# Understanding College Students' Perceptions Regarding Mindfulness and Social Media

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Media - Mindful Attention Awareness Scale (SM-MAAS). Multiple linear regressions and t-tests were performed. Results revealed (a) women rated higher on Social Media Use versus men, (b) men rated higher perception, self, sex differences, social media on the SM-MAAS versus women, (c) mindful acting

The objective of this study was to investigate college with awareness was associated with social media use, students' mindfulness practices with social media. A (d) mindful acting with awareness, nonreactivity to total of 539 college students were surveyed and inner experience, and nonjudging of inner experience reported using varying levels of mindfulness with were associated with social media use and the SMtheir social media usage. Two new measures were MAAS. Discussion points to ways that social media developed: the Social Media Use Scale and Social can nurture healthy communication and support from others that enhance positive views of self.

Keywords: communication, mindfulness,

ccording to Dawson and Cowan (2013), "Communication technologies mold the messages we deliver in unanticipated ways... crucially influencing our self-conceptions, notions of human relations and community and the nature of realty itself" (p. 9). It is evident that social media impacts the way that people communicate with each other. The user-friendly capabilities, the ease of communication, and the immediacy it offers in our daily lives has changed the way we think about everything around us. Yet, we also suspect there are part of social media that are harmful, or at least less favorable. We know that mobile technology, which is the common method for accessing social media, is distracting and influences self-control (Bayer et al., 2016). So, social media is a force to be reckoned with in terms of communication in interpersonal relationships. Not too many years ago, relationships were initiated, maintained, and dissolved face-to-face.

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Social media is not going away anytime soon, and while it is here to stay, it is important to understand the repercussions that come from usage of social media and our ability to communicate with others. More research is needed to understand the harmful effects of social media on interpersonal relationships, especially when people are not mindful of what they are posting or sharing via social media sites. This study focuses specifically on the combination of mindfulness and social media. While there is a vast amount of knowledge on the topic of social media, this research study is novel and different, because little is known about the aspect of mindfulness, social media behavior, and social media usage.

### Rationale

Social media have positive and negative influences on relationships, views of self and how we support others. Wagner (2015) noted that social media has impacted our interpersonal communication behaviors, resulting in individuals' preferences to communicate via mediated contexts. She argued that communicating in this format does not allow for nonverbal communication and individuals tend to be less empathetic. Further, she suggested that social media has caused us to create less honest relationships. There are also harmful effects of social media. Kircaburun (2016) reported that Twitter addiction was negatively related to conscientiousness. Sarabia and Esteves, (2016) explained that consequences to posting sexualized content, common among Facebook users, include exposure to predators, harmful body images fixation, narcissism, and eating disorders. This study stems from the idea that social media is causing interpersonal relationship satisfaction to decline, mainly because individuals are not mindful of what and how they communicate in these contexts. We believe mindful social media communication can enhance relationships and support lasting and healthy relationships. These qualities include communicating with concentration, and an ability to observe one's own inner experiences or emotions without overreacting or judging (Garcia & Wrench, 2017).

#### LITERATURE REVIEW

# Social Media Use

Ellison (2007) defined social networking sites (SNSs) as "web-based services that allow people to create a personal profile that can be public or private, create a connection

with other users in which they have things in common, and send public or private messages to each other" (p. 210). Thus, SNS users can decide what type of information and when they would like to communicate with others. Further, SNS users can determine what information they would like to announce publicly and what information they would like to keep private (e.g., shared with only close friends or family).

Junco et al. (2011) have contended that college students' lives are largely connected to their social media and they are heavy users of social media. Many scholars find benefits of social media usage in their studies, often citing that participants of those studies find social media to be liberating and allows them to be themselves (Dainton & Stokes, 2015; Fox & Angeregg, 2014; Fox et al., 2014; Muise et al., 2009; Storey & McDonald, 2013). Whitty (2008) noted that, "cyberspace can also feel like a more fun, creative and therapeutic space compared to the offline world" (p. 1841). With the unique quality of being able to feel like yourself over the Internet, many people find themselves using social media to create and maintain romantic relationships. Furthermore, using social media offers a glance into many people's lives with information you might not be able to find otherwise. Because of social media sites there is the capability for users to reveal a large amount of information of their own to all of their perceived "friends" on the site, or reveal just what they want others to know, and the capacity for others to find that information (Fox & Anderegg, 2014).

Nowadays social networking becomes more and more indispensable in people's life. Among all the social network sites, Facebook is one of the most popular social network sites. Its benefit is obvious and has been studied a lot. People use Facebook to keep in touch with friends, learn more about friends or about people they just meet (Skiba, 2007). In addition, people can use Facebook to investigate others in the offline community and this behavior is called social searching (Lampe, Ellison, & Steinfeld, 2006). Most of the research about Facebook focus on the benefit of social networking and the frequency of visitation (Ellison et al., 2007), the management of impression on Facebook (DeAndrea & Walther, 2011), and maintain existing relationships (Tom Tong & Walther, 2011). However, the great risk and danger social network sites cause should not be ignored (for example, Sarabia & Estevez, 2016).

As social media becomes more popular day by day, the number of users steadily increases leading to a great deal of research conducted about the habits and patterns of the usage of media in individuals' lives. One of the main social media sites referenced in numerous articles about social media and relationships is Facebook (Dainton & Stokes, 2015; Fox & Angeregg, 2014; Fox et al., 2014). Facebook is heavily studied by researchers because of the longevity of the site up to this point, and the amount of people who use the website for social networking. According to Facebook itself, in December of 2015 there were 1.04 billion members of the website who used Facebook on a daily basis, making it the largest social networking site on the Internet (Fox et al., 2014). Christofides et al. (2009) contended that while many people use Facebook to stay connected with, the website also allows people to be "friends" with those who they may have never interacted with outside of the Internet (2009).

Skiba (2007) defined Facebook as "a social utility that connects people with friends and others who work, study, and live around them" (p. 100). It offers a great opportunity for people to renew old friendships, communicate with friends, and obtain information about interests, opinions and activities of friends (Ellison et al., 2007). Ellison (2007) warned that social networking sites might bring negative outcomes such as jeopardizing user's privacy. Muise et al. (2009) revealed social networking sites had a great impact on activities in romantic relationships such as romantic jealousy, in which people could expose vague relational information in order to monitor their partners. Melander (2010) discovered participants using Facebook to achieve cyber harassment in romantic relationships, such as sending intimidating messages and turning private arguments into public. Thus, it is very important that college students become mindful of how they use social media to post and/or to find information.

# Mindfulness

Baer et al. (2006) described mindfulness as "bring[ing] one's complete attention to the experiences occurring in the present moment, in a non-judgmental or accepting way" (p. 27). Mindfulness was originally derived from Buddhist meditation practices for individuals to focus on their current state, not shift their thoughts, and to be truly aware of their current state (Jacobs & Blustein, 2008). Researchers have suggested that

mindfulness is a form of contemplation that is found in many religions and cultures (Oman, 2010; Stratton, 2015).

Eblin (2014) explained mindfulness in terms of basic formula consisting of Mindfulness = Awareness + Intention. Kabat-Zinn (2009) outlined mindfulness as the awareness that occurs when an individual is nonjudgmentally and resolutely paying attention in the current moment.

Research on mindfulness has shown than it is related to higher levels of self-esteem, empathy, and relationship satisfaction (Baer et al., 2004; Carmody & Baer, 2008).

Several researchers have created measures to assess the construct of mindfulness (Baer, et al., 2004, Brown & Ryan, 2003; Feldman, Hayes, et al., 2006; Hayes & Feldman, 2004). However, there is not a consensus on what measure accurately evaluates mindfulness. Research findings has shown that mindfulness is positively correlated with happiness and life satisfaction, as well as being negatively correlated with depression and anxiety (Baer et al., 2004; Brown & Ryan, 2003; Feldman et al., 2006). The measures have also been criticized because they tend to measure trait-based behaviors not supported by actual mindful practices, like meditation or contemplation (Manuel et al., 2016).

Brown and Ryan (2004) termed mindfulness as "an open or receptive awareness of and attention to what is taking place in the present moment" (p. 116). They created the Mindful Attention Awareness Scale (MAAS), which includes several college student sample populations. Results from these studies revealed that mindfulness was positively correlated with competence, autonomy, and relatedness. Specifically, mindfulness predicted higher engagement of autonomous activities. Baer et al. (2004) has argued that the scale is very unidimensional. Baer et al. (2006) contended that mindfulness should be viewed as a multidimensional construct. Baer et al. (2006) also used a college student sample population and created the Five Facet Mindfulness Questionnaire (FFMQ). There are five distinct areas of mindfulness that FFMQ measures (Baer et al., 2004). The five facets are: acting with awareness or avoiding automatic pilot, non-reactivity to inner experience; describing or labeling; observing or noticing internal and external experiences and nonjudging of inner experience. There is huge support for the FFMQ to be a valid measure for mindfulness (Baer et al., 2008).

Baer et al. (2004) noted that college students advocate and favor being mindful but have never been trained at mindfulness. Siegel (2014) found several mental and physical benefits to being mindful. He argued that mindfulness helps to foster the mind-body connection. Moreover, mindfulness can facilitate and improve interpersonal relationships. Leigh and Neighbors (2009) investigated the relationship between college students, drinking motives, and mindfulness. They discovered that men tend to drink for enhancement reasons versus women, and mindful non-attachment to emotions or sensations predicted more coping, less enhancement and less drinking. Another study used the FFMQ measure of mindfulness and found that men and women differed on health outcomes and mindfulness, but men scored higher on only one aspect of mindfulness; non-reactivity to inner experience (Bodenlos et al., 2015). Also, the study found that stress levels were negatively correlated on all five facets of mindfulness. MacDonald and Baxter (2016) found that mindful females college students that had greater emotional awareness and tolerance toward undesirable thoughts also had overall greater well-being. These findings suggest that there are gender differences to consider when investigating mindfulness.

Sriwilai and Charoensukmongkol (2015) investigated social media addiction and mindfulness in Thailand. They discovered that individuals with high levels of social media addiction tend to have lower levels of mindfulness. Their results showed that a deficiency in mindfulness also leads to mental exhaustion. It will be interesting to see if college students have varying levels of mindfulness when they engage in social media. Specifically, this research argued that social media use can be predicted by mindfulness. The rationale is that when college students are using social media, their ability to be mindful to what they are doing in the present is lessened because of the diversion caused by the desire to participate and communicate via social media.

Jones et al. (2016) investigated the impact of mindfulness using the FFMQ on empathy, active listening, and provisions for emotional support in interpersonal relationships. Results indicated that empathy and active listening were mediating factors in helping people to positively reappraise a situation mindfully, which seemed to help people to provide emotional support to others. Structural equation model established that mindful observing and describing predicted empathy and active listening while mindful

describing and nonjudging predicted reappraisals. This study points to the essential nature of mindfulness to support others in interpersonal relationships. It also showed that mindfulness can be a vehicle for reappraisals leading to emotional support without incurring emotional costs like stress and allowing for coping. An ability to support others is critical for healthy interpersonal relationships.

Jones and Hansen (2015) presented a model for mindful supportive communication that included social skills. A key finding from Jones and Hansen's study is that "engaging in difficult sensory experiences" (p. 1125) helps people to communicate with support, and skills such as mindful verbal and non-verbal expressivity were acutely important for perceiving and communicating experience. The authors stated that abilities to present both feelings and thoughts are important, but not when the actor is focused too much on themselves. Lower mindfulness scores on acting with awareness and nonjudging emotions were associated with emotional control and attempting too strongly to be sensitive in social situations. So, it seems that a mindful balance is necessary, first to receive feedback appropriately, and then secondly to communicate with skill and positive intent. Overall, the research on mindfulness and social media suggests that college students are aware of the benefits of communicating mindfully, but that during the act of engaging with social media a lack of control can occur that can be attributed to less emotional and bodily awareness.

With all these considerations from past research and with the idea that social media and mindfulness are correlated, we advance these hypotheses:

- H1: There will be differences between male and female college students regarding social media use and social media mindfulness.
- H2: There will be a relationship between mindfulness and social media use among college students.
- H3: There will be a relationship between mindfulness and mindful attention while using social media among college students.

#### **METHODS**

Participants included 526 college students age of 21.78 years (SD = 2.06). More than half of the participants were female (n = 370, 69.4%) and most were White (69.4%, n = 374), while 6.5% (n = 35) were Black/African American, 1.9% (n = 10) were Asian, 17.3% (n

= 93) were Hispanic, .8% (n = 4) were Native American/Pacific Islander, .2% (n = 1), and 1.5% (n = 8) were classified as "Other." A vast majority reported that they were heterosexual (n= 480, 89.1%) and 46.2% (n = 249) said that they were Republican. In addition, 93% (n= 503) were active users of Facebook and 92.4% (n= 498) were active users of Snapchat. Participants reported using other types of social media (i.e., Twitter, Vine, Reddit, YouTube, Pinterest, Imgur, LinkedIn, and Tumblr). Participants reported spending an average time of 4.63 hours (SD = 3.01) on social media.

#### **Procedures**

Participation was solicited from undergraduate college students at a large public university in the southwest (n = 418) and a mid-size university in the Northeast (n = 121). After providing informed consent, participants in the southwest completed an online questionnaire with several instruments (which comprised of three different instruments) and were awarded extra credit (less than 2% of a course grade) for their participation. Equivalent options were given to the students by their instructors for those who did not wish to participate in this particular study. Participants in the northeast were not offered extra credit and completed the survey on a paper format.

#### Instruments

Five Facet Mindfulness Questionnaire (FFMQ). All participants completed the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006), which assesses five facets of a general tendency to be mindful in daily life: observing (8-items), describing (8-items), acting with awareness (8-items), nonreactivity to inner experience (7-items), and nonjudging of inner experience (8-items). Items are rated on a 5-point Likert-type scale ranging from 1 (never or very rarely true) to 5 (very often or always true). Alpha reliabilities for the measure were as follows: observing ( $\alpha = .78$ , M = 25.72, SD = 5.07), describing ( $\alpha = .83$ , M = 26.17, SD = 5.23), acting with awareness ( $\alpha = .83$ , M = 24.18, SD = 5.22), nonreactivity to inner experience ( $\alpha = .88$ , M = 20.81, SD = 3.83), and nonjudging of inner experience ( $\alpha = .72$ , M = 24.78, SD = 6.02)

Social Media Usage Scale. To understand social media usage and focus the authors created a 14-item measure, which measures social media use and social media focus. The Social Media Usage Scale (SMUS) is a series of ten Likert-type questions that ask individuals to recall the degree to which they perceive they understand a risk using a scale

ranging from 1 strongly disagree to 7 strongly agree. The items on the SMUS should be coded so that higher scores are given to those people who believe they know more about a specific risk than those with lower scores.

The dimensionality of the 14 items for the SMUS in the current study was analyzed using an unrotated principal component factor analysis. To examine sampling adequacy, Kaiser's Measure of Sampling Adequacy was used. The MSA obtained was .92, which is considered "marvelous" for conducting a factor analysis (Kaiser, 1974). The principal component factor analysis indicated that only one eigenvalue was above 1 accounting for 53.18% of the variance (factor loadings can be seen in Table 1). Scores for the Social Media Usage Scale can range from 14-98, which was seen in this study. The SMUS had an alpha reliability of .93 (M = 60.03, SD = 16.18).

Table 1 Factor Analysis of the Social Media Usage Scale (SMUS)

	Factor Loadings
1. Social media is part of my everyday activity.	.70
2. I am proud to tell people I use social media.	.74
3. Social media has become part of my daily routine.	.75
4. I fell out of touch when I haven't logged onto social media for a while.	.83
5. I feel I am a part of the community of the social media sites I use.	.84
6. I would be sorry if my social media sites shut down.	.80
7. The first thing I do in the morning in check my social media.	.80
8. I check my social media platforms within the first hour of waking up each morning.	.78
9. I spend a lot of time thinking about social media or planning use of social media.	.79
10. I feel an urge to use social media more and more.	.80
11. I use social media in order to forget about personal problems.	.57
12. I have tried to cut down on the use of social media without success.	.55
13. I become restless or troubled when I am prohibited from using social media.	.67
14. I use social media so much that it has had negative impact on my job/studies.	.48

This factor analysis is unrotated.

Social Media and Mindful Attention Awareness Scale. In order to assess social media mindfulness, the original Mindful Attention Awareness Scale by Brown and Ryan (2003) was used for this study. The modification to the scale was "social media" was added to each of the items. The MAAS is a 15-item scale that is commonly used to measure core characteristics of dispositional mindfulness. Specifically, the MAAS is a unidimensional measure. It can be used to identify the tendency to be receptively aware of and attend to current life experiences. The measure appears to tap the accepting, non-judgmental quality of mindfulness as an inherent part of being fully present (Brown & Ryan, 2003). The 15 items (e.g., "I could be experiencing some emotion and not be conscious of it until sometime later") are rated on a scale from 1 (almost always) to 5 (almost never). Despite the fact, the item's negatively worded items have raised some concerns about face validity (e.g., Grossman, 2011), research implies that the measure shows several other types of validity (concurrent, convergent, discriminant, predictive, and incremental) and is suggestive of essential qualities of overall dispositional mindfulness (Quaglia et al., 2016). The items on the Social Media and Mindful Attention Awareness Scale (SM-MAAS) should be coded so that higher scores are given to those people who believe they know more about a specific risk than those with lower scores.

The dimensionality of the 15 items for the SM-MAAS in the current study was analyzed using an unrotated principal component factor analysis. The original factor analysis had three items loaded highly on both the primary and a secondary factor. Previous research with this measure has consistently had a single factor solution, so those three items were dropped to create a 12-item scale. To examine sampling adequacy, Kaiser's Measure of Sampling Adequacy was used. The MSA obtained was .91, which is considered "marvelous" for conducting a factor analysis (Kaiser, 1974). The principal component factor analysis indicated that only one eigenvalue was above 1 accounting for 48.16% of the variance, but the scree plot clearly indicated a single factor structure. The factor loadings in Table 2 represent a single factor structure using a principle components analysis. Scores for the SM-MAAS can range from 12-60, which was seen in this study and had an alpha reliability of .90 (M = 41.68, SD = 8.80).

Table 2

Factor Analysis of the Social Media and Mindful Attention Awareness Scale (SM-MAAS)

	Factor Loadings
1. I find it difficult to stay focused on what's happening in the present when I look at social media.	.64
2. I tend to look through social media without paying attention to what I experience in the current moment.	.67
3. When looking at social media, I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	.64
4. It seems I am "running on automatic" without much awareness of what I'm doing on social media.	.75
5. I rush through social media without being really attentive to it.	.63
6. I get so focused on the goal I want to post on social media that I lose touch with what I am doing right now to get there.	.63
7. I use social media, without being aware of what I'm doing.	.75
8. I find myself listening to someone with one ear, while using social media at the same time.	.70
9. I use social media on "automatic pilot" and then wonder why I went there.	.76
10. I find myself preoccupied with the future or the past on social media.	.71
11. I find myself doing things on social media without paying attention.	.77
12. I snack without being aware that I'm eating while using social media.	.65
13. I could be experiencing some emotion and not be conscious of it until sometime later after reviewing social media.	
14. I post things on social media because of carelessness, not paying attention, or thinking of something else.	
15. I forget a person's name almost as soon as I see it on social media.	

This factor analysis is unrotated.

# RESULTS

In order to analyze the first hypothesis, an independent t-test was calculated to examine potential differences in social media use and mindfulness when using social media. First, females (M = 62.06, SD = 15.85) and males (M = 55.70, SD = 16.37) were found to have statistically different social media usage (SMUS), t (502) = -4.06, p < .005, d

= 0.39. Second, females (M = 41.15, SD = 8.81) and males (M = 43.05, SD = 8.76) were found to be statistically different on the SM-MAAS, t (489) = 2.19, p = .029, d = 0.23. Hypothesis two predicted a relationship between the five facets of mindfulness (observing, describing, acting with awareness, nonreactivity to inner experience, and nonjudging of inner experience) and social media use within this study. A multiple linear regression was calculated using the five facets of mindfulness as the independent variables and social media use as the dependent variable, F (5, 428) = 4.28, p = .001. The sample multiple correlation coefficient, R, was .22, which indicates that approximately 4.8% of the variance in social media use can be accounted for by its linear relationship with the five facets of mindfulness. However, only acting with awareness (t = -3.53, p = .001,  $\beta$  = -.18) accounted for any of the unique variance within the model.

Hypothesis three predicted a relationship between the five facets of mindfulness (observing, describing, acting with awareness, nonreactivity to inner experience, and nonjudging of inner experience) and social media usage (SMUS) and SM-MAAS within this study. A multiple linear regression was calculated using the five facets of mindfulness as the independent variables and social media use and SM-MAAS as the dependent variables, F (5, 421) = 11.46, p < .001. The sample multiple correlation coefficient, R, was .35, which indicates that approximately 12% of the variance in SMUS and SM-MAAS can be accounted for by its linear relationship with the five facets of mindfulness. Acting with awareness (t = 4.50, p < .001,  $\beta$  = .24), nonreactivity to inner experience (t = 2.21, p = .028,  $\beta$  = .11), and nonjudging of inner experience (t = 2.07, p = .039,  $\beta$  = .11) each accounted for unique variance within the model.

# **DISCUSSION**

The aim of this study was to examine college students' perceptions of their social media use and mindfulness. Several theoretical and practical advances considered, and implications are noted. First, Hypothesis 1 found there was a significant difference between males and females was noted on social media usage. Females were found to use social media in higher quantities versus men. This is consistent with other research suggesting females are more open and less critical to social media posts than males but also social media is used to control self-presentation (Herring et al., 2015). Social media is also used to support others through posting and likes (Sarabia & Estevez, 2016). However,

there is a degree of presentation and support that can be unhealthy and risk-provoking, like sexualized behaviors on Facebook. Sarabia and Estevez (2016) found that predominantly teen girls posted sexualized images since Facebook makes content exchange easy through mobile devices. The female teens often take part in at-risk behaviors that are driven by "digital social egocentrism and narcissism" (Herring & Kapidzic, 2015, p. 219), and females with lower self-esteem are more likely to describe themselves as sexy. Selfies were posted most often by underage female teens containing erotic or sexualized material with more likes attached to these images.

Hypothesis 1 also found that that although female's social media usage is higher than males, males rated higher on social media mindfulness compared to females. The SM-MAAS scale describes whether an individual pays attention and is actively engaged without distraction while using social media. These findings are somewhat inconsistent with other work that found that more men were addicted to Twitter versus women (Kircaburun, 2016) and that women were more thoughtful in their Facebook posts (Shepherd, 2016). The differences may be explained based on the precise nature of our measure for use and mindfulness. It is evident that self-presentation is highly important to social media users, as is supporting others in their view of themselves. Females seem especially prone to risky social media behavior, but the entire gender spectrum can benefit from mindful social media use. We question whether young people are mindfully communicating using social media.

Hypothesis two found relationships among the five facets of mindfulness and social media usage. Only one facet of mindfulness predicted social media usage, acting with awareness. Acting with awareness is a state of concentration or nondistraction that is the opposite of being on "autopilot", and has been negative correlated with absent-mindedness and disassociation (Baer et al., 2006). It seems that mindfulness only partly explains social media usage while a much larger portion of social media usage is predicted by other factors not included in this study. Low self-esteem, narcissism, affinity-seeking behaviors could be other factors that influence social media use that could drive concerns about social media use (Mo & Leung, 2015).

Concerns about social media use include the amount of time spent online, lack of parental control for underage users, and risky behaviors such as cyberbullying and

Understanding College Students' Perceptions Regarding Mindfulness and Social Media

exposure to violent or sexual content (Herring et al., 2015). Greater amounts of social media usage means specific things in the current investigation, based on the items in the measure. It is conceptualized as emotional investment rather than time investment. The item "I feel I am a part of the community of the social media sites I use" is exemplar that using social media portals is an investment that has social costs. For example, there are social costs for someone who is not connected socially. One study found that college students who meditated or practiced mindfulness felt significantly more socially connected (Hutcherson et al., 2008). Jones et al. (2016) found mindful individuals are better able to support others without incurring emotional costs. A mindful ability to engage with one's own emotions without attachment helps to be more expressive verbally and non-verbally in interpersonal situations. So, acting with awareness with social media is one's ability to interact with others over social media with robust reserves to engage in one's emotions without judgement, and respond to others with healthy supportive and expressive messages.

The third hypothesis stated that the five facets of mindfulness predicted social media usage and social media mindfulness. Three mindfulness facets predicted the two variables: acting with awareness, nonreactivity to inner experience, and nonjudging of inner experience. The first facet, acting with awareness, was not surprising since the SM-MAAS central feature is dispositional acting with awareness using social media. Nonreactivity is being able to observe one's emotions without getter lost in them, and nonjudging is being able to not criticize oneself for feeling particular emotions or sensations. Nonreactivity and non-judging suggests that using social media mindfully involves additional constructs related to self-exploration, and in a way allows people to prepare and adapt to new situations or information (Huston et al., 2011). This adaptation process improves positive reappraisals.

This study used trait-type measures of mindfulness and found concrete differences on social media usage and mindful social media mindfulness, with the assumption that there was not prior mindful practice. Those that were mindful naturally seemed to benefit by engaging in a present-centered and engaged social media use and possibly took less risks in presenting themselves online. It seems that some users of social media can interact interpersonally in a mindful and skilled fashion. Jones and Hansen (2015) found

that mindfulness "makes for more compassionate and beneficial emotional support" (p. 1126). We believe that mindful interpersonal relations using social media is viable, but with certain conditions. First, some caution is warranted for female users, but mindful use can help females to post more wisely. Mindful support by others, presumably with more compassion and better virtual listening skills can sustain healthier self-views for females. Mindful social media interaction is related to greater awareness and balance of emotions, without overreacting. Although another facet of mindfulness, emotional reactivity, was not found to be associated with social media use, previous research found that reactivity was lessened by dispositional mindfulness (McDonald & Baxter, 2016).

As with all research, the current study is not without limitations. First, the sample was predominantly comprised of female college students. It would have been better to obtain a more evenly distributed population. Second, our sample was from two different higher education institutions: a large public southwestern university and a mid-size public northeastern university. It might be interesting to see if students from private college and universities answer these questions differently. Last, self-regulation and being conscious of one's communication is an important component of mindfulness and has been associated with mindful use of mobile-devices (Bayer et al., 2016), but little research until now has started to measure mindful social media use. We are starting to understand dispositional mindfulness, but the impact of mindful practices, such as meditation and contemplation on social media exposure and use are not known.

Future researchers can employ this study's usage measure with experimental models to capture actual behaviors and hence understand situational or adaptive mindfulness, which is the ability to adapt to situations in particular instances (Garcia & Wrench, 2017; Reber et al.,2014). Also, future research can look at mindfulness and social media at other life stages. Noller and Callan (2015) argued that age influences perceptions of the relationship and age influences how others will communicate in those relationships. Thus, future research can examine mindfulness via a longitudinal study across multiple communication channels. It would be interesting to see if people are more mindful via computer-mediated communication or face-to-face conversations. Moreover, future research should investigate different correlates such as affinity-seeking and satisfaction

with these channels. The results from this study demonstrated that college students use social media and engage in mindfulness behaviors differently.

All in all, the study suggests that being mindful on social media outlets can impact communication behaviors. If people are more mindful and aware of their posts and comments and social media, it can possibly create positive change, because people will not be overreacting to different posts. By being more mindful on social media, the findings from this study suggest that it can also positively affect mental health, because people are more compassionate. In order to help to others, become more mindful of their social media posts, it is important to simply ask them to be more aware of what and how they consume social media.

#### References

- Baer, R. A., Smith, G. T., & Allen, K. B. (2004). Assessment of mindfulness by self-report: The Kentucky Inventory of Mindfulness Skills. *Assessment*, 11, 191-206.
- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13, 27-45.
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S., ... Williams, J. M. G. (2008). Construct validity of the Five Facet Mindfulness Questionnaire in meditating and nonmeditating samples. *Assessment*, 15, 329–342. https://doi.org/10.1177/1073191107313003
- Baer, R. A., Smith, G. T., Lykins, E., Button, D., Krietemeyer, J., Sauer, S. et al. (2008). Construct validity of the five facet mindfulness questionnaire in meditating and nonmeditating samples. *Assessment*, 15, 329-342.
- Bayer, J. B., Cin, S. D., Campbell, S. W., & Panek, E. (2016). Consciousness and self-regulation in mobile communication. *Human Communication Research*, 42, 71–97.
- Bromley, D. G. (1991). Unraveling religious disaffiliation: The meaning and significance of falling from the faith in contemporary society. *Counseling and Values, 35*, 164-185.
- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology, 84*, 822-848.
- Brown, K. W., & Ryan, R. M. (2004). Fostering healthy self-regulation from within and without: A self-determination theory perspective. In A. A. Linley & S. Joseph (Eds.), *Positive psychology in practice* (pp. 105-124). Hoboken, NJ: John Wiley & Sons.
- Bodenlos, J. S., Wells, S. Y., Noonan, M., & Mayrsohn, A. (2015). Facets of dispositional mindfulness and health among college students. *Journal of Alternative & Complementary Medicine*, 21, 645–652.
- Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of Behavioral Medicine, 31*, 23-33.

- Christofides, E., Muise, A., & Desmarais, S. (2009). Information control and disclosure on Facebook: Are they two sides of the same coin or two different processes. *Cyberpsychology and Behavior*, 34, 1303-1314.
- Dainton, M., & Stokes, A. (2015). College students' romantic relationships on Facebook: linking the gratification for maintenance to Facebook maintenance activity and the experience of jealousy. *Communication Quarterly, 63*, 365-383.
- Dawson, L. L., & Cowan, D. E. (Eds.). (2013). Religion online: Finding faith on the Internet. New York, NY: Routledge.
- DeAndrea, D. C., & Walther, J. B. (2011). Attributions for inconsistencies between online and offline self-presentations. *Communication Research*, *38*, 805-825.
- Dekeyser, M., Raes, F., Leijssen, M., Leysen, S., & Dewulf, D. (2008). Mindfulness skills and interpersonal behaviour. *Personality and Individual Differences*, 44, 1235-1245.
- Eblin, S. (2014, March 10). *Mindful Mondays: What does mindfulness even mean, anyway?* Retrieved from http://eblingroup.com/2014/03/mindful-mondays-whatdoes-mindfulness-even-mean.html
- Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13, 210-230.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of Computer-Mediated Communication*, 12, 1143-1168.
- Feldman, G. C, Hayes, A. M., Kumar, S. M., Gresson, J. M., & Laurenceau, J. P. (2006). Mindfulness and emotion regulation: The development and initial validation of the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R). *Journal of Psychopathology and Behavioral Assessment, 29*, 177-190.
- Fox, J., & Anderegg, C. (2014). Romantic relationship stages and social networking sites: uncertainty reduction strategies and perceived relational norms on Facebook. *Cyberpsychology, Behavior, and Social Networking, 17,* 685-691.
- Fox, J., Osborn, J. L., & Warber, K. M. (2014). Relational dialectics and social networking sites: The role of Facebook in romantic relationship escalation, maintenance, conflict, and dissolution. *Computers in Human Behavior*, *35*, 527-534.
- Garcia, A. J., & Wrench, J. S. (2017). Mindful Classroom Communication: A conceptual framework and investigation of the Five-Facet Mindfulness Questionnaire and select instructional communication measures. Manuscript submitted for publication.
- Hayes, A. M., & Feldman, G. (2004). Clarifying the construct of mindfulness in the context of emotion regulation and the process of change in therapy. *Clinical Psychology:* Science and Practice, 11, 255-262.
- Herring, S. C., & Kapidzic, S. (2015). Teens, gender, and self-presentation in social media. In J. D. Wright (Ed.), *International Encyclopedia of Social and Behavioral Sciences* (2nd ed.). Oxford, UK: Elsevier.
- Huston, D. C., Garland, E. L., & Farb, N. A. S. (2011). Mechanisms of mindfulness in communication training. *Journal of Applied Communication Research*, *39*, 406–421.
- Hutcherson, C. A., Seppala, E. M., & Gross, J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion*, 8, 720–724.

- Jones, S. M., Bodie, G. D., & Hughes, S. D. (2016). The impact of mindfulness on empathy, active listening, and perceived provisions of emotional support. *Communication Research*, 43, 1–28.
- Jones, S. M., & Hansen, W. (2015). The Impact of mindfulness on supportive communication skills: Three exploratory studies. *Mindfulness*, *6*, 1115–1128.
- Junco, R., Heiberger, G. and Loken, E. (2011). The effect of Twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27, 119–132. doi: 10.1111/j.1365-2729.2010.00387.x
- Kabat-Zinn, J. (2009). Wherever you go, there you are: Mindfulness meditation in everyday life. Hachette, UK: Hyperion.
- Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39, 401-415.
- Kircaburun, K. (2016). Effects of Gender and Personality Differences on Twitter Addiction among Turkish undergraduates. *Journal of Education and Practice*, 7, 33–42.
- Lampe, C., Ellison, N., & Steinfield, C. (2006, November). A Face (book) in the crowd: Social searching vs. social browsing. In Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work (pp. 167-170). ACM.
- Leigh, J., & Neighbors, C. (2009). Enhancement motives mediate the positive association between mind/body awareness and college student drinking. *Journal of Social and Clinical Psychology*, 28, 650-669.
- MacDonald, H. Z., & Baxter, E. E. (2016). Mediators of the relationship between dispositional mindfulness and psychological well-being in female college students. *Mindfulness*, 7, 1–10.
- Melander, L. A. (2010). College students' perceptions of intimate partner cyber harassment. *Cyberpsychology, Behavior, and Social Networking, 13*, 263-268.
- Mo, R., & Leung, L. (2015). Exploring the roles of narcissism, uses of, and gratifications from microblogs on affinity-seeking and social capital. *Asian Journal of Social Psychology*, 18, 152–162. https://doi.org/10.1111/ajsp.12087
- Noller, P., & Callan, V. (2015). The adolescent in the family. New York, NY: Routledge.
- Oman, D. (2010). Similarity in diversity? Four shared functions of integrative contemplative practice systems. In *Contemplative practices in action: Spirituality, meditation, and health* (pp. 7–16). Santa Barbara, CA: Praeger.
- Punyanunt-Carter, N. M., Corrigan, M. W., Wrench, J. S., & McCroskey, J. C. (2010). A quantitative analysis of political affiliation, religiosity, and religious-based communication. *Journal of Communication and Religion*, 33, 1-32.
- Punyanunt-Carter, N. M., Wrench, J. S., Corrigan, M. W., & McCroskey, J. C. (2008). An examination of reliability and validity of the religious communication apprehension scale. *Journal of Intercultural Communication Research*, 37, 1-15. https://doi.org/10.1080/17475750802077339
- Quaglia, J. T., Braun, S. E., Freeman, S. P., McDaniel, M. A., & Brown, K. W. (2016). Meta-analytic evidence for effects of mindfulness training on dimensions of self-reported dispositional mindfulness. *Psychological Assessment*, 28, 803–818.
- Reber, R. (2014). Mindfulness in education. In A. Ie, C. T. Ngnoumen, & E. J. Langer (Eds.), *The Wiley Blackwell Handbook of Mindfulness* (pp. 1054–1070). Hoboken, NJ: John Wiley & Sons.
- Sarabia, I., & Estévez, A. (2016). Sexualized behaviors on Facebook. Computers in Human Behavior, 61, 219–226. https://doi.org/10.1016/j.chb.2016.03.037

- Shepherd, R. P. (2016). Men, women, and Web 2.0 writing: Gender difference in Facebook composing. *Computers and Composition*, 39, 14–26. https://doi.org/10.1016/j.compcom.2015.11.002
- Siegel, D. J. (2014, August, 1). *Mindfulness as integration*. Retrieved from http://drdansiegel.com/blog/2014/08/01/mindfulness-as-integration/
- Skiba, D. J. (2007). Nursing education 2.0: YouTube™. Nursing Education Perspectives, 28, 100-102.
- Sriwilai, K., & Charoensukmongkol, P. (2016). Face it, don't Facebook it: Impacts of social media addiction on mindfulness, coping strategies and the consequence on emotional exhaustion. *Stress and Health*, *32*, 427-434.
- Stratton, S. P. (2015). Mindfulness and contemplation: Secular and religious traditions in western context. *Counseling & Values, 60,* 100–118.
- Tom Tong, S., & Walther, J. B. (2011). Just say "no thanks": Romantic rejection in computer-mediated communication. *Journal of Social and Personal Relationships*, 28, 488-506.
- Wagner, L. A. (2015). When your smartphone is too smart for your own good: How social media alters human relationships. *The Journal of Individual Psychology, 71*, 114-121.
- Wrench, J. S., & Punyanunt-Carter, N. M. (2007). The relationship between computer-mediated-communication competence, apprehension, self-efficacy, perceived confidence, and social presence. *Southern Communication Journal*, 72, 355-378. https://doi.org/10.1080/10417940701667696
- Wrench, J. S., Corrigan, M. W., McCroskey, J. C., & Punyanunt-Carter, N. M. (2006). Religious fundamentalism and intercultural communication: The relationships among ethnocentrism, intercultural communication apprehension, religious fundamentalism, homonegativity, and tolerance for religious disagreements. *Journal of Intercultural Communication Research*, 35, 23-44. https://doi.org/10.1080/17475740600739198

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