | 100 to under $\$ 150,000$ [OR] | 3130 | 2297 | 5427 |
|  | $\$ 150,000 \text { or more }$ | 2464 | 1821 | 4285 |
|  | DK/Ref | 174 | 337 | 511 |
| Religious servic attendance |  |  |  |  |
|  | More than once a week | 1440 | 1993 | 3433 |
|  | Once a week | 3107 | 3514 | 6621 |
|  | Once or twice a month | 1704 | 1631 | 3335 |
|  | A few times a year | 2584 | 2755 | 5339 |
|  | Seldom | 3596 | 3727 | 7323 |
|  | Never | 3801 | 3459 | 7260 |
|  | DK/Ref | 7 | 0 | 7 |

## Results

Social media use was the main focus of this study. We explored the way social media use had differed among different groups of people to see main sources of variance. Participants classified themselves as "social media users" or "not social media users". We hypothesized some demographics like age, gender, marital status, etc. may account for this classification.

## Prevalence of social media use among different groups

In order to know how much different groups of people used social media a set of cross tables were drawn. Table 2 represents social media use demographics tabs. Rows represent gender, age, education level, marital status, race, ideology, income, and religious service attendance. Columns are assigned to social media use. Cramer's V was used to examine any nonrandom difference between expected and observed frequencies.

Table 2. Social media usage among different groups

| Demographics |  | Social media usage |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | social media users | Not social media users | Total |
| Gender | Male | 15044 | 1195 | 16239 |
|  |  | 92.6\% | 7.4\% | 100.0\% |
|  | Female | 16203 | 876 | 17079 |
|  |  | 94.9\% | 5.1\% | 100.0\% |
| Total |  | 31247 | 2071 | 33318 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
| Cramer's V= .046, Sig. $=.000$ |  |  |  |  |
| Age | 18-29 | 5455 | 19 | 5474 |
|  |  | 99.7\% | 0.3\% | 100.0\% |
|  | 30-49 | 10823 | 433 | 11256 |
|  |  | 96.2\% | 3.8\% | 100.0\% |
|  | 50-64 | 9290 | 688 | 9978 |
|  |  | 93.1\% | 6.9\% | 100.0\% |
|  | 65+ | 5648 | 922 | 6570 |
|  |  | 86.0\% | 14.0\% | 100.0\% |
|  | Total | 31216 | 2062 | 33278 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V=. 184 | Sig. $=.000$ |  |  |
| Education level | College | 17640 | 1281 | 18921 |
|  | graduate+ | 93.2\% | 6.8\% | 100.0\% |
|  | Some college | 9808 | 515 | 10323 |
|  |  | 95.0\% | 5.0\% | 100.0\% |
|  | H.S. graduate or | 3799 | 275 | 4074 |
|  | less | 93.2\% | 6.8\% | 100.0\% |
|  | Total | 31247 | 2071 | 33318 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V= . 034 | Sig. $=.000$ |  |  |


| Demographics |  | Social media usage |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | social media users | Not social media users | Total |
| Marital status | Married | 18047 | 1417 | 19464 |
|  |  | 92.7\% | 7.3\% | 100.0\% |
|  | Living with a partner | 2264 | 57 | 2321 |
|  |  | 97.5\% | 2.5\% | 100.0\% |
|  | Divorced | 3217 | 363 | 3580 |
|  |  | 89.9\% | 10.1\% | 100.0\% |
|  | Separated | 574 | 13 | 587 |
|  |  | 97.8\% | 2.2\% | 100.0\% |
|  | Widowed | 1458 | 147 | 1605 |
|  |  | 90.8\% | 9.2\% | 100.0\% |
|  | Never been married | 5641 | 74 | 5715 |
|  |  | 98.7\% | 1.3\% | 100.0\% |
|  | DK/Ref | 35 | 0 | 35 |
|  |  | 100.0\% | 0.0\% | 100.0\% |
|  | Total | 31236 | 2071 | 33307 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V= . 119 | Sig. $=.000$ |  |  |
| Race | White non- | 24366 | 1882 | 26248 |
|  | Hispanic | 92.8\% | 7.2\% | 100.0\% |
|  | Black non- | 2223 | 33 | 2256 |
|  | Hispanic | 98.5\% | 1.5\% | 100.0\% |
|  | Hispanic | 2507 | 69 | 2576 |
|  |  | 97.3\% | 2.7\% | 100.0\% |
|  | Other | 1872 | 31 | 1903 |
|  |  | 98.4\% | 1.6\% | 100.0\% |
|  | DK/Ref | 279 | 56 | 335 |
|  |  | 83.3\% | 16.7\% | 100.0\% |
|  | Total | 31247 | 2071 | 33318 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V = . 097 | Sig. $=.000$ |  |  |
| Ideology | Very conservative | 2789 | 290 | 3079 |
|  |  | 90.6\% | 9.4\% | 100.0\% |
|  | Conservative | 7290 | 547 | 7837 |
|  |  | 93.0\% | 7.0\% | 100.0\% |
|  | Moderate | 11051 | 582 | 11633 |
|  |  | 95.0\% | 5.0\% | 100.0\% |
|  | Liberal | 6594 | 388 | 6982 |
|  |  | 94.4\% | 5.6\% | 100.0\% |
|  | Very liberal | 3426 | 261 | 3687 |
|  |  | 92.9\% | 7.1\% | 100.0\% |
|  | DK/Ref | 97 | 3 | 100 |
|  |  | 97.0\% | 3.0\% | 100.0\% |
|  | Total | 31247 | 2071 | 33318 |
|  |  | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V= . 056 | Sig. $=.000$ |  |  |


| Demographics |  | Social media usage |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | social media users | Not social media users | Total |
| Income | Less than | 1420 | 24 | 1444 |
|  | \$10,000 | 98.3\% | 1.7\% | 100.0\% |
|  | 10 to under | 1969 | 86 | 2055 |
|  | \$20,000 | 95.8\% | 4.2\% | 100.0\% |
|  | 20 to under | 2600 | 78 | 2678 |
|  | \$30,000 | 97.1\% | 2.9\% | 100.0\% |
|  | 30 to under | 2972 | 181 | 3153 |
|  | \$40,000 | 94.3\% | 5.7\% | 100.0\% |
|  | 40 to under | 2745 | 243 | 2988 |
|  | \$50,000 | 91.9\% | 8.1\% | 100.0\% |
|  | 50 to under | 5229 | 343 | 5572 |
|  | \$75,000 | 93.8\% | 6.2\% | 100.0\% |
|  | 75 to under | 4958 | 247 | 5205 |
|  | \$100,000 | 95.3\% | 4.7\% | 100.0\% |
|  | 100 to under | 4940 | 487 | 5427 |
|  | \$150,000 | 91.0\% | 9.0\% | 100.0\% |
|  | \$150,000 or | 3949 | 336 | 4285 |
|  | more | 92.2\% | 7.8\% | 100.0\% |
|  |  | 465 | 46 | 511 |
|  | DK/Ref | 91.0\% | 9.0\% | 100.0\% |
|  |  | 31247 | 2071 | 33318 |
|  | Total | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V= . 087 | Sig. $=.000$ |  |  |
| Religious service attendance | More than once | 3228 | 205 | 3433 |
|  | a week | 94.0\% | 6.0\% | 100.0\% |
|  | Once a week | $6199$ | $422$ | $6621$ |
|  | Once a week | 93.6\% | $6.4 \%$ | $100.0 \%$ |
|  | Once or twice a | 3166 | 169 | 3335 |
|  | month | 94.9\% | 5.1\% | 100.0\% |
|  | A few times a | 5140 | 199 | 5339 |
|  | year | 96.3\% | 3.7\% | 100.0\% |
|  | Seldom | 6813 | 510 | 7323 |
|  | Seldom | 93.0\% | 7.0\% | 100.0\% |
|  | Never | 6694 | 566 | 7260 |
|  | Never | 92.2\% | 7.8\% | 100.0\% |
|  |  | $7$ | 0 | $7$ |
|  | DK/Ref | $100.0 \%$ | 0.0\% | 100.0\% |
|  | Total | 31247 | 2071 | 33318 |
|  | Total | 93.8\% | 6.2\% | 100.0\% |
|  | Cramer's V= . 056 | Sig. $=.000$ |  |  |

The first cross table illustrates the distribution of social media use based on the gender of participants. Cramer's V (0.046) was significant at $P<0.01$ which indicates a relationship between gender and the amount of social media use. Female ( $94.9 \%$ ) used social media a slightly more than men (92.6\%) did.

In social media use*age cross table revealed a constant pattern of decrease in social media use by an increase in age (Cramer's $\mathrm{V}=0.184$, $P<0.01$ ). The percentage of social media use decreased from $99.7 \%$ for age ranges of 18 to29 to $96.2 \%$ for those of $30-49$, from $93.1 \%$ for age ranges of 50 to 64 to $86.0 \%$ for those of 65 and higher.

It can be seen that percentages of social media use among college graduates (93.2\%) and high school graduates (93.2\%) were almost the same. In contrast, some college students used social media a little more (95.0\%). Cramer's V (.034, $P<0.01$ ) indicates the relation of education level and social media use.

Participants who were living with a partner (97.5\%), separated (97.8\%), and never married (98.7\%) used social media significantly more than those who were married (92.7\%), divorced (89.9\%), or widowed (90.8\%). Cramer's V (.119, $P<0.01$ ) conformed the relation between marital status and social media use.

White non-Hispanic people ( $92.8 \%$ ) reported social media use less than others (Cramer's V=0.097, $P<0.01$ ). Black non-Hispanics (98.5\%), Hispanics (97.3\%), and other races (98.4\%) reported higher levels of social media use.

Among different ideological categories, participants who were very conservative ( $90.6 \%$ ) and conservative ( $93.0 \%$ ) used social media less than liberals (94.4\%) and very liberals (92.9\%). Cramer's V (0.056, $P<0.01$ ) indicated a significant relation between ideology and social media use.

According to cross table distribution, participants who had low level incomes used social media more than those who had high level incomes (Cramer's V=0.087, $P<0.01$ ). People whose income were less than $\$ 10,000$ ( $98.3 \%$ ), under $\$ 20,000$ ( $95.8 \%$ ), and under $\$ 30,000$ ( $97.1 \%$ ) reported more levels of social media use than those with higher income.

Religious service attendance was related to social media (Cramer's $\mathrm{V}=0.056, P<0.01$ ). Although statistical test said there had to be a recognizable pattern in social media use according to religious service attendance, the distribution did not clarify it. It can be seen that people who attended religious services a few times a year used social media (96.3\%) more than others and people who never attended religious
services had the lowest social media use. Other groups fell somewhere in between.

Results of the present study showed that all demographics are significantly related to social media use. However, the level of significance could be somehow misleading because of weak practical effect sizes. Except for marital status and age ranges, Cramer's V values were too small and their levels of significance could not have any implications except for being sensitive to the degree of freedom.

## Explaining social media

Social media use was measured as a dichotomy with "yes" and "no" to assign to one of the two groups: "social media users" and "not social media users". Given the percentage of social media users (93.8\%) the variance was not significant. Nevertheless, a regression model was run to explain that variety. Since social media use was a dichotomy, the logistic regression was used with social media use as a dependent variable and age, gender, income, religious service attendance, ideology, education, race, marital status as independent variables. We also separated race into two groups of "white" and "non-white". In addition, marital status was comprised of two groups of "married" and "non-married". Table 3 shows the summary of each step.

Table 3. Social media use regression model summary

| Step | $\mathbf{- 2}$ Log likelihood | Cox \& Snell R2 | Nagelkerke <br> $\mathbf{R}^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: |
| 1 | 9573.012 | .033 | .086 |
| 2 | 9491.311 | .037 | .095 |
| 3 | 9456.604 | .038 | .099 |
| 4 | 9436.648 | .039 | .102 |
| 5 | 9429.565 | .040 | .103 |
| 6 | 9424.696 | .040 | .103 |

The first model demonstrated the age category as the best predictor $\left(\mathrm{R}^{2}=0.086\right)$. R square rose to 0.095 in the second model where race was added to the model ( $\mathrm{R}^{2}=0.009$ ). In the third model marital status was added and R square was changed to .099 . In model 4 religious service attendance ( $\mathrm{R}^{2}=0.102$ ), in model 5 gender $\left(\mathrm{R}^{2}=0.103\right)$, and in model 6 ideology $\left(R^{2}=0.103\right) R$ square change was too small but statistically significant. Education level could not explain social media use and therefore was excluded from final model. Table 4 shows coefficients for each model.

Table 4. Social media usage regression model coefficients

| Variables in the Equation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | S.E. | Wald | df Sig. | $\operatorname{Exp}(\mathrm{B})$ |
| Step 1 | Age category | . 802 | . 032 | 608.637 | 1.000 | 2.229 |
|  | Constant | -4.954 | . 107 | 2136.558 | 1.000 | . 007 |
| Step 2 | Age category | . 752 | . 033 | 525.758 | 1.000 | 2.120 |
|  | Race-Ethnicity | -. 924 | . 115 | 64.397 | 1.000 | . 397 |
|  | Constant | -3.782 | . 173 | 477.463 | 1.000 | . 023 |
| Step 3 | Age category | . 745 | . 033 | 503.701 | 1.000 | 2.107 |
|  | Race-Ethnicity | -. 885 | . 115 | 58.947 | 1.000 | . 413 |
|  | Marital status | -. 360 | . 062 | 33.401 | 1.000 | . 698 |
|  | Constant | -3.326 | . 190 | 306.972 | 1.000 | . 036 |
| Step 4 | Age category | . 755 | . 033 | 515.979 | 1.000 | 2.128 |
|  | Religious service attendance | . 073 | . 016 | 19.797 | 1.000 | 1.076 |
|  | Race-Ethnicity | -. 861 | . 115 | 55.689 | 1.000 | . 423 |
|  | Marital status | -. 391 | . 063 | 38.875 | 1.000 | . 677 |
|  | Constant | -3.619 | . 202 | 321.589 | 1.000 | . 027 |
| Step 5 | Age category | . 753 | . 033 | 514.120 | 1.000 | 2.124 |
|  | Gender | -. 153 | . 058 | 7.068 | 1.008 | . 858 |
|  | Religious service attendance | . 072 | . 016 | 19.211 | 1.000 | 1.074 |
|  | Race-Ethnicity | -. 866 | . 115 | 56.245 | 1.000 | . 421 |
|  | Marital status | -. 362 | . 064 | 32.481 | 1.000 | . 696 |
|  | Constant | -3.414 | . 216 | 250.136 | 1.000 | . 033 |
| Step 6 | Age category | . 753 | . 033 | 512.174 | 1.000 | 2.123 |
|  | Gender | -. 138 | . 058 | 5.715 | 1.017 | . 871 |
|  | Religious service attendance | . 090 | . 018 | 24.118 | 1.000 | 1.094 |
|  | Ideology | -. 141 | . 064 | 4.864 | 1.027 | . 868 |
|  | Race-Ethnicity | -. 859 | . 115 | 55.311 | 1.000 | . 424 |
|  | Marital status | -. 357 | . 064 | 31.392 | 1.000 | . 700 |
|  | Constant | -3.311 | . 220 | 225.611 | 1.000 | . 036 |

effect on social media use ( $B=0.753, P<0.01$ in that with decreasing the age range social media use has decreased. the relationship between gender and social media use ( $B=-0.138, P<0.05$ ), knowing that male were coded by 1 and female by 2 , showed that higher level of social media use among female participants. Religious service attendance had a positive effect on social media use ( $B=0.090, P<0.01$ ) which implies a higher social media use by religious people. Ideology had a negative $B(B=0.141, P<0.05)$ and showed liberals used social media more than conservatives did. The negative relationship between race and social media use ( $B=-0.859, P<0.01$ ) showed that white people used social media less than other races. Marital status had also a negative effect on social media use ( $B=-0.357, P<0.01$ ) showing that married people reported less use of social media.

In the above analysis, the number of social media users (31247) and non-users (2071) were too unbalanced. This may result in a low variation with a huge number using social media (about 94\%). This 94 percent of the whole sample reduces the generalizability of the results ( 0.94 * 0.06= 0.056 ). In contrast, having equal number of cases in the two groups may lead to a wider probability range $(0.50 * 0.50=0.250)$. Furthermore, unbalanced number of participants can mislead our conclusion in terms of almost unlimited degree of freedom. Expanding the degree of freedom (as a function of larger sample) magnifies statistical indices and shows them up as significant, while the effect size demonstrated different results. , In Table 3, it can be seen that $\mathrm{r}^{2}$ changes in one step to the next from 0.086 (the first step) to 0.000 (the fifth to the sixth steps) which is not significant empirically. Then the researchers intended to re-frame the analysis by, first, reducing the whole number of participants and second, by balancing the ratio of participants in each group. To do so, a sample of 200 people for each group were selected randomly in SPSS data selection room. Below is the result of binary logistic regression.

Table 5. Social media usage regression model summary in balanced groups

| Step | $\mathbf{- 2}$ Log likelihood | Cox \& Snell R ${ }^{2}$ | Nagelkerke R ${ }^{\mathbf{2}}$ |
| :---: | :---: | :---: | :---: |
| 1 | 503.711 | .119 | .159 |
| 2 | 438.305 | .252 | .336 |
| 3 | 428.859 | .270 | .359 |

Again, age was the most powerful variable in predicting social media use. This variable could account for almost $16 \%$ of the variance $\left(\mathrm{R}^{2}=\right.$ 0.159 ). R square was changed to 0.336 in the second model as marital status was considered ( $\mathrm{R}^{2}=0.177$ ). In the third model religious service
was added and $\mathrm{R}^{2}$ was raised to 0.359 . In this analysis consisting of 400 participants the variables ideology, party, and gender could not significantly account for social media use. Like the previous model, education level was not entered to the equation. These new models with balanced sample showed that those small effect sizes in the previous analyses may be due to lowered variance in the dependent variable. Table 6 summarizes coefficients for each model.

Table 6. Social media use regression model coefficients in balanced groups
Variables in the Equation

|  |  | B | S.E. | Wald | df | Sig. | Exp(B) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Step 1 | Age category | .916 | .136 | 45.641 | 1 | .000 | 2.500 |
|  | Constant | -2.864 | .439 | 42.503 | 1 | .000 | .057 |
|  | Age category | 1.157 | .153 | 57.300 | 1 | .000 | 3.182 |
| Step 2 | Marital status | -.700 | .106 | 43.227 | 1 | .000 | .497 |
|  | Constant | -2.416 | .460 | 27.539 | 1 | .000 | .089 |
|  | Age category | 1.022 | .158 | 41.822 | 1 | .000 | 2.780 |
|  | Marital status | -.682 | .104 | 43.127 | 1 | .000 | .505 |
|  | Religious service | .239 | .079 | 9.191 | 1 | .002 | 1.270 |
|  | attendance | .2 | -3.035 | .521 | 33.896 | 1 | .000 |
|  | Constant | -048 |  |  |  |  |  |

The summary table showed that Age range, marital status, and religious service attendance accounted cumulatively for $0.359 \%$ of social media use variance. The last model included age range, marital status and religious service attendance as significant predictors. The effect of age on social media use ( $B=0.916, P<0.01$ ) was positive. Given the way dependent variable was coded ( $1=$ social media users and $2=$ not social media users), social media us decreased with aging. Marital status had a negative amount ( $B=-0.700, P<0.01$ ) showing that a smaller ratio of married people are social media users. Religious service attendance had also a positive amount ( $B=0.239, P<0.01$ ) indicating a bigger ratio of social media users among religious people.

## Conclusion

Over the last decade the growth of social media use in the US has been phenomenal. A majority of Americans are now spending time on social media and this has not only altered entertainment, but it has also entailed great shifts in the way we do politics; we are now witnessing how celebrities are triumphantly march in every aspect of our lives with the help of social media and as a result, we now see that several
number of world leaders including the presidents of the United States are celebrities themselves. Therefore, now more than ever, we should study social media and factors influencing their utilization in daily lives of people.

This study shows how different demographic factors can have effects on social media use. As we could have predicted, female web panelists used social media more than their male peers. Women are generally more comfortable with sharing emotions and personal thoughts and as previous studies showed, it can be predicted that they use social media more than men. In addition, people with lower income level were more akin to use social media than their wealthier counterpart. Again, previous research has shown that due to different reasons, people who do not have enough financial resources are more likely to live in the cyber world, compared to wealthier people.

There has been much discussion that family has been long the main source of growth and solace for people. This study also demonstrated the similar results. Among web panelists, those who lived with a partner, the separated people and people who were never married used social media much more than married people showing that vulnerability of people who lived in solitude can increase the use of social media as a replacement of a successful married life. In addition, as religions have social ceremonies, religious people tend to use social media more frequently than non-religious ones.

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