

Me, My "Selfie" and I: A Survey of Self-disclosure Motivations on Social Media

Patricia Williamson
Trey Stohlman
Heather Polinsky
Central Michigan University

Abstract

Personal photo-sharing has become a popular activity across social media platforms as a self-disclosure activity. A survey of 366 (N=366) individuals via a web-based questionnaire measured correlations between photo-sharing on social networking sites (SNS) and fulfillment of self-disclosure goals. Data analysis indicated respondents posted selfies to social media to meet the information storage and entertainment self-disclosure goals. Facebook users also posted selfies to aide in relational development, whereas relational development was negatively correlated with the frequency of selfie-posting on Twitter. Neither gender nor age were found to have any impact on the number of selfies posted to social media, overall. However, Snapchat was a more popular SNS for selfie-posting among younger respondents, while Facebook was the most popular medium for posting selfies amongst the older respondents.

Keywords: self-disclosure, selfies, social media

Introduction

Because of the growing popularity of social network sites (SNS) amongst people of a wide-range of ages, it is important to look more closely at the motivations behind posting selfies. Some have suggested those who post a large number of selfies online are narcissistic (Sorokowski et al, 2015; Kapidzic, 2013; McKinney et al., 2012; Muise, Christofides, & Desmarais, 2009), while others warn of the loss of privacy related to self-disclosure (Altman, 1975). This investigation employs a web-based survey to determine the role of self-disclosure on individuals' decisions to post selfies on social media sites.

Facebook continues as the most popular SNS in the United States, other services are popular worldwide. Twitter reports 320 million active monthly users, with 79 percent of its accounts outside of the United States (O'Reilly, 2015). Instagram, meanwhile, celebrated 400 million users as of September 2015 with more than 75 percent of users living outside of the United States (Isaac, 2016). Similarly, LinkedIn reported 396 million users by the third quarter of 2015. Snapchat is the youngest of the SNS included in this study, with approximately one-million daily active users as of late 2015 (O'Reilly, 2015). Despite having only one-tenth the daily user base as Facebook, the service reported in September 2015 that it has more than four billion daily video views (Carr, 2015). SNS usage has become commonplace in recent years, with recent reports estimating more than 950 million people worldwide use a variety of platforms (Syn, 2014). More than 70% of American teenagers under the age of 17 reported visiting SNS, and that number is expected to rise to nearly 2.3 billion users by 2017 (Klier, Klier & Wigand, 2014). Facebook started as a Harvard-only network created by Mark Zuckerberg in 2004 that quickly achieved a high level of recognition, and today boasts 1.591 billion active users, as of the fourth quarter of 2015 (Cohen, 2016). Internet users in the United States spend an average of 6.8 hours every week using Facebook (Klier, Klier & Wigand, 2014).

While there has been a handful of quantitative studies conducted analyzing the posting of selfies on social media, most of the previous research has focused on finding correlations between personality types and social media usage (Omarzu, 2000; Treem & Leonardi, 2012). The bulk of the rest of the existing research has employed uses and gratifications as the theoretical basis to investigate photo-sharing (Malik & Nieminen, 2015; Alhabash, Chiang, & Huang, 2014). Very little research has centered on the selfie as a form of self-disclosure (Bazarova & Choi, 2014).

This study investigates the phenomenon of posting "selfies" to social media as a form of self-disclosure. Self-disclosure is, simply stated, the act of revealing personal information to others (Jourard, 1971). Selfies are self-portraits taken with a digital camera or cell phone at arm's length (Qiu et al., 2015; Sorokowski, 2015). The term "selfie" was first used on an Australian internet forum in 2002, but has since become a commonly used term and practice in the past several years (Radulova, 2015). Selfies are generally posted on some form of social networking site (SNS) and seen by friends, followers, and sometimes, the general public. Specifically, this study determines which self-disclosure goals are fulfilled by posting selfies on Facebook, Twitter, Instagram, LinkedIn and Snapchat.

Literature Review

“Selfies”

While it is believed the first “selfies” were taken in 1840, both by an American amateur photographer named Robert Cornelius, and in England by British inventor Charles Wheatstone (Wade, 2014), the word itself is a contemporary term. According to the Oxford Dictionary, the word was first used in 2002 on an Australian internet forum (“The Oxford Dictionaries word of the year,” n.d.). Generally speaking, a selfie can be defined as a self-portrait taken by oneself using a digital camera or smartphone (Qiu et al., 2015). Sorokowski et al. (2015) defined selfie similarly, but added that the camera or camera phone must be held at arm’s length or pointed at a mirror, and is usually shared via social media. The development of the “selfie stick” literally extends the parameters of this type of self-photography method (Shipley, 2015). Regardless of how the word is defined, the term has become part of the English vernacular. “Selfie” was Oxford Dictionary’s “Word of the Year” for 2013 (Oxford Dictionaries word of the year 2013), and the word’s usage increased in frequency by 17,000-percent between the years 2012 and 2013 (Sorokowski et al., 2015).

There has been limited research on the posting of selfies on various forms of social media, with the majority of those previous studies focusing on how the Five Factor Model can be used to relate social media activity to personality type (Sorokowski et al., 2015; Ross et al., 2009; Qui et al., 2015; Gosling et al., 2011; Amichai-Hamburger & Vinitzky, 2010; Lee & Kim, 2014). The Five Factor Model (FFM) refers to the five broad personality dimensions used by social scientists to describe human personality (Costa & McCrae, 1992). Extraversion, neuroticism, agreeableness, openness to experience and conscientiousness comprise the FFM (Costa & McCrae, 1992).

Lee and Kim (2014) looked at the relationship between personality traits and self-presentation on Facebook. They found that extraversion was positively related to self-presentation on both the user’s Facebook wall and their news feed. Extroverts more frequently uploaded photos and updated their statuses, and had more friends than introverts (Lee & Kim, 2014). Amichai-Hamburger and Vinitzky (2010) found a strong connection between Facebook users’ personalities and their Facebook behaviors.

Ross et al. (2009) examined the personality and competency factors that influence the use of Facebook as a social medium. They found that the more experience a Facebook user had with the site, the less frequently they visited Facebook and the more Facebook friends they had (Ross et al., 2009). Additionally, the more experienced Facebook users were, the more likely they were to post photos. However, those users also had fewer overall postings on their wall. Extraversion, conscientiousness, emotional stability nor agreeableness were found to be significantly related to the number of Facebook photos posted on their profile (Ross et al., 2009). However, gender was found to be significantly related to Facebook usage and content. Women reported spending more time on Facebook, they had a greater number of friends, and posted more photos and more status updates about themselves than did their male counterparts (Ross et al., 2009).

Sorokowski et al. (2015) investigated selfie posting on social networking sites in Poland. Like Ross et al. (2009), their study found women posted more selfies of all types than did men. However, Sorokowski et al. (2015) also looked at narcissism as a variable. Though women posted more selfies, there was no relationship found between that behavior and narcissism. Men’s narcissism scores, however, positively predicted selfie posting. That

included selfies of themselves alone, with a partner, or a group selfie (Sorokowski et al., 2015). Men's vanity, leadership, and admiration demand scores, each independently predicted the posting of one or more types of selfies. Self-presentation was found to be a key motivator of social networking in general for both sexes (Sorokowski et al., 2015).

Narcissism was found to be a predictor of social media use in a number of studies (Kapidzic, 2013; McKinney et al., 2012; Muise, Christofides, & Desmarais, 2009). Kapidzic (2013) found narcissism to be a predictor of profile picture selection, while Ong et al. (2011) concluded that narcissists find their own personal profile pictures and selfies to be more attractive when compared to the opinions of their peers. Wang, Jackson, Zhang, & Su (2012) discovered narcissists were more likely to upload the photos they found most attractive to social media, compared to less narcissistic users. Ryan and Xenos (2011) failed to find any connection between narcissism and selfie-posting on Facebook.

Qiu et al. (2015) looked at personality traits of social network site users. They found no significant difference between selfie posters' personality traits and those of non-selfie posters after controlling for age and gender (Qiu et al., 2015). Selfie-posters' extraversion was accurately predicted by observers, based on exposure to users' pictures, but no significant correlation was found between users' self-reported levels of openness and observers' ratings. However, Qiu et al. (2015) did uncover a number of interesting findings related to selfie cue validity. Agreeableness was associated with emotional positivity and negatively associated with camera height, suggesting that more agreeable individuals were more likely to take pictures from a lower angle. Conscientiousness was negatively correlated to selfies taken in private locations, as those users were seen as being more cautious and concerned with privacy. Neuroticism was related to "duckface" in selfies, while extraversion was negatively related to pressed lips. Those who looked directly into the camera, feigning eye contact in their profile photos were seen to be more agreeable (Qiu et al., 2015).

Diefenbach & Christoforakos (2017) looked at the "selfie paradox," which relates to individuals' positive reactions to their own selfies and negative reactions to others' selfies. Their 2017 survey of individuals in Germany, Austria and Switzerland found that people self-reported self-promotion and self-disclosure as their reasons for taking selfies. Overall, respondents regarded their own selfies in a positive light, yet were more critical of others' (Diefenbach & Christoforakos, 2017). Furthermore, individuals were more likely to see their own selfies as ironic, while they were less likely to attribute self-irony to others' selfies. Instead, the study found other's selfie-taking behaviors as almost exclusively self-presentational (Diefenbach & Christoforakos, 2017).

Self-Disclosure

Jourard (1971) defined self-disclosure as the "act of revealing personal information to others" (p. 2). It makes us transparent to others through our communication (Jourard, 1971). Meanwhile, Altman and Taylor (1987) called self-disclosure a form of social penetration. They argued that the act of self-disclosure is a gradual process that allows us to learn about others, and therefore, penetrate deeper layers of personal depth (Altman & Taylor, 1987). Others believe self-disclosure is a dialectical process that occurs in waves, pinging back and forth from a sense of distance to closeness (Brown, Werner & Altman, 1996). This is due to the inner struggle we experience as we want to reveal ourselves to others, yet simultaneously work to conceal that information. Pearce & Sharp (1973) separated self-disclosure from confession and/or revelation. They argued self-disclosure is a voluntary process, while

confession is forced or coerced communication, and revelation is unintentional or inadvertent by nature (Pearce & Sharp, 1973).

Disclosure may fulfill needs for social connectedness and belonging (Tamir & Mitchell, 2012), but may come at a price, requiring the individual sharing their personal information to become vulnerable (Altman, 1975). Selective disclosure may minimize that level of vulnerability, while allowing the discloser to satisfy their desired goals.

Derlega and Grzelak (1979) proposed the functional theory of self-disclosure, positing that disclosure goals activate the self-disclosure decision-making process and help determine the content of the disclosure. Further, Derlega and Grzelak (1979) proposed that self-expression, self-clarification, social validation, relationship development, and social control were the five basic functions of self-disclosure.

Bazarova and Choi (2014) conducted one of the first studies of self-disclosure via SNS, and that investigation is used as a blueprint for the current study. A survey of undergraduate students was conducted, as well as an analysis of students' Facebook status updates, wall posts and private messages (Bazarova & Choi, 2014). The study employed Derlega and Grzelak's (1979) five primary goal categories, plus added two new categories, information sharing and information storage and entertainment, based on Lee et al.'s (2008) categorization of disclosure motivations in blogs.

The present study utilized the same seven categories of self-disclosure goals as Bazarova and Choi (2014). Those goals included 1.) identity clarification, 2.) relational development, 3.) social validation, 4.) social control and resource gain, 5.) self-expression and relief of distress, 6.) information sharing to benefit others, and 7.) information storage and entertainment. These seven categories are based upon a functional theory of self-disclosure which hypothesizes that disclosure goals or subjective reasons for self-disclosure activate disclosure decision-making (Derlega & Grzelak, 1979). Individuals self-disclose hoping to attain social rewards.

Identity clarification is considered an intrapersonal goal and occurs when an individual seeks to convey one's personal identity to others (Bazarova & Choi, 2014). Relational development has long been found to be one of the main motivators for self-disclosure (Altman & Taylor, 1973; Laurence & Barrett, 1998; Lee et al., 2008). This motivator revolves around developing and maintaining friendships, familial or dating relationships. Social validation is an attempt to seek approval and support from others (Bazarova & Choi, 2014). Social control and resource gain occurs when a person tries to somehow obtain a benefit through their self-disclosure, or to control social outcomes within their group of friends and family. Self-expression and relief of distress allows one to release emotions through a form of self-expression. In this case, a selfie would be that form of self-expression. Information sharing to benefit others comes from a desire to share information with others that may be of a personal nature, or may emerge from a desire to let others in on something the communicator has discovered. Generally, information sharing is thought to be "benevolent" in nature (Lee et al., 2008). Information storage involves the disclosure of daily life experiences for the purpose of recording personal information so as to be able to access it or reflect on it at a later date (Lee et al., 2008).

Wan, Wu & Lu (2015) argued the selfie is a high form of self-disclosure. In their study of selfies used by product endorsers, they found that social interactivity can moderate the effect

of the endorsers' attractiveness and credibility on consumers' attitudes (Wan, Wu & Lu, 2015). Stefanone, Lackaff & Rosen (2011) found females are more likely to share photos of themselves online if they base their self-worth on their appearance. They also linked narcissism and low self-esteem to sharing a high number of pictures of oneself on-line (Stefanone, Lackaff & Rosen, 2011).

Research Questions

This study used survey research to investigate how selfie-posting behaviors serve as a form of self-disclosure on various social media platforms. Specifically, respondents were asked about their selfie-posting behaviors on Facebook, Twitter, Instagram, Snapchat and Linked In. While Wan et al. (2015) found selfies to be a significant form of self-disclosure, this study looked to determine how self-disclosure goals may vary by SNS when sharing personal photos.

Another variable that deserves attention in terms of selfie-posting behavior is frequency. While narcissism was found to correlate with selfie-sharing in other studies (Kapidzic, 2013; Wang, Jackson, Zhang, & Su, 2012), it would seem logical that those who post a higher number of selfies might fulfill different self-disclosure goals than those who post infrequently.

Finally, age and gender of SNS users posting selfies were analyzed to determine whether those variables impact self-disclosure goals met via the behavior. Our research questions are as follows:

- RQ 1: Which self-disclosure goals are met by posting selfies to social media?
- RQ 2: Do self-disclosure goals met by posting selfies vary by social media platform?
- RQ 3: Do age and gender impact the self-disclosure goals met by posting selfies to social media?

Method

In order to measure the relationship between individuals' selfie-posting behaviors and self-disclosure fulfillment, a web-based survey was put in the field after receiving IRB approval. Using Survey Monkey software, a 39-item questionnaire was developed. A five-point Likert-type scale was used to measure respondents' reactions to multiple self-disclosure goals. The survey also measured individuals' selfie-posting frequency on a variety of social media, including Facebook, Twitter, Instagram, Snapchat and LinkedIn. Basic demographic information was collected from all participants in order to determine whether gender and/or age impacted self-disclosure motivations via selfie sharing, and whether those demographic variables impacted frequency of use of individual SNS.

Invitations to complete the survey were circulated on social media sites, including Facebook, Instagram and Twitter in March 2016. Social media users were asked to complete the survey and to share the link to the survey with their social media connections. Further invitations were sent to undergraduate and graduate students at a four-year University in the Midwest. The resulting snowball sample yielded 366 ($N=366$) responses.

Findings

A total of 366 participants contributed to the study. Most participants completed the question related to gender ($N=364$) with 73.9% of respondents identifying as female ($N=269$) and 26.1% identifying as male ($N=95$). Although the participants skewed female, this sample correlates to a similar study conducted by Bazarova and Choi (2014).

For age, 26% of respondents ($N=95$) reported their age as 23 or under. 25.7% of respondents ($N=94$) reported their age as between 24 and 34. 23% of respondents ($N=84$) reported their age as between 34 and 44. The remaining 25.4% ($N=93$) reported their age as between 45 and 78. These data provide support for a good representative cross sampling of the population.

Regarding ethnicity, all but one participant answered the question ($N =365$). Of the respondents, 89.3% ($N=326$) identified as Caucasian. The study lacked in minority representation with only 4.4% ($N=16$) identifying as African-American/Black, 2.2% ($N =8$) identifying as Native American, and 1.1% ($N=4$) each identifying as Hispanic/Latino, Middle-Eastern/Arab-American, and Asian/Asian-American. Additionally, less than 1% ($N=3$) identified as Other, citing a mix of races as their response.

Social media usage varied significantly among the apps surveyed, with Facebook scoring the highest usage at 98.1% ($N= 359$) among responses (Table 1):

<i>SNS Usage</i>		
Platform	N	Percent
Facebook	359	98.1
Twitter	227	66.6
Instagram	217	64.2
Snapchat	158	49.2
LinkedIn	207	62.7

Table 1: Social Media Platforms

RQ 1: Which self-disclosure goals are met by posting selfies to social media?

The self-disclosure goals provide very weak explanatory influence on why participants are posting selfies in a week or month, however the regression results were found to be statistically significant. When considering all the of the selfies participants posted across all social media platforms in the past week, the self-disclosure goals have a statistically significant combined effect ($Adj R^2 = .040, p < .01$), but only Information Storage & Entertainment ($\beta = .232, p < .05$), is a statistically significant individual self-disclosure goal (Table 2). When considering all the of the selfies participants posted across all social media platforms in the past month the self-disclosure goals have a statistically significant combined effect ($Adj R^2 = .038, p < .01$), and again only Information Storage & Entertainment ($\beta = .232, p < .05$), is a statistically significant individual self-disclosure goal (Table 3). Overall, the main self-disclosure goal that predicts why people are posting selfies on social media is to store information for future access and entertain others.

RQ 2: Do self-disclosure goals met by posting selfies vary by social media platform?

When looking at how many selfies participants have posted on specific social media platforms, different self-disclosure goals emerged as statistically significant predictors. The self-disclosure goals explained the most variance in how many selfies participants posted on Facebook in the past month ($Adj R^2 = .132, p < .001$), and the least variance in how many selfies participants posted on Twitter in the past week ($Adj R^2 = .046, p < .01$) (Table 2 and 3). This means that the combined effect of the self-disclosure goals in this sample was able to explain between just over thirteen to just under five percent of variance in number of selfies these participants in the sample are posting.

When examining which self-disclosure goals were most influential to posting selfies, the results were slightly different depending on the social media sites and the time frame being considered. Information Storage and Entertainment had a statistically significant positive influence on how many selfies participants posted on Facebook in the past month ($\beta = .255, p < .01$), but Information Storage and Entertainment had no statistical impact on how many selfies participants posted on Facebook in the past week. Information Storage and Entertainment had a statistically significant positive influence on how many selfies participants posted on Instagram in the past week ($\beta = .221, p < .01$); on Instagram in the past month ($\beta = .221, p < .01$); on Twitter in the past week ($\beta = .214, p < .01$); and on Twitter in the past month ($\beta = .228, p < .01$). Relational Development had a negative influence on posting selfies on Twitter in the past week ($\beta = -.184, p < .01$); and on Twitter in the past month ($\beta = -.190, p < .01$). As the relationship development was more important to the participants the less likely they were to post selfies on Twitter. Relationship Development did have a statistically significant positive influence on how many selfies participants posted on Facebook in the past month ($\beta = -.139, p < .05$); but had no influence on how many selfies participants posted on Facebook in the past week, nor did it have an influence on how many selfies were posted on Instagram in the past week nor month. Social Control and Resource Gain only had statistically significant positive influence on how many selfies participants posted on Instagram in the past month ($\beta = -.125, p < .05$). Information Sharing to Benefit Others only had a statistically significant positive influence on posting selfies on Facebook in the past week ($\beta = .219, p < .01$).

RQ 3: Do age and gender impact the self-disclosure goals met by posting selfies to social media?

Gender and age were added to the self-disclosure goal variables. Gender had no impact on how many selfies were posted overall or for any social media platform. Therefore, men are just as likely to post selfies as women according to the results from this sample. However, age had a statistically significant positive influence on posting selfies on Facebook in the past week ($\beta = .134, p < .05$); and on posting selfies on Facebook in the past month ($\beta = .186, p < .01$). Therefore, as age increased in the sample, participants were more likely to post selfies on Facebook. Conversely, age had a statistically significant negative influence on posting selfies on Snapchat in the past week ($\beta = -.298, p < .001$); and on posting selfies on Snapchat in the past month ($\beta = -.276, p < .001$). As the age in sample went down, participants were more likely to post selfies on Snapchat. These results indicate that older participants in the sample favored posting their selfies on Facebook while younger participants favored posing selfies on Snapchat. It is important to note that none of the self-disclosure goals had a statistically significant effect on posting selfies on Snapchat in this sample.

Most of the statistically significant results from the first regression held significance with the addition of age and gender to the models. However, the addition of age and gender

illuminated other self-disclosure effects on posting selfies. With addition of age and gender, Information Storage and Entertainment was a statistically significant predictor of posting selfies on Facebook in the past week ($\beta = .182, p < .05$). With the addition of age and gender, Identity Clarification was a statistically significant predictor of how many selfies participants posted on Twitter in the past week ($\beta = .167, p < .05$). However, with the addition of age and gender, Social Control and Resource Gain had no statistical influence on how many selfies participants posted on Instagram.

	Overall	Facebook	Instagram	Twitter	Snapchat	LinkedIn
Identity Clarification	-.024	.103	.006	.142		
Relational Development	-.049	.077	.091	-.184 ^b		
Social Validation	.007	-.085	-.020	.026		
Social Control & Resource Gain	.002	-.074	.042	-.057		
Self Expression & Relief of Distress	-.014	-.046	-.081	-.140		
Information Sharing to Benefit Others	.085	.219 ^b	.066	.100		
Information Storage & Entertainment	.232 ^c	.142	.221 ^b	.214 ^b		
Adjusted R²	0.040^b	0.105^c	0.059^c	0.046^b	N.S.	N.S.

^a $p < .05$; ^b $p < .01$; ^c $p < .001$

Table 2: Regression Tables for Posting Selfies in the Past Week

	Overall	Facebook	Instagram	Twitter	Snapchat	LinkedIn
Identity Clarification	-.024	.005	-.031	.109		
Relational Development	-.049	.139 ^a	.098	-.190 ^b		
Social Validation	.007	-.013	.072	.066		
Social Control & Resource Gain	.002	.006	.125 ^a	.029		
Self Expression & Relief of Distress	-.014	-.044	-.024	-.112		
Information Sharing to Benefit Others	.085	.117	.042	.081		
Information Storage & Entertainment	.232 ^a	.255 ^b	.221 ^b	.228 ^b		
Adjusted R²	0.038^b	0.132^c	0.117^c	0.062^c	N.S.	N.S.

^a $p < .05$; ^b $p < .01$; ^c $p < .001$

Table 3: Regression Tables for Posting Selfies in the Past Month

	Overall	Facebook	Instagram	Twitter	Snapchat	LinkedIn
Identity Clarification	.010	.099	.030	.167 ^a	-.006	
Relational Development	-.004	.063	.085	-.187 ^b	-.019	
Social Validation	-.067	-.099	-.049	.018	-.050	
Social Control and resource gain	-.079	-.073	.051	-.067	-.072	
Self Expression and Relief of Distress	-.091	-.009	-.076	-.155	-.076	
Information Sharing to Benefit Others	.133	.216 ^b	.067	.100	.096	
Information Storage and Entertainment	.187 ^a	.182 ^a	.216 ^b	.196 ^a	.144	
Age	-.273 ^c	.134 ^a	.016	-.068	-.298 ^c	
Gender (Female)	.046	.079	.089	.024	.025	
Adjusted R²	0.099^c	0.124^c	0.061^b	0.045^b	0.087^c	N.S.

^ap < .05; ^bp < .01; ^cp < .001

Table 4: Regression Tables for Posting Selfies in the Past Week

	Overall	Facebook	Instagram	Twitter	Snapchat	LinkedIn
Identity Clarification	.048	-.011	.019	.130	.048	
Relational Development	-.051	.124 ^a	.089	-.192 ^b	-.075	
Social Validation	-.010	-.026	.045	.058	-.013	
Social Control and resource gain	-.036	.018	.109	.022	-.046	
Self Expression and Relief of Distress	-.066	.002	-.043	-.124	-.072	
Information Sharing to Benefit Others	.089	.114	.043	.082	.066	
Information Storage and Entertainment	.169 ^a	.303 ^c	.192 ^a	.213 ^b	.126	
Age	-.253 ^c	.186 ^b	-.101	-.052	-.276 ^c	
Gender (Female)	.026	.083	.073	.023	.010	
Adjusted R²	0.089^c	0.165^c	0.123^c	0.059^b	0.074^c	N.S.

^ap < .05; ^bp < .01; ^cp < .001

Table 5: Regression Tables for Posting Selfies in the Past Month

Discussion

Regarding the self-disclosure goals, results indicated participants posted selfies primarily to meet the information storage and entertainment self-disclosure function. Only three self-disclosure functions registered any statistical significance when posting selfies weekly. Participants posted selfies to Twitter weekly to meet identity clarification, relational development, and information storage and entertainment disclosure functions. Weekly posting to Instagram only registered statistical significance for the information storage and entertainment self-disclosure function. Posts to Facebook and Twitter met relational development and information storage and entertainment functions, and Instagram posting met only the information storage and entertainment function. Interestingly, LinkedIn registered no statistical significance for daily or weekly posting, but did register significance to meet the self-expression and relief of distress self-disclosure function for monthly posting.

Collected data indicated survey participants posted selfies to Twitter and to Instagram to fulfill the same self-disclosure functions. Posting for identity clarification, relational development, social validation, self-expression and relief of distress, information sharing to benefit others, and information storage and entertainment were all found to be statistically significant. For frequency of posting, Instagram presented as the most popular medium for daily posting, registering statistical significance when posting selfies for social control and resource gain, identity clarification, and relational development. Facebook also registered significance for daily posting to meet the social control and resource gain self-disclosure function.

The importance of the relational development self-disclosure goal seems to somewhat contradict the findings of Bazarova & Choi (2014) that relational development was more prominent in Facebook wall posts and private messages, rather than in status updates. The selfies posted on Facebook by participants of our study were status updates, and were at least partially posted in an effort to further develop relationships with friends and family. However, relational development has been found as a main motivator for self-disclosure, generally speaking (Altman & Taylor, 1973; Lee et al., 2008).

Younger participants used Snapchat more frequently while older participants used Facebook more frequently. The results for age regarding weekly posting held true for monthly posting for Facebook and Snapchat. Snapchat emerged as the leader for daily posts with younger demographics; as the age of the participant decreased, the number of selfies to Snapchat increased. When looking at frequency of selfie-posting over the course of a week, age again emerged as a factor. Younger participants utilized Snapchat more frequently for posting selfies, and older participants posted more frequently to Facebook. Although the study found no statistical significance for social control and resource gain for any media platform, age was a related factor for LinkedIn, Twitter, and Facebook. Age was also a related factor when posting selfies for information storage and entertainment for all media except Instagram. Gender did not present as a factor. This conflicts with several earlier studies on selfie-posting on social media, including Ross, et al (2009) which found young women posted more selfies than men.

Conclusion

This study is a first step in determining how selfie-posting on various forms of social media platforms interacts with self-disclosure. Our collected data points toward entertainment and

information storage as the most popular self-disclosure goals for individuals posting selfies to social media, and that did not vary based on gender. Twitter users appear to post selfies for these reasons, but also identity clarification and relational development. Identity clarification may relate to the medium's more public nature. Tweets are available to an unknowable number of Twitter users, unless the individual keeps their tweets private, whereas SNS platforms such as Facebook, Instagram and Snapchat tend to be targeted messages to "friends." Therefore, it may be that Twitter users who post selfies do so to clarify their personality or other personal attributes to a public who does not know them on an interpersonal level.

Relational development was also found to be a significant form of self-disclosure for those posting selfies on both Twitter and Facebook, which may give us hints as to users' reasons for choosing to share such photographic material on platforms. Future research should look more closely at the specific audiences for the selfies posted, and the audience for each posting. There may be correlation between the perceived or intended audience of the selfie and the self-disclosure goals. This research does not take that variable into account.

Instagram users were likely to post selfies to the platform for both entertainment and information storage purposes. Seeing as photos and videos are the only form of "post" that can be made on the medium, this finding gives us some insight into the general motivations for Instagram usage. These findings regarding selfie-posting on Instagram remained constant regardless of age.

As one might expect, younger SNS users posted selfies most often to Snapchat, while older users posted selfies most often to Facebook, reinforcing what is known about the demographics of the two SNS. Surprisingly, Snapchat users' selfie-posting did not correlate with any of the commonly measured self-disclosure functions, which begs for further investigation. What motivates younger users to post selfies to this SNS platform? Seeing as it is the fastest growing platform amongst young users, it is important to determine how Snapchat differs from the other popular SNS platforms in terms of its perceived benefits and self-disclosure opportunities by its users.

The weaknesses of this survey involve the fact that survey research relies on self-reported data from users, rather than verifying the posted content via some form of content analysis. Also, female respondents outnumbered male respondents by a ratio of nearly three to one, which could impact the results. Future research should consider using a more detailed survey with additional questions that account for the number of friends or followers of each user, and include additional queries for each of the known self-disclosure goals. An open-ended question asking selfie-posters their reasons for posting selfies would also lead to more rich motivational data.

Future investigators may also want to include measures that would look into the so-called "selfie paradox," to further determine why individuals seem to have more positive feelings about their own selfie-posting behaviors than others'. Additional study could help determine why individuals' self-disclosure via selfies is interpreted less positively than posters expect. Our study focused solely on the posting of selfies and investigated the reasons for those posts. It did not look at the way those selfies were received by friends, family or other followers.

References

- Alhabash, S., Chiang, Y., & Huang, K. (2014). MAM & U&G in Taiwan: Differences in the uses and gratifications of Facebook as a function of motivational reactivity. *Computers in Human Behavior*, 35(1), 423–430. <https://doi.org/10.1016/j.chb.2014.03.033>
- Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, crowding*. Monterey, CA: Brooks/Cole.
- Altman, I., & Taylor, D. (1987). Communication in interpersonal relationships: Social penetration theory. In M. E. Roloff & G. R. Miller (Eds.), *Interpersonal processes: New direction in communication research* (pp. 257–277). Newbury Park, CA: Sage.
- Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior*, 26(6), 1289–1295. <https://doi.org/10.1016/j.chb.2010.03.018>
- Bazarova, N. N., & Choi, Y. H. (2014). Self-disclosure in social media: Extending functional approach to disclosure motivations and characteristics on social network sites. *Journal of Communication*, 64(1), 635–657. <https://doi.org/10.1111/jcom.12106>
- Carr, A. (2015). Inside Snapchat CEO Evan Spiegel's entertainment empire. *Fast Company*. Retrieved from <http://www.fastcompany.com/3051612/innovation-agents/media-tech-and-advertising-to-snapchat-i-aint-afraid-of-no-ghost>
- Cohen, D. (2016, Jan 28). Everything you need to know about Facebook's Q4 and full-year 2015 results. *Social Times*. Retrieved from <http://www.adweek.com/socialtimes/q4-full-year-2015-results/633437>
- Costa, P.T., & McCrae, R. R. (1992). *Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Derlega, V. J., & Grzelak, J. (1979). Appropriateness of self-disclosure. In G. J. Chelune (Ed.), *Self-disclosure: Origins, patterns, and implications of openness in interpersonal relationships* (pp. 151–176). San Francisco, CA: Jossey-Bass.
- Diefenbach, S. & Christoforakok, (2017). The selfie paradox: Nobody seems to like them yet everyone has reasons to take them. An exploration of psychological functions of Selfies in self-presentation. *Frontiers in Psychology*. 8(1) Article 7. <https://doi.org/10.3389/fpsyg.2017.00007>
- Dollinger, M. (2015). Social media: Cui bono? Who benefits from all this socialness? *Business Horizons*, 58(3), 235–236. <https://doi.org/10.1016/j.bushor.2014.11.007>
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26–34. <https://doi.org/10.1037/0003-066X.48.1.26>
- Gosling, S. D., Augustine, A. A., Vazire, S., Holtzman, N. & Gaddis, S. (2011). Manifestations of personality in online social networks: Self-reported Facebook-related behaviors and observable profile information. *Cyberpsychology, Behavior, and Social Networking*, 14(9) 483–488. <https://doi.org/10.1089/cyber.2010.0087>
- Isaac, M. (2016, March 15). Instagram may change your feed, personalizing it with an algorithm. *The New York Times*. Retrieved from http://www.nytimes.com/2016/03/16/technology/instagram-feed.html?_r=0.
- Jordan-Conde, Z., Mennecke, B. & Townsend, A. (2014). Late adolescent identity definition and intimate disclosure on Facebook. *Computers in Human Behavior*, 33(1), 356–366. <https://doi.org/10.1016/j.chb.2013.07.015>
- Jourard, S. M. (1971). *Self-disclosure: An experimental analysis of the transparent self*. New York: Wiley-Interscience.

- Kapidzic, S. (2013). Narcissism as a predictor of motivations behind Facebook profile picture selection. *Cyberpsychology, Behavior, and Social Networking*, 16(1), 14–19. <https://doi.org/10.1089/cyber.2012.0143>
- Klier, J., Klier, M., & Wigand, R. T. (2014). The connectedness, pervasiveness and ubiquity of online social networks. *Computer Networks*, 75(1), 473–476. <https://doi.org/10.1016/j.comnet.2014.11.016>
- Lee, E., Ahn, J., & Kim, Y. J. (2014). Personality traits and self-presentation at Facebook. *Personality and Individual Difference*, 69(1), 162–167. doi:10.1089/cpb.2006.9.618
- Malik, A., Dhir, A., & Nieminen, M. (2016). Uses and gratifications of digital photo sharing on Facebook. *Telematics and Informatics*, 33(1), 129–138. <https://doi.org/10.1016/j.tele.2015.06.009>
- McKinney, B., Kelly, L., & Duran, R. (2012). Narcissism or openness? College students' use of Facebook and Twitter. *Communication Research Reports*, 29(2), 108–118. <https://doi.org/10.1080/08824096.2012.666919>
- Moore, K., & McElroy, J. C. (2012). The influence of personality on Facebook usage, wall postings, and regret. *Computers in Human Behavior*, 28(1), 267–274. <https://doi.org/10.1016/j.chb.2011.09.009>
- Muise, A., Christofides, E., & Desmarais, S. (2009). More information than you ever wanted to know – Does Facebook bring out the green-eyed monster of jealousy? *CyberPsychology & Behavior*, 12(4), 441–444. <https://doi.org/10.1089/cpb.2008.0263>
- Omarzu, J. (2000). A disclosure decision model: Determining how and when individuals will self-disclose. *Personality and Social Psychology Review*, 4(2), 174–185. https://doi.org/10.1207/S15327957PSPR0402_05
- Ong, Y. L., Ang, R. P., Ho, J. C. M., Lim, J. C. Y., Goh, D. H., Lee, C. S. & Chua A. Y. K. (2011). Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences*, 50(2), 180–185. <https://doi.org/10.1016/j.paid.2010.09.022>
- O'Reilly, L. (2015, Dec 28). Why Snapchat is 'the one to watch in 2016 – at the expense of Twitter. *Business Insider*. Retrieved from <http://www.businessinsider.com/why-snapchat-is-the-one-to-watch-in-2016-at-the-expense-of-twitter-2015-12>
- Pearce, W. B., & Sharp, S. (1973). Self-disclosing communication. *The Journal of Communication*, 23(4), 409–425. <https://doi.org/10.1111/j.1460-2466.1973.tb00958.x>
- Peek, H. The selfie in the digital age: From social media to sexting." *Psychiatric Times*, December, 2014, p. 28G.
- Qiu, L., Lu, J., Yang, S., Qu, W., & Zhu, T. (2015). What does your selfie say about you? *Computers in Human Behavior*, 52, 443–449. <https://doi.org/10.1016/j.chb.2015.06.032>
- Radulova, L. (2015, April 2015). Australia revealed to have invented the word 'selfie' as more than 2000 Aussie phrases and words are added to Oxford Dictionaries. *Daily Mail Australia*. Retrieved from <http://www.dailymail.co.uk/news/article-3061118/Australia-revealed-invented-word-selfie-2000-Aussie-phrases-words-added-Oxford-Dictionaries.html>
- Ross, C., Orr, E. S., Sisic, M., Arseneault, J. M., Simmering, M. G., & Orr, R. R. (2009). Personality and motivations associated with Facebook use. *Computers in Human Behavior*, 25(2), 578–586. <https://doi.org/10.1016/j.chb.2008.12.024>
- Ryan, T., & Xenos, S. (2011). Who uses Facebook? An investigation between the Big Five, shyness, narcissism, loneliness, and Facebook usage. *Computers in Human Behavior*, 27, 1658–1664. <https://doi.org/10.1016/j.chb.2011.02.004>
- Scheller, S. H. (2015). A picture is worth a thousand words: The legal implications of revenge porn. *North Carolina Law Review*, 93(2), 551–594.

- Shibley, J. W. (2015). Selfie love: Public lives in an era of celebrity pleasure, violence, and social media. *American Anthropology*, *117*(2), 403–413. <https://doi.org/10.1111/aman.12247>
- Sorokowski, P., Sorokowska, A., Oleskiewicz, A., Frackowiak, T., Huk, A., & Pisanski, K. (2015). Selfie posting behaviors are associated with narcissism among men. *Personality and Individual Differences*, *85*(1), 123–127. <https://doi.org/10.1016/j.paid.2015.05.004>
- Stephanone, M. A., Lackaff, D., & Rosen, D. Contingencies of self-worth and social-networking-site behavior. *Cyberpsychology, Behavior, and Social Networking*, *14*(1–2), 41–49. <https://doi.org/10.1089/cyber.2010.0049>
- Syn, S. Y. (2014). Personal documentation on a social network site: Facebook, a collection of moments from your life? *Archival Science*, *14*(2), 95–124. <https://doi.org/10.1007/s10502-013-9208-7>
- Tamir, D. I., & Mitchell, J. P. (2012). Disclosing information about the self is intrinsically rewarding. *Proceedings of the National Academy of Sciences of the United States of America*, *109*(21), 8038–8043. <https://doi.org/10.1073/pnas.1202129109>
- Treem, J. W., & Leonardi, P. M. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Communication Yearbook*, *36*(1), 143–189. <https://doi.org/10.2139/ssrn.2129853>
- The Oxford Dictionaries word of the year 2013 is... Retrieved from <http://blog.oxforddictionaries.com/2013/11/word-of-the-year-2013-winner/>
- Wade, N. J. (2014). The first scientific “selfie?” *Perception*, *43*(11), 1141–1144.
- Wan, J., Wu, T., & Lu, Y. (2015). How selfies change the effect of product endorsers in social media: The role of self-disclosure and social interactivity. *PACIS 2015 Proceedings*. Paper 91.
- Wang, J-L., Jackson, L.A., Zhang, D-J., & Su, Z-Q. (2012). The relationships among the Big Five personality factors, self-esteem, narcissism, and sensation-seeking to Chinese university students’ uses of social networking sites (SNSs). *Computers in Human Behavior*, *28*(1), 2313–2319. <https://doi.org/10.1016/j.chb.2012.07.001>

Corresponding Author: Patricia Williamson

E-Mail address: willilpa@cmich.edu