Analyzing College Students' Social Media Communication Apprehension

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Abstract

Research has shown that college students are heavy users of social media. Yet, very little has looked at the connection between college students' social media use and communication apprehension (CA). Due to the shortage of research concerning CA and social media, this study aims to test the relationship between social media CA and introversion in relationship to social media use and social media addiction. To test these relationships, 396 undergraduate students were surveyed. The survey consisted of instruments used to measure the individuals' levels of social media use, social media addiction, introversion, and CA. After conducting multiple linear regressions, it was determined that there was a negative relationship between social media CA and introversion with (1) social media use and (2) social media addiction. Results indicated that social media CA was significantly related to social media addiction. These findings suggest that college students might gravitate toward social media to communicate rather than face-to-face communication.

Keywords: college students, communication apprehension, social media addiction, social media

Introduction

ACCORDING TO A recent Pew Research Center report, ∼70 percent of American adults use some form of social media.[1] It has been reported that ∼20 percent of the population experiences high levels of communication apprehension (CA).[2] Looking at the statistics provided, it is likely that there is potential for overlap in the two groups. This overlap might suggest that an individual is using social media as a means to interact with others as a result of high levels of CA. Indeed, scholars have begun to discuss the plausibility of such a notion.[3] This notion is rooted in research that has revealed social media, and its features offer individuals a unique experience capable of overcoming characteristics of face-to-face interaction that might insight or increase apprehension. While the concept has been briefly discussed by many, the relationship has yet to be explicitly researched.[4] Existing research regarding CA focuses on computer-mediated communication (CMC) and how it influences the use of social networking sites (SNSs).[5] Other research related to CA within the realm of social media is geared toward examining how shyness impacts motives for using social media.[6] The information from such research is precious in guiding research, but it fails to meet the need to understand CA and its relationship to social media usage—this is the issue with most of the extant literature. That said, there is a need to examine the ways in which social media usage and levels of CA operate in relationship to one another. This study aims to examine the links between CA level and social media usage.

Literature Review

Before proposing hypotheses, let us first discuss the literature surrounding the research variables, beginning with CA. CA was conceptualized as the state or trait-like anxiety an individual experiences when faced with or when anticipating communication.[7] CA was later reconceptualized to include Trait CA, Generalized-Context CA, Person-Group CA, and Situational CA. Trait CA is persistent across communication contexts and is seen as a personality trait of the individual.[8] Generalized-Context CA is similar to Trait CA in that it is persistent and characteristic, but unlike Trait CA, Generalized-Context CA is specific to certain contexts or situations.[7] Finally, Person-Group CA and Situational CA are similar in that neither is persistent nor characteristic, but rather are responses to the context of the communication.[7] The difference is that Person-Group CA is a response to the person/people the individual is communicating with, whereas Situational CA is a response to the situation in which an individual is communicating.[7] There are four reactions typical of individuals with high CA, *avoidance*, *withdrawal*, *disruption* (exhibition of

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inappropriate verbal/nonverbal behaviors), and *overcommunication* (overcompensation that results in excessive communication).[8] From this information, it is clear that CA spans across many situations and has several identifying characteristics and reactions. One of the contexts, in which scholars have begun to investigate CA, is online.

Researchers have examined social media usage and anxiety among emerging adults and found students who used social media more frequently were more likely to develop/experience an anxiety disorder.[3] Furthermore, the results suggested that increased social media use was attributed to respondents using social media as an alternative to face-to-face communication. It has been found that individuals who participate more online could be doing so as a result of having more time due to limited face-to-face interactions.[9] Online communication seems to offer benefits to individuals, which makes the medium seem like the optimal method of communication.[10] Based on this information, it would seem as though communication through a mediated channel would offer individuals, especially those who experience high levels of CA, an opportunity to take part in greater quantities and qualities of interactions to meet their needs for interaction.

While CMC does afford individuals some benefits, which are not typical of face-to-face interactions, it has not been deemed an effective alternative to face-to-face communication.[11] For example, researchers found that instant messaging use was not significantly correlated with reducing feelings of loneliness in shy individuals.[6] Rather, several motives were listed as reasons for increased use of instant messaging, and there was mention of a significant difference between the desire to use CMC and actual recorded use of CMC. In other words, participants who reported higher levels of social anxiety were also more likely to engage and choose CMC over face to face communication. It is important to note that scholars have differentiated between shyness and CA.[12] Due to the limited research on CA in the context of social media, using information regarding shyness and social media provides excellent insight into the topic of interest.

In a study conducted to examine how CMC apprehension (CMCA) influences motives for Facebook use, CMCA was found to be inversely related to motives such as interpersonal interaction, self-expression, entertainment, and passing time.[5] This relationship indicates that an increase in apprehension toward CMC would result in a decrease in an individual's likelihood to use a mediated channel to interact with others. Based on this evidence, it was concluded that who decides to use SNSs and the way SNSs are used could be affected by the motives of each individual as they are shaped by CMCA. Furthermore, it has been shown that an individual who does not feel valued in interpersonal interactions may turn to the Internet to satisfy their interaction needs.[9] Ultimately, the decision to use, or not use, social media is dependent on motives, which are significantly influenced by apprehension. In addition to apprehension, it was found that cognitive appraisal (perceptions of self-efficacy and social risk) mediated the relationship between anxiety and CMC.[10] It was shown that a certain sense of inadequacy was present in individuals who exhibited high levels of social anxiety, and as a result, they turned to CMC. CMC was shown to be the preferred means of communication because of its characteristics which limit physical cues, boasts anonymity in many cases, and asynchronous communication. Self-efficacy

has also been studied in relationship to other variables, such as competence and skill, which have been shown to increase self-efficacy and satisfaction in online communication.[13] Contrary to these findings, when studying communication outcomes of shy individuals using virtual reality, it has been found that communication competence did not affect apprehension because there was no negative experience to lead to apprehension.[3]

Moreover, social media addiction and introversion are other factors the present study seeks to examine. Interestingly, both of these variables have been studied to some extent, but there is still little agreement as to what role either plays in the usage of social media. Social media has been shown to have positive effects due to its ability to gratify some of an individual's needs, but it also boasts negative effects, such as increased chances of Internet addiction.[14] Internet addiction can be influenced by several factors. One of the components that leads to Internet addiction was self-esteem. Results show self-esteem was negatively associated with Internet addiction. This association was due to the individuals attempting to escape reality and physical social interactions.[15] It was also found that social interactions were an indicator of increased use of the Internet by extroverts. The explanation for this is that extroverts enjoy and seek social interactions online.[16] The difference between the role of social interaction was that extroverts do not see online activity as a replacement for in-person interactions.

In fact, individuals who use Internet for communication rather than entertainment are more likely to become addicted to the Internet.[17] Other findings corroborate these findings when examining massively multiplayer online role playing game (MMORPGs).[18] MMORPG users expressed their extended use of the game did not replace their physical social lives; however, users who sought to use MMORPGs as a means of social interaction were deemed more ''hard core.'' While this information pertains to Internet addiction, similar conclusions have been reached when investigating social media. One example is a study which found that depression and social media addiction were positively correlated.[15] Another negative effect of social media addiction is that individuals suffer lower levels of mindfulness, or the ability to focus on one particular thing for an extended period of time.[19]

It is important that the positive effects are not discounted. Some researchers advocate for a positive psychology paradigm, which does not dismiss addiction as a disorder to treat, but rather a ''case which prevents the individual's happiness.''[17 (p241)] In some instances, social media can serve to improve an individual's ''pursuit of happiness.'' Take for example the MMORPG users who show that online interactions can serve as a supplement to physical interactions.[18] Another instance was shown when examining coping methods. Social media offered an outlet for addicted individuals to seek emotion-focused support when coping.[19] Social media seems to be a forum for individuals to control the environment and seek certain characteristics in an interaction. Introverts were shown to have positive online experiences due to the anonymity, information control, and limited focus on physical appearance. Due to these features, which differ from those in face-to-face interactions, introverts were able to present their true self online.[14] In looking at the effects of social media, it is clear that there is a need for further research. A great deal of the literature focuses on

Internet addiction and does not perfectly extend to social media addiction. Additionally, much of the previous literature is relatively outdated and may not be easily applied to the ever-changing landscape of social media.

In looking at the previous research that has been conducted, it is clear that many factors have the potential to influence social media usage. To understand how social media usage is influenced, it is important to first understand the connection between an individual's CA to his/her social media usage. Knowing the nature of the relationship could greatly improve the ways users choose and use social media to get the most return for their participation based on the motives he/she has when approaching social media. To investigate the relationship, the following two hypotheses were posed:

Hypothesis 1: There will be a negative relationship between social media CA and introversion with social media use.

Hypothesis 2: There will be a negative relationship between social media CA and introversion with social media addiction.

Methods

Participants

Participants included 396 college students attending a large public institution in the Southwest. The mean age of sample was 21.51 years ($SD = 2.41$). The overwhelming majority of the sample were female ($n = 280$) and white ($n = 274$). The average amount of time interacting with SNSs per day was 3.06 hours ($SD = 2.34$). Although this is a high estimate, we believe that a lot of this interaction with SNSs is probably a result of multitasking behavior and not behavior solely focused on social interaction. Research has shown that college students are viewing social media to pass the time or serve as a distraction rather than truly engaging in communicative behaviors.[20]

Instrumentation

Social media use. The Social Media Use Scale was created by the authors of this article to examine individual uses of social media. The measure was used in this study consisting of six Likert scales of 1 (*strongly disagree*) to 7 (*strongly agree*). A seven-point scale was used to optimize reliability.[21] The alpha reliability for the scale was 0.87 ($M = 32.23$, $SD = 6.92$).

Social media addiction. The Social Media Addiction Scale is based on Facebook Addiction Scale of Andreassen et al.[22] The measure consists of six Likert-type items, which were retooled from Facebook specifically to social media more broadly, with a scale of 1 (*very rarely*) to 5 (*very often*). The alpha reliability for the scale was 0.85 ($M = 16.32$, $SD = 5.05$).

Introversion. Social Introversion Scale by Richmond et al.[23] was utilized to measure the degree to which an individual focuses her or himself more internally versus externally. The measure consists of 18 Likert-type items (only 12 are used in the scoring of introversion) with a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The alpha reliability for the scale was 0.82 ($M = 31.49$, $SD = 7.33$).

Communication apprehension. McCroskey's[24] Personal-Report of CA-24 was retooled to examine CA with regard to social media. The measure consists of 24 Likert-type items with a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The alpha reliability for the scale was 0.92 ($M = 86.13$, $SD = 21.05$).

Results

Using multiple combinations of the four instruments mentioned above, each of the hypotheses was tested. Below, the results of these analyses are discussed for each hypothesis in turn. Hypothesis 1 predicted a negative relationship between social media CA and introversion with social media use. A multiple linear regression was utilized using social media CA and introversion as the independent variables and social media use as the dependent variable. The overall model was statistically significant, $F(2, 324) = 7.83$, $p < 0.0005$, $R = 0.22$. Ultimately, the linear combination of social media CA and introversion accounted for 4 percent of the variance in social media use. Only introversion accounted for any unique variance, $t = -3.39$, $p = 0.001$, $\beta = -0.20$.

Hypothesis 2 predicted a negative relationship between social media CA and introversion with social media addiction. A multiple linear regression was utilized using social media CA and introversion as the independent variables and social media addiction as the dependent variable. The overall model was statistically significant, $F(2, 323) = 4.21$, $p = 0.016$, $R = 0.16$. Ultimately, the linear combination of social media CA and introversion accounted for 1.9 percent of the variance in social media use. Both independent variables accounted for unique variance: introversion, $t = -1.2$, $p = 0.043$, $\beta = -0.12$ and social media CA, $t = 2.76$, $p = 0.006$, $\beta = 0.17$. Next, these results will be discussed within the context of the larger body of knowledge to which this study contributes.

Discussion

There are significant findings from the present study that make significant contributions to CA and social media use scholarship. Studies have indicated that individuals will use the Internet to satisfy their needs.[9] Results in this study revealed that there are negative relationships with social media CA and introversion with social media use. These findings are consistent with some of the research previously conducted regarding this topic. Results from the present study offer support for the notion that online communication does offer a forum for individuals to interact even if he/she is not comfortable with face-to-face interactions.[4]

The negative relationship among social media CA, introversion, and social media use or addiction supports this notion, but in a new online setting. As social media CA and introversion increases, social media use and addiction decreases. While social media allows individuals who are apprehensive with face-to-face communication to communicate in a more controlled setting, one in which they may edit and present the best version of themselves, social media may be another means of communication that produces anxiety for certain individuals and limits their effective use of the medium for communication. The results of the present study suggest that individuals who experience CA on social media and exhibit introversion are not likely to use and become addicted to social media. This finding makes sense, as

an individual who does not use social media frequently is not likely to become addicted to the medium.

Interestingly, results indicated that there is a negative relationship between social media CA and introversion with social media addiction. These results somewhat echo what other studies found regarding MMORPG users.[18] Individuals who sought social interaction online were much more "hard core" when participating in the online environment and were considered to be more addicted to the setting than individuals who were comfortable with face-to-face interactions. This is a significant finding since it furthers the argument that addiction may be more deeply rooted in uses and gratifications than previously considered. Thus, social media users might find using this medium as more rewarding and beneficial.

In terms of theoretical and practical implications, future research is warranted. Currently, the findings are beneficial for practitioners who counsel individuals who either experience social media CA or social media addiction. The present study's findings can explain how the concepts may be connected. Based on the understanding of the connection, the counselor may be more well-equipped to locate the source of the individual's anxiety or addiction. However, the findings do have limitations, and future research could expand the scope of these findings. One avenue of future research could be examining the connection between uses and gratifications and social media CA. An examination of this sort could further tease out the relationship between the two concepts and offer greater insight into the decision-making that goes into using social media, or how social media addiction develops. Once a greater understanding of the relationship between the variables is established, practitioners may be better equipped to deal with cases of social media avoidance or addiction.

As data were collected using a Qualtrics questionnaire with a convenient sample of college students, this might have been a limitation. It might be more fruitful to observe and record real-life interactions that college students have face-to-face and via CMC. Future research should use a more varied population sample and utilize more open-ended questions to better understand social media behaviors and apprehension.

The results from this study showed a negative link between social media CA and introversion. Hence, students who are more introverted are not necessarily apprehensive about posting on social media. Furthermore, results also indicated that college students who are not apprehensive about posting on social media are also not addicted to social media. All in all, the current investigation helps us understand how social media is affecting college students' CA, but further study is necessary to bring to light how social media is affecting the way that we communicate.

Author Disclosure Statement

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