

Impact of Electronic Communication on Students' Perceived Ability to Write

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Introduction

With the emergence of digital media platforms, students primarily communicate through social media and text messaging (Risto, 2014), which many people assume negatively impacts students' ability to develop proper writing skills. For example, a poll found that 75% of high school teachers believe frequent use of text messaging negatively influences students' writing ability, while 69% of high school teachers believe frequent use of social media also negatively affects students' ability to write (Simba Information, 2012). However, Pew Research Center (2008) found that students generally do not believe their quality of writing decreases from their frequent use of digital media. Although many researchers have attempted to provide evidence for this phenomenon, studies show conflicting results. For example, Lee (2002) found that the increased digital media use effects students' writing ability negatively whereas Crystal (2008) found positive effects and Grace et al. (2013) found no effect. The purpose of the pilot test was to ensure that we created a valid and reliable metric for investigating a potential relationship between digital media use and students' perceived writing ability.

Conceptual Framework

We used Lingwall and Kuehn's (2013) Media Writing Self-Perception (MWSP) scale to measure students' perceptions of their media writing abilities. The MWSP contains five constructs to explain writers: 1) elaborative/surface, 2) reflective/revisionist, 3) writing self-efficacy, 4) writing apprehension, and 5) social media/professional (Lingwall & Kuehn, 2013). We then used Olufadi's (2016) Social Networking Time Use Scale (SONTUS) to measure the time students spend using digital media. The instrument uses a 1–11 rating scale and considers five factors during which students are most likely to use social media: relaxation and free periods, academic-related periods, public-place-related use, stress-related periods, and motives for use (Olufadi, 2016). Responses produce a score ranging from 5–23, which categorizes participants from low users to extremely high users of social media. We repeated this scale but adapted directions for students to consider the amount of time they spend text messaging. We justify this modification because the SONTUS scale addresses the primary categories of situations, places, or reasons people are most likely to use information technology (Olufadi, 2016). We assumed—based on supporting literature about digital media use—the same user categories for the time students spend text messaging. We recommend readers locate Lingwall and Kuehn's MWSP scale and Olufadi's SONTUS scale to understand construct definitions and scoring procedures and meanings.

Method

We used the pre-existing MWSP and SONTUS scales to build a questionnaire in Qualtrics. The results presented herein were gathered from pilot testing the instrument. Our target population included students enrolled in agricultural colleges because we were interested in learning more about students in the food, agriculture, natural resources and human sciences. We distributed the instrument to all students ($N = 1,090$) in a college of agriculture at a northwestern United States land grant institution via email and achieved a 7.14% response rate with 32 usable responses

because of missing data. Respondents included nine males, 22 females, and one genderqueer individual and represented all classifications in the college. The average age of respondents was 23 ($SD = 7.64$). We used a Cronbach's alpha to calculate the reliability of the MWSP and SONTUS constructs and analyzed the data by calculating descriptive statistics, Pearson product-moment correlation coefficients, and one-way ANOVAs. Although the data presented herein is not generalizable, it does indicate that further investigation is warranted and suggests the instrument we developed—incorporating the MWSP and SONTUS scales—is capable of empirically testing for relationships between the time students spend using social media and text messaging and their perceived writing ability.

Results

The MWSP scale was reliable with a .71 Cronbach's alpha coefficient, and the SONTUS scales for social media and text messaging were both reliable with Cronbach's alpha coefficients of .91 and .93. Correlational analyses revealed a moderate negative relationship ($r = -0.31, p < .05$) between students' MWSP self-efficacy scores and SONTUS scores for social media, which indicates that the more time students spend using social media, the lower confidence they might have in their perceived writing ability regarding proper spelling, punctuation, grammar, and paragraph development. We also found a moderate positive correlation between respondents' MWSP total scores and SONTUS scores ($r = 0.43, p < .05$), indicating that the more time students spend using social media, the more time they spend text messaging and vice versa. In addition, respondents primarily used social media and text messaging while sitting at home idly ($M = 8.47, SD = 2.83; M = 6.84, SD = 2.96$). Other than using social media while relaxing at home, respondents primarily used social media during stress-related periods (e.g., to reduce mental stress; $M = 7.03, SD = 2.80$; to reduce the pressure of daily routines; $M = 6.22, SD = 2.87$) and primarily used text messaging to communicate with family and friends ($M = 6.60, SD = 2.65$) and to maintain contact with existing friends ($M = 5.78, SD = 2.87$).

Conclusions and Recommendations

Preliminary results suggest that the time students spend using social media and text messaging does not negatively influence their perceived writing ability, which is similar to findings from Grace et al. (2013). However, it is possible that students' use of incorrect spelling, punctuation, and grammar in their social media writing negatively impacts their perceived ability to perform these skills in their professional writing correctly. Pilot study results suggest that, because students often neglect spelling, punctuation, and grammar when using social media and sending text messages (Kemp, 2010), college educators, especially those who teach writing courses, should spend time revisiting these areas with students. Students' spelling and grammar skills could deteriorate with increased time spent writing informally on digital media platforms. Future research should implement the instrument presented herein among a large student sample to further investigate the strength of relationships between students' perceived writing ability and use of digital media platforms. In addition, students in the pilot study sample typically used social media as an outlet to reduce stress. We recommend future researcher continue to investigate students' motives for using social media and sending text messages and investigate the effectiveness of social media as a stress-reducer among college students.

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