Instagram and American Teens: Understanding Motives for Its Use and Relationship to Excessive Reassurance-Seeking and Interpersonal Rejection

Pavica Sheldon 1* and Megan Newman 1

¹Department of Communication Arts, University of Alabama in Huntsville, AL, 35899

Drawing from the uses and gratifications theory, this study explored how excessive reassurance-seeking (the tendency to repeatedly request reassurance from close others about one's lovability and worth) and interpersonal rejection relate to Instagram use among minors. Participating were pre-teens and teens, ages 12 to 17 years. Results from structural equation modeling analysis revealed that teens who were driven by gratifications of self-promotion and creativity were more likely to suffer

from excessive reassurance-seeking. Excessive reassurance-seeking also predicted the number of hours they spent on Instagram. In addition, those who experienced interpersonal rejection were more likely to use Instagram to escape from reality.

Keywords: Instagram; teens; social media; excessive reassurance-seeking, interpersonal rejection

(Lenhart & Page, 2015). One of the most popular social media platforms among adolescents is Instagram. University of Chicago's 2017 survey of American teenagers age 13-17 revealed that teens have shifter their favored social media platforms and are now most likely to use Instagram and Snapchat (NORC at the University of Chicago, 2017). Instagram was launched in 2010 as a mobile photo and video-sharing application. The app gained popularity quickly due to its enhanced photo-editing features allowing users to take, edit, and upload the photos

early 90% of American teens report being active users of social media

Despite its growing popularity, research on Instagram is still in its infancy, and most studies have been conducted with participants 18 years old or older. As teens spend more time on Instagram, it is important to understand how they use it. Some scholars

instantly, and with high quality (Lee, Lee, Moon, & Sung, 2015).

^{*}Corresponding Author: pavica.sheldon@uah.edu, 256-824-2305

(e.g., Frison & Eggermont, 2017; Primack et al., 2017; Weinstein, 2017) suggested the associations between Instagram use and young adults' mental health. For example, Frison and Eggermont's (2017) self-report data from 671 Flemish adolescent revealed that Instagram browsing at Time 1 was related to increases in adolescents' depressed mood at Time 2. Furthermore, Primack et al. (2017) survey of 1,787 American young adults uncovered that participants who used 7-11 social media platforms had substantially higher odds of having increased levels of both depression and anxiety symptoms compared to those who used 0-2 social media platforms.

As evident, these studies focused on investigating how social media impacts young adults' mental health. No study looked at how specific depression-related behaviors, such as reassurance-seeking and interpersonal rejection, might predict Instagram use. According to uses and gratifications theory (U&G, Katz, Blumler, & Gurevitch, 1973-4), individual differences influence motivations for engaging with different media. Thus, one's psychological well-being might be related to motives and outcomes of Instagram use. Instagram offers a number of features (likes, comments) that might be attractive to those who seek reassurances from others or experience interpersonal rejection.

THEORECTICAL BACKGROUND

Uses and Gratifications of Social Media

The assumption of U&G theory is that people are active participants in seeking the media that will satisfy their specific needs (Katz, Blumler, & Gurevitch, 1973-4). Five categories of needs apply to all forms of media: 1) Cognitive needs: needs related to strengthening information, knowledge, and understanding; 2) Affective needs: needs related to strengthening aesthetic, pleasurable, and emotional experiences; 3) Personal integrative needs: needs related to strengthening credibility, confidence, stability, and status; 4) Social integrative needs: needs related to strengthening contact with family and friends; and 5) Tension release needs: needs related to escape and diversion (Katz, Gurevitch, & Hass, 1973).

U&G has stimulated a lot of research of both traditional and new media. In the last ten years a number of studies have examined uses and gratifications for Facebook use (e.g., Krause, North, & Heritage, 2014; Sheldon, 2008), Twitter (e.g., Chen, 2011), and

Pinterest (Mull & Lee, 2014). This has resulted in new gratifications being added to explain how individuals use social media. Social media have also changed the importance of some gratifications. For example, Whiting and Williams (2013) identified several uses and gratifications of social media that did not exist when the original U&G theory was developed. This includes convenience, expression of opinion, and knowledge about others. Similarly, Mull and Lee (2014) discovered new motivations for Pinterest usage: fashion, entertainment, creative projects, virtual exploration, and organization. Finally, Sheldon et al. (2017) proposed a five-factor solution to explain gratifications for Instagram use: social interaction, documenting, diversion, self-promotion, and creativity.

Motives for Instagram Use

Social Interaction. Whiting and Williams (2013) defined social interaction as "watching what others are doing." According to U&G theory, individuals interact with each other to achieve a sense of belonging (Rubin, 1986). In recent years, opportunities for social interaction via social media such as Facebook, Instagram, Snapchat, or Skype have greatly expanded, as users organize events, share photos, and chat with family and friends.

Documentation. Sheldon and Bryant (2016) identified a new motivation for Instagram use that they termed *documentation* – i.e., individuals use social media to store images and memories so that they can remember past events. The documentation motive measures the extent to which users want to remember special events by sharing their photos and videos on the site.

Diversion. This motive was proposed by McQuail, Blumler and Brown (1972) and was defined as an escape from boredom or problems, and emotional release. A number of studies (e.g., Krause, North, & Heritage, 2014; Sheldon, 2008) confirm that diversion accounts for much social media use. It is about gratifications derived from pleasurable experiences. In this study diversion includes escaping from the stresses of daily life. Chen and Kim (2013) found that among social media users with high privacy concerns, those who seek greater gratifications of diversion from those sites had a higher problematic social media use than those who seek less diversion from those sites.

Self-Promotion. "Self-Promotion" was identified in previous U&G studies (e.g., Charney & Greenberg, 2001; Sheldon & Bryant, 2016). The reasoning behind broadcasting ourselves via personalized new technologies reflects our quest for fame and the need to feel seen and valued (Greenwood, 2013). One major goal of many Instagram users is to gain a large number of "likes" for their posts. Such "likes" validate their popularity and status among peers (Dumas et al., 2017).

Creativity. Creativity is also one of the newest discovered gratifications of social media use. In this study, creativity is defined as showing off one's skills and creating art. As a visually-based social networking site, there are ample opportunities for users to portray creative talents on Instagram. Instagram offers a number of special filters that allow users to edit the colors, filters, and resolutions of images before they are posted. Then there are creative captions and hashtags.

Research suggests that the patterns behind social media usage are, in part, a function of demographic and personality variables. For example, Lin, Lee, Jin, and Gilbreath (2017) found that extraversion and openness influence motivations for Facebook and Instagram use.

Excessive Reassurance-Seeking and Interpersonal Rejection

Excessive reassurance-seeking (ERS) is the relatively stable tendency to repeatedly request reassurance from close others about one's lovability and worth (Joiner, Alfano, & Metalsky, 1992). ERS seems to contribute to interpersonal rejection and depressive symptoms (Joiner et al., 1999). McClintock, McCarrick, and Anderson (2014) found that ERS is also related to interpersonal dependency. For example, one might engage in ERS to alleviate fears about how others are evaluating them (Coyne, 1976). This might be common among adolescents as the investment in feedback from peers increases dramatically during those years (Prinstein et al., 2015). Peers become not only the primary source of social support, but adolescents engage in social comparison and reflected appraisal. This is especially true for individuals with low self-esteem, as they compare to others not only in terms of body image but also in terms of popularity, creativity, and life success (Ahadzadeh, Sharif, & Ong, 2017; Sheldon et al., 2017).

Individuals who engage in ERS often experience deterioration of the interpersonal relationships. Several studies (e.g., Benazon, 2000; Joiner, 1999; Joiner et al., 1992) have found that excessive reassurance-seeking is related to interpersonal rejection. Rejection-sensitive individuals are more likely to seek reassurances and perceive rejection in others (Starr & Davila, 2008). Swann, Wenzlaff, and Tafarodi (1992) argued that rejection is a by-product of the natural selection process, as depressed individuals actively select friends who view them negatively. Overall, adolescence is a vulnerable period where individuals are at risk for low self-esteem and the onsets of depression –especially if they experience an unsupportive and stressful environment or otherwise unsatisfying interpersonal relationships (McLaughlin & King, 2015). Therefore, in this study, we test predict that excessive reassurance-seeking (as a depression-related behavior) will be related to all five motives for Instagram use.

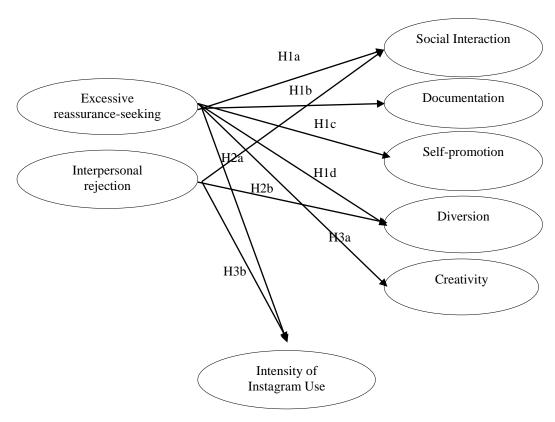
Hypothesis 1: Excessive reassurance-seeking will be a positive predictor of using Instagram to satisfy needs for (a) social interaction, (b) documentation, (c) diversion, (d) self-promotion, and (e) creativity.

We also speculate that some of the motives for Instagram use might be related to interpersonal rejection. Social interaction (or lack of it) might be related to interpersonal rejection as users experience a decrease or an increase of social contact. Similarly, diversion might be associated with interpersonal rejection. A socially rejected teen would likely want to promote himself/herself on Instagram as a way to increase popularity. Thus, we propose:

Hypothesis 2: Interpersonal rejection will be a positive predictor of using Instagram to satisfy needs for: (a) social interaction and (b) diversion.

Based on previous research (Blomfield Neira & Barber, 2014; Moreno et al., 2011; Primack et al., 2017) showing an association between increased social media use and depressive symptoms, including interpersonal rejection and excessive reassurance-seeking, we state:

Hypothesis 3: (a) Excessive reassurance-seeking and (b) interpersonal rejection will be positively associated with the intensity of Instagram use. The conceptual model is presented in Figure 1.



Note: *p<0.05, **p<0.01, ***p<0.001

Figure 1. Conceptual Model

METHODS

Participants and Procedures

Participating were 181 American pre-teens and teens (99 boys, 82 girls), ages 12 to 17 years (M = 13.7; SD = 1.12), recruited from a large school in the southern region of the United States. Most students were enrolled in Grade 7 (35.4%), followed by Grade 9 (33.7%), then Grade 8 (28.7%), and finally Grade 10 (2.2%). The student body was 95% white. Of the total number of participants, 115 used Instagram (67 boys and 48 girls), and 66 did not use it. There was no gender difference in the likelihood to use Instagram; $\chi 2$ = 1.87; p > .05. The study was approved by the Institutional Review Board.

Measures

Excessive Reassurance Seeking Scale. The Child Excessive Reassurance Seeking Scale (CRSS; Joiner, 1999) is the child version of the Reassurance Seeking Scale (Joiner & Metalsky, 1995; 2001). It is a four-item measure consisting of questions assessing how

frequently youth request excessive reassurance from others. Respondents rated each item (e.g., "I often ask other people if they think that my clothes looks okay" and "I often ask people what other people say about me") on a 3-point scale (1–3), and item scores were summed. Previous research has demonstrated a strong validity for this measure, including good concurrent and discriminant validity (Abela et al., 2005; Joiner, Metalsky, Gencoz, & Gencoz, 2001). The total score could range from 3 to 12, with higher scores corresponding to more reassurance seeking. Cronbach's alpha for the child version of the scale in this sample was .78.

Interpersonal Rejection. Interpersonal rejection was measured using Children's Depression Inventory (CDI; Kovacs, 1992) items. Joiner (1999) first created an index of Interpersonal Rejection by using four out of 27 items from the CDI. Participants were asked the extent to which they agreed with four statements (e.g., "I do not want to be with people at all," and "I feel alone all the time"). All of the responses were measured on a 5-point Likert scale ($1 = strongly\ disagree; 5 = strongly\ agree$). Responses to all four items were averaged and summed into a subscale. The higher score indicated more interpersonal rejection. The mean for interpersonal rejection was 1.66 (SD = .69; Cronbach's $\alpha = .81$).

Intensity of Instagram Use. Instagram use was measured as the amount of Instagram use in hours per day. Students reported that, on average, they spent 1.35 hours a day on Instagram (*SD*= 1.17).

Instagram Uses and Gratifications. A pool of gratification items was assembled from previous uses and gratifications studies (e.g., Papacharissi & Rubin, 2000; Sheldon & Bryant, 2016). Participants had to answer how often (from 1 = never to 5 = always) they used Instagram for the given reasons. Table 1 lists the items used to measure Instagram gratifications.

Demographics. Participants answered the questions about their sex, age, and grade.

RESULTS

First, the measurement model demonstrated adequate reliability and convergent validity. All Cronbach's alphas had acceptable values (see Table 1). Results of a principal component analysis on all 18 items measuring Instagram gratifications revealed five factors with eigenvalues greater than 1. These factors could explain 60.48 percent of the

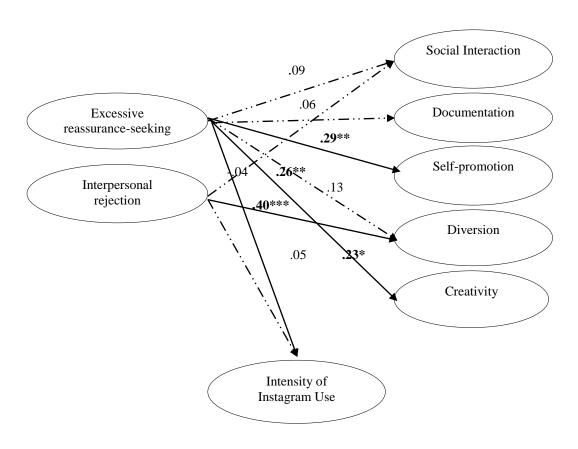
variance. Separate principal component analyses were also conducted on the excessive reassurance-seeking and interpersonal rejection items. The factor loadings for items exceeded 0.5. Hence, the measurement model demonstrated adequate reliability and convergent validity.

Table 1 Measurement Constructs

Variable	Item	Factor	Mean*	Std.	α
		loading		deviation	
Social	To see what other people share.	.70	3.25	.76	.73
Interaction					
	To "like" my followers' photos.	.67			
	To follow my friends.	.71			
	To see my friends' photos.	.60			
	To post photos for my friends.	.50			
Documentation	To remember special events.	.90	3.17	.89	.77
	To celebrate an event.	.68			
	To describe my life through photos.	.70			
	To remember something important.	.56			
Self-Promotion	To show off.	.80	1.94	.80	.77
	To become popular.	.78			
	To self-promote myself.	.62			
Diversion	To avoid loneliness.	.70	1.77	1.03	.75
	To escape reality.	.78			
Creativity	To create art.	.63	1.98	.76	.65
	To document the world around me.	.66			
	To find people with whom I have common	.56			
	interests				
	To show off my photography skills.	.73			
Excessive	I often ask other people if they think that my	.74			.78
	clothes looks okay.				
Reassurance	I often ask people if I look attractive.	.84			
Seeking	I often ask people what other people say	.74			
	about me.				
	I often ask people if other people like me	.74			
Interpersonal	I do not want to be with people at all.	.75	1.66	.69	.81
Rejection	I feel alone all the time.	.80			
	I do not have any friends.	.77			
	I can never be as good as other kids.	.73			
	Nobody really loves me.	.73			

^{*}mean values on a scale from 1-5.

SEM was employed to test the significance of the entire model as well as the significance of the relationships among the multiple variables. The proposed model (Figure 2) yielded a satisfactory fit ($\chi^2/df = 1.44$, CFI = .98, RMSEA = .06). The paths between excessive reassurance-seeking and self-promotion ($\beta = .29$; p<.01) and creativity $(\beta = .26; p < .01)$ were significant, indicating support for hypotheses H1c and H1e. The path coefficient between interpersonal rejection and diversion was also significant $(\beta = .40; p < .001)$, indicating support for hypothesis H2b. Finally, the standardized path coefficient between excessive reassurance-seeking and the intensity of Instagram use was significant $(\beta = .23; p < .05)$, indicating support for hypothesis H3a. These results are shown in Table 2. In total, four of the nine hypotheses were supported.



Note: *p<0.05, **p<0.01, ***p<0.001

Figure 2. Structural Model

Table 2 Structural Model Results and Parameter Estimates for the Hypothesized Model

Structural Model								
Results								
Model fit indices	χ^2	X	²/df	NFI	CFI	TLI	RMSEA	_
Values	14.45	1	.45	.93	.98	.93	.06	
Paths						В	SE	p p
REASSURANCE- SE	EKING	\rightarrow	SOCL	AL INTER	ACTION	.09	.04	.34
(H1a)								
REASSURANCE-SEE	EKING	\rightarrow	DOCU	JMENTAT	ION	.06	.04	.52
(H1b)								
REASSURANCE-SEE	EKING	\rightarrow	SELF	-PROMOT	TON	.29	.03	.00**
(H1c)								
REASSURANCE-SEE	EKING	\rightarrow	DIVE	RSION		.13	.05	.13
(H1d)								
REASSURANCE-SEE	EKING	\rightarrow	CREA	TIVITY		.26	.04	.01**
(H1e)								
INTERPERSONAL R	EJECTION	\rightarrow	SOCI	AL INTE	RACTION	04	.09	.65
(H2a)								
INTERPERSONAL R	EJECTION	\rightarrow	DIVE	ERSION		.40	.12	
(H2b)								.00***
REASSURANCE-SEE	EKING	\rightarrow	INST	AGRAM H	OURS	.23	.06	.02*
(H3a)								
INTERPERSONAL R	EJECTION	\rightarrow	INST	'AGRAM F	HOURS	.05	.16	.64
(H3b)								

NFI – normed fit index; CFI – comparative fit index; TLI – Tucker Lewis index; RMSEA – root mean square error of approximation; β – standardized regression weight; SE – standard error

^{*}p<0.05, **p<0.01, ***p<0.001

DISCUSSION

Uses and gratifications theorists (Katz et al., 1973-4; Papacharissi & Rubin, 2000) have emphasized that we need to study individual differences that might influence motivations for engaging with different media. Drawing from the theory, the present study was the first to test the prospective associations between excessive reassurance-seeking, interpersonal rejection, and Instagram use among minors.

Excessive reassurance-seeking is a behavioral tendency to repetitively and persistently ask assurances of close others about one's worth and lovability, regardless of whether that reassurance is provided (Joiner et al., 1999). We know that adolescents seek reassurances about a lot of things, including their physical appearance and creativity talent. Individuals who need reassurances are insecure (Joiner, 1999). To deal with it they might use Instagram to get positive feedback – "likes" – and validate their popularity and status among peers. McClintock et al. (2014) argued that fear of negative evaluation motivates ERS behavior. For example, someone who suffers from ERS might delete their Instagram or social media post if they do not get enough "likes." In this study, we hypothesize (H1) that excessive reassurance-seeking will positively relate to different motives for Instagram use (documentation, social interaction, self-promotion, creativity, and diversion). This hypothesis is partially supported.

As hypothesized, results reveal that excessive reassurance-seeking in teens is a positive predictor of them using Instagram for self-promotion and creativity gratifications. In other words, needing validation from others drives teens to be creative with their Instagram posts, and to impress other people. Although this finding is novel for Instagram, the long history of writing points out to a connection between creativity and psychopathology. Plato wrote about the "Divine Madness" that accompanied creative inspiration (Paek, Abdulla, & Cramond, 2016). More recently, Papworth et al. (2008) and Santosa et al. (2007) have investigated the madness-creativity theory and found a qualified support for it. For example, Papworth et al. (2008) found that art students scored higher on the Torrance Tests of Creativity Thinking compared to science students, and also exhibited more depressive symptoms. More research is needed to further explore if and how creativity expressed through social media platforms is associated with excessive

reassurance-seeking. Clearly, as a visual social media platform, Instagram offers plenty of opportunities to be creative.

Current study also reveals a positive relationship between excessive reassuranceseeking and the number of hours teens spend on Instagram (H3). This finding is not surprising as those who need validation from others might be looking for it on Instagram. Instagram has a number of features that contributed to seeking reassurances from others. For some users, social media are a way to escape reality, to cope with stress and depression. These individuals might be attracted to Instagram where they can interact with others in a controlled setting. Because friends and family often do not tolerate ERS behavior, one might seek reaffirmation through Instagram.

Excessive reassurance-seeking increases the likelihood of pursuing social support in a maladaptive manner – including repeatedly seeking reassurances to the point of losing significant social ties. We hypothesize (H2) that interpersonal rejection will be a positive predictor of using Instagram to satisfy needs for social interaction and diversion. Our hypothesis is partially supported. Interpersonal rejection is positively related to only one motive – diversion. Teens who perceive that nobody loves them and that they cannot be as good as other kids use Instagram for one purpose: to escape from reality and to avoid loneliness. Again, those teens use social media to compensate for the lack of social contacts that they have with others face-to-face. Toronto (2009) also found that Generation Z youth may be using technology in order to avoid struggles in their offline lives or to find belongings – by using escapism and fantasy to fill emotional voids. Pittman (2015) discovered that undergraduate college students with higher loneliness scores tended to create and consume more content (e.g., pictures, videos) on Instagram, but interestingly not on Facebook.

Conclusion

To our knowledge, this is the first study to survey pre-teens and teens about their Instagram use. Results reveal that Instagram is highly appealing to those who need constant reassurance about their worth. Needing validation from others drives teens to be creative with their Instagram posts, and to impress other people. Those teens who experience interpersonal rejection from other kids use Instagram to escape from reality,

possibly to compensate for the lack of social contacts that they have with others face-to-face.

This study is limited as the sample was not large or diverse. Most (95%) participants were White. Results might have been different if we had surveyed children in other schools. In addition, it is possible that there are other reasons why teens use Instagram. Future studies should try to understand which Instagram features attract individuals with excessive-reassurance needs. They should take other socio-psychological and socio-demographic characteristics into account when studying teens' use of Instagram.

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Funding and Acknowledgements

The authors declare no funding sources or conflicts of interest.

Online Connections

To follow these authors in social media:

Dr. Pavica Sheldon: https://www.instagram.com/pavica/

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