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## Personality factors as predictors of sexting

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## ABSTRACT

“Sexting” refers to sending and receiving sexually suggestive images, videos, or texts on cell phones. Nowadays, technology is embedded in communication between current and prospective romantic partners and understanding what may fuel sexting behavior warrants attention. 304 undergraduate participants (males = 126 and females = 178) completed an online questionnaire about their personality traits, sensation seeking, and problematic cell phone use and their engagement in sexting behaviors. Results suggest that men and those in romantic relationships are more likely to sext, particularly through text messaging. Those in relationships and women indicate requiring greater commitment in a relationship in order to engage in sexting. Extraversion predicted sexting with text messaging, and neuroticism and low agreeableness predicted sexting—sending a sexually suggestive photo, a photo in underwear or lingerie, and a nude photo. Problematic cell phone use also predicted engagement in sexting with text messages. Certain aspects of sexting may appeal as a risky behavior for those individuals with personality traits towards high-risk activities.

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## 1. Introduction

In the last decade, communication via technology has become an integral element of romantic relationships. Although many may use technology, teenagers and young adults, in particular, have readily integrated the use of a variety of platforms including emails, cell phones, IM, social networking sites like Facebook, and videoconferencing (e.g., Skype and FaceTime) to initiate, manage, and end romantic relationships (Huntley, 2006). Recently, the media has directed a great deal of attention to “sexting” (a play on the words “sex” and “texting”) where individuals create, send, and receive sexually suggestive or nude images and/or sexually suggestive text messages using their cell phones (Lenhart, 2009; “Sex and Tech”, 2008). Sexting has become so common that it was competing to be “the word of the year” in 2009 by the New Oxford American Dictionary (Stanglin, 2009). Although sending and receiving sexually-laden images and messages are not new behaviors, what is novel is the use of the cell phone to do so and the ease with which one can engage in sexting with a cell phone.

## 1.1. Frequency of sexting

Media often report sexting among adolescents as problematic. Given that participants are minors, sexting of images may be treated under the child pornography laws (Ostrager, 2010). Among

emerging adults and adults, sexting has often portrayed as part of a general attitude of sexual permissiveness or, for those in a relationship, of infidelity (Wysocki & Childers, 2011). However, studies of the prevalence of engagement in sexting indicated a broad range. Mitchell, Finklehor, Jones, and Wolak (2012) indicated that, based on a national sample of over 1500 youth aged 10–17, 9.6% had appeared in or created nude or nearly nude images or receiving such images in the past year. In another study of over 600 high school students, between 9% and 27% had ever sent a sexually explicit cell phone picture and between 24% and 65% had received a sexually explicit cell phone picture (Strassberg, McKinnon, Sustaita, & Rullo, 2013). They also noted sexting behaviors were more frequent as participants increased by age. Dake, Price, Maziarz, and Ward (2012) indicated that 17% of their middle school and high school sample had engaged in sexting. According to “Sex and Tech” (2008), 20% of teenagers (aged 13–19 years) and 33% of young adults (aged 20–26 years) in their sample, sent or posted nude or semi-nude pictures or videos of themselves, and 38% of teens and 58% of young adults sent or posted sexually suggestive messages. In a sample of over 200 Hispanic female undergraduates, 20.5% had sent erotic or nude photos of themselves and 34.5% had received photos from someone else (Ferguson, 2011). In a random sample of 827 18–24 year olds, Gordon-Messer, Bauermeister, Grodzinski, & Zimmerman (2012) reported that 28.2% engaged in sexting by sending and receiving a sexually suggestive nude or nearly nude photo or video of themselves or someone else and 12.6% had received such a photo or video from someone else. In general, it appears that moderate numbers of adolescents and young adults have been engaging in some form of sexting.

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### 1.2. Demographics and sexting

A few studies have investigated antecedents to sexting as well as associated behaviors.

In general, several studies indicated that boys and men were more likely to engage in sexting than were girls and women (e.g., Strassberg et al., 2013; Gordon-Messer et al., 2012). In terms of racial and ethnic differences, findings have been mixed. Racial and ethnic minority adolescents, in one study, were more likely to engage in sexting (Dake et al., 2012). In another study, Asian/Pacific Islanders were five times more likely to be non-sexsters in comparison to other ethnic groups (Gordon-Messer et al., 2012). However, among college students, Benotsch, Snipes, Martin, and Bull (2012) reported that White participants had a significantly higher rate of sexting than non-White participants.

In addition, relationship status was also found to be linked to sexting where married participants were the least likely to sext whereas those who were “single/never married” were the most likely to sext (Lenhart, Ling, Campbell, & Purcell, 2010). Drouin and Landgraaf (2012) indicated that, among college, romantic couples, 67% sent sexually explicit text messages and 54% sent sexually explicit pictures or videos to their relationship partner. In addition, among emerging adults, those in a relationship were more likely to have sent a sexually suggestive text and to have sent a text message propositioning sexual activity than those who were single (Weisskirch & Delevi, 2011). Taken together, gender, ethnicity, and relationship status may relate to engagement in sexting and attitudes towards sexting, in general.

### 1.3. Sexting and related behaviors

Beyond demographic characteristics, personality may relate to how individuals decide to engage in sexting. Although there is scant research linking sexting and personality traits, a limited number of studies have been conducted to see how personality was linked to the use of technology in relationships. In one study of Hispanic female college students, histrionic personality traits predicted sexting (defined as sending and receiving nude and erotic photos; Ferguson, 2011). Furthermore, neuroticism, extroversion, and low conscientiousness were found to be related to more text messaging (Butt & Philips, 2008). In addition, participants who reported higher scores of social anxiety and shyness felt more comfortable text messaging as opposed to face-to-face interactions (McKenna, Green, & Gleason, 2002; Reid & Reid, 2010). Furthermore, low levels of agreeableness was found to be related to more time spent on phone calls and instant messaging, whereas extraversion and neuroticism were linked to increased time spent text messaging (Ehrenberg, Jukes, White, & Walsh, 2008). Given the connections between aspects of personality and behaviors related to technology use in previous studies, it appears that personality may trigger how individuals use technology in communicating with others, including romantic relationships.

Sexting may also be one of many risky behaviors for those who may have a tendency to engage in high risk activities. For example, adolescents who had engaged in sexting also reported a high rate of having engaged in anal sex, having had 4 or more sexual partners, not using contraceptives at last intercourse, having engaged in oral sex, and having ever had sexual intercourse (Dake et al., 2012). Using marijuana, smoking cigarettes in the last 30 days, binge drinking, as well as suicidal thoughts and depressive symptoms were associated with sexting among adolescents (Dake et al., 2012). Among young adults, recipients of sexually laden images in sexting were three times more likely to be sexually active than non-recipients of those images (Gordon-Messer et al., 2012). In fact, sexting was associated with greater sexual activity in the last 30 days (Gordon-Messer et al.,

2012). Ferguson (2011) indicated that sexting was associated with having unprotected intercourse and with pleasure in sex among female Hispanic college students. Sexting may be a component of a propensity for risky and high intensity activities.

The propensity for risky activities may be a function of sensation seeking, which has been conceived as component of personality that motivates individuals to seek novel and intense experiences (Zuckerman, 1979). Those individuals who are high on sensation seeking often take physical, social, legal and even financial risks simply to have the experience (Zuckerman, 1994). For example, high sensation seekers often engaged in risky sexual behaviors including a greater numbers of sexual partners and less frequent use of condoms than those low sensation seekers (Zuckerman, 1994). In terms of technology use, high sensation seeking has been associated with online adult entertainment use (Perry, Accor-dino, & Hewes, 2007; Weisskirch & Murphy, 2004), Internet dependence, (Lin & Tsai, 2002), and playing online games (Wang, Jackson, Zhang, & Su, 2012). Since sexting is a novel, high arousal activity, it is likely that high sensation seeking will associate with engagement in sexting.

Similarly, sexting may be a kind of behavior related to overall problematic cell phone use. Problematic cell phone use has been likened to a behavioral addiction, inclusive of excessive use, intrusive use, and distress upon separation (e.g., Bianchi & Phillips, 2005). Problematic cell phone use has been linked with extraversion and low self-esteem (Bianchi & Phillips, 2005), higher sensation seeking, low self-esteem, and greater leisure boredom (Leung, 2008), females' high self-monitoring and high approval motivation (Takao, Takahashi, & Kitamura, 2009), and somatic complaints, insomnia, and social dysfunction (Jenaro, Flores, Gómez-Vela, González-Gil, & Caballo, 2007). One study specifically found that heavy users of cell phones for texting, calling, instant messaging, and social networking associated with being more likely to send or receive sexts (Lenhart et al., 2010). Given the risky behavior and personality-related constructs related to problematic cell phone use, it is likely that sexting behaviors may be part of the larger behavioral repertoire for individuals who have high levels of problematic cell phone use.

### 1.4. The present study

In this study, we investigate personality traits, sensation seeking, and problematic cell phone use as relating to engagement in sexting behavior. Namely, we hypothesize that high extraversion, high openness to new experience, high neuroticism, and low agreeableness would be positively associated with sexting behaviors. In addition, we expect that sensation seeking, and problematic cell phone usage would be associated with sexting behaviors, given that sexting is a high arousal activity and may be a manifestation of behavior addiction with technology.

## 2. Method

### 2.1. Participants

304 undergraduate students (males = 126 and females = 178) recruited from human development and child development and family studies classes at two public universities on the West Coast completed an online survey and were offered the incentive of receiving extra credit for completing the survey. Participants completed the online survey on their own time within a window of 2 weeks for completion. The participants' ages ranged from 18 to 30 years ( $M = 22.64$ ,  $SD = 2.77$ ), and the racial/ethnic composition of the sample was 58.6% Latino, 16.4% Euroamerican/White, 12.2% Asian American, 6.9% African American/Black, and 5.9% other

which is representative of the student body at these universities. 59.5% of the individuals were in a relationship and 40.5% indicated that they were single.

## 2.2. Measures

### 2.2.1. Demographics

Participants indicated their gender, ethnicity, age, and relationship status (i.e., whether or not they were in a relationship).

### 2.2.2. Sexting behaviors

We used Weisskirch and Delevi's (2011) measure of frequency of sexting behaviors. Participants indicated the frequency of engagement in sending a sexually suggestive photo using a cell phone, sending a photo in underwear or lingerie using a cell phone, sending a nude photo using a cell phone, sending a sexually suggestive text message, and sending a text message propositioning sexual activity, using the scale 1 = *never* to 5 = *frequently*.

### 2.2.3. Sexting and relationship commitment

Participants indicated how closely they would need to know someone to engage in the sexting behaviors of sending a sexually suggestive photo using a cell phone, sending a photo in underwear or lingerie using a cell phone, sending a nude photo using a cell phone, sending a sexually suggestive text message, and sending a text message propositioning sexual activity. To assess the sexting behaviors, the participants used the scale of 1 = *I would never do this*, 2 = *someone I recently met but want to know better*, 3 = *someone I've known for 24 to 72 hours*, 4 = *someone I am dating regularly*, and 5 = *someone with whom I am in a committed relationship*.

### 2.2.4. Personality traits

Participants completed the Mini-International Personality Item Pool (Mini-IPIP), a brief, 20-item measure (Donnellan, Oswald, Baird, & Lucas, 2006) which measures each of the Big Five personality traits – Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Intellect/Imagination (also known as Openness to Experience). Participants rated each item as describing them from 1 = *very inaccurate* to 5 = *very accurate*. Examples of the items include “I am the life of the party,” “I like order,” and “I seldom feel sad.” The measure produces scores for each of the five personality traits. Cronbach's alpha scores for the personality trait subscales were .48 (neuroticism), .52 (conscientiousness), .61 (agreeableness), .67 (imagination/openness to new experience), and .76 (extraversion).

### 2.2.5. Sensation seeking

Sensation seeking was measured using the Arnett Inventory of Sensation Seeking (1994). This 20-item scale consists of a 10-item novelty subscale and a 10-item intensity subscale. Respondents reported how well each item described them using a 4-point, Likert-type scale ranging from 1 (*does not describe me at all*) to 4 (*describes me very well*). Cronbach's alpha for the entire scale was  $\alpha = .64$  in the current sample.

### 2.2.6. Cell phone problematic use

Participants completed Bianchi and Phillips's (2005) Mobile Phone Problematic Use Scale, reworded to use “cell phone” rather than “mobile phone”. This 27-item measure includes items such as “I can never spend enough time on my cell phone” and “I find it difficult to switch off my cell phone,” which participants rated using the scale 1 = *not at all true* to 7 = *extremely true*. Cronbach's alpha was .93.

## 3. Results

### 3.1. Descriptives

In this sample, 75.7% ( $N = 230$ ) of the participants sent a sexting text message, and 67.4% ( $N = 205$ ) sexted sexual propositions. 45.7% ( $N = 139$ ) of the participants had sent a sexting a photo, 43.7% ( $N = 133$ ) sexted a photo of their underwear, and 28.9% ( $N = 88$ ) sexted a nude picture of themselves (see Table 1). Clearly, the more risky and explicit the content of the sexting, the fewer people engaged in the behavior. Despite the variation across the specific sexting behaviors, the overall sexting scores suggest that 89.1% ( $N = 246$ ) of the participants have engaged in at least one of the sexting behaviors. Those who had not sexted were removed from further analyses.

In addition, when asked how well the participants would need to know the person to sext, the majority of the participants said that they need to be dating regularly or in a committed relationship with the person in order to sext. More participants were willing to engage in sexting using text earlier in a relationship than sending any form of sexually explicit images. See Table 2 for detail.

In order to examine if sexting behaviors varied by gender, race/ethnicity, and relationship status, we conducted one-way ANOVAs. Men more frequently engaged in sexting texts,  $M = 2.25$ ,  $SD = .88$ ,  $F(1, 227) = 12.04$ ,  $p < .001$ , sexting sexual propositions,  $M = 2.11$ ,  $SD = .88$ ,  $F(1, 204) = 11.08$ ,  $p < .001$ , and sexting photos in their underwear,  $M = 1.70$ ,  $SD = .94$ ,  $F(1, 132) = 5.66$ ,  $p < .05$ , than women ( $M = 1.86$ ,  $SD = .82$ ,  $M = 1.73$ ,  $SD = .74$ ,  $M = 1.38$ ,  $SD = .63$ , respectively). There were no differences in sexting behaviors by race/ethnicity. Participants who were currently in a romantic relationship were more likely to send sexually suggestive text messages ( $M = 2.19$ ,  $SD = .90$ ) than their single counterparts ( $M = 1.82$ ,  $SD = .78$ ),  $F(1, 227) = 10.06$ ,  $p < .01$ . Using Pearson's product correlation, there was no significant association of age and sexting behaviors.

We also investigated if willingness to engage in sexting by relationship intimacy varied by gender, race/ethnicity, and relationship status. There were significant differences by gender and relationship status for willingness to engage in sexting by relationship intimacy. In general, those in relationships wanted greater commitment in relationships to engage in the specified sexting behavior. In addition, men were more apt to engage in sexting behaviors with less commitment in the relationship than were women. See Table 3. There were no significant differences by race/ethnicity or any association with age.

### 3.2. Personality traits predicting sexting behaviors

To determine which of the personality variables predicted sexting behaviors, we conducted separate hierarchical multiple regressions for each of the sexting behaviors. Since there were differences by gender and by relationship status, these were entered

**Table 1**  
Frequency of engaging in sexting behaviors.

	N	Mean <sup>a</sup>	SD
Text	228	2.04	0.87
Proposition	205	1.92	0.83
Nude pictures	86	1.58	0.83
Photo	139	1.52	0.76
Underwear	133	1.51	0.78

Note: Text = sending a sexually suggestive text message, Proposition = sending a text message propositioning sexual activity, Nude pictures = sending a nude photo using a cell phone, Photo = sending a sexually suggestive photo using a cell phone, and Underwear = sending a photo in underwear or lingerie using a cell phone.

<sup>a</sup> 1 = rarely, 2 = sometimes, 3 = very rarely, 4 = frequently.

**Table 2**  
Sexting and intimacy of relationship.

How well do you have to know someone to:	N	Just met (%)	Know between 24 and 72 h (%)	Dating regularly (%)	Committed relationship (%)
Text	255	5	10	38	47
Proposition	240	5	11	35	49
Nude pictures	143	3	6	21	70
Photo	186	3	7	25	66
Underwear	187	3	7	24	66

Note: Text = sending a sexually suggestive text message, Proposition = sending a text message propositioning sexual activity, Nude pictures = sending a nude photo using a cell phone, Photo = sending a sexually suggestive photo using a cell phone, and Underwear = sending a photo in underwear or lingerie using a cell phone.

**Table 3**  
Differences by gender and by relationship status in sexting and intimacy of relationship.

	In a relationship M (SD)	Single M (SD)		Female M (SD)	Male M (SD)	
Text	3.39 (.84) <sup>‡</sup>	3.09 (.80)	$F(1, 254) = 8.37^{**}$	3.39 (.84)	3.09 (.80)	$F(1, 254) = 23.99^{***}$
Proposition	3.38 (.86)	3.14 (.83)	$F(1, 239) = 4.60^*$	3.38 (.86)	3.14 (.83)	$F(1, 239) = 26.86^{***}$
Nude pictures	3.67 (.61)	3.41 (.90)	$F(1, 142) = 4.26^*$	3.67 (.61)	3.41 (.90)	$F(1, 142) = 10.40^{**}$
Photo	3.67 (.64)	3.33 (.84)	$F(1, 185) = 9.40^{**}$	3.67 (.64)	3.33 (.84)	$F(1, 185) = 21.59^{***}$
Underwear	3.61 (.68)	3.40 (.87)	$F(1, 186) = 3.26^{\dagger}$	3.61 (.68)	3.40 (.87)	$F(1, 186) = 25.03^{***}$

Note: Text = sending a sexually suggestive text message, Proposition = sending a text message propositioning sexual activity, Nude pictures = sending a nude photo using a cell phone, Photo = sending a sexually suggestive photo using a cell phone, and Underwear = sending a photo in underwear or lingerie using a cell phone.

<sup>‡</sup> 1 = Just met, 2 = known between 24 and 72 h, 3 = dating regularly, 4 = in a committed relationship.

<sup>†</sup>  $p < .10$ . \*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

**Table 4**  
Summary of regressions of personality predictors of sexting behaviors.

	Text			Proposition			Nude pictures			Photo			Underwear		
	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β	B	SE B	β
Male	.36	.12	.21**	.34	.12	.21**	.25	.18	.15	.01	.13	.01	.28	.14	.18*
In a relationship	.33	.12	.19**	.17	.12	.10	-.02	.19	-.01	-.11	.13	-.07	-.14	.13	-.09
Extraversion	.13	.06	.14*	.15	.06	.17*	.14	.09	.16	.02	.07	.03	.05	.07	.06
Neuroticism	.15	.07	.13*	.11	.08	.10	.23	.11	.22*	.33	.08	.33***	.35	.09	.34***
Agreeableness	-.11	.09	-.08	-.14	.09	-.12	-.36	.15	-.31*	-.33	.11	-.30**	-.23	.11	-.21*

Note: Text = sending a sexually suggestive text message, Proposition = sending a text message propositioning sexual activity, Nude pictures = sending a nude photo using a cell phone, Photo = sending a sexually suggestive photo using a cell phone, and Underwear = sending a photo in underwear or lingerie using a cell phone.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

first and the personality traits were entered second. In predicting the sexting behaviors that involved images, low levels of agreeableness and high levels of neuroticism predicted sending a sexually suggestive picture or video, sending a picture in underwear or lingerie, and sending a nude or nearly nude picture. For sending a picture in underwear, being male was also significant in the final model. Being male, in a relationship, being extraverted, and being neurotic predicted sending sexually suggestive text. Being male and extraverted predicted sending a text propositioning sexual activity. The first hypothesis was partially correct. See Table 4.

3.3. Sensation seeking and problematic cell phone use predicting sexting behaviors

We also examined how well sensation seeking and problematic cell phone use predicted sexting behavior using hierarchical multi-

**Table 5**  
Summary of regression of sensation seeking and problematic cell phone use and sexting behaviors.

	Text			Proposition		
	B	SE B	β	B	SE B	β
Male	.33	.12	.19**	.34	.12	.20**
In a relationship	.39	.11	.22***	.22	.12	.12
Problem cell use	.19	.05	.23***	.11	.05	.15*

Note: sensation seeking scales were not significant in the final models. Text = sending a sexually suggestive text message, Proposition = sending a text message propositioning sexual activity.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

ple regression. As before, gender and relationship status were entered first, followed by sensation seeking and problematic cell phone use. The regression models for predicting sexting a photo, a photo in underwear or lingerie, or a nude or semi-nude photo did not reach significance. Sending a sexually suggestive text was predicted by being male, in a relationship, and problematic cell phone use. Sending a text propositioning sexual activity was predicted by being male and problematic cell phone use. See Table 5. The second hypothesis was partially fulfilled.

4. Discussion

This study draws attention to an understudied and yet highly relevant topic in the lives of the Net Generation. Our results support the high frequency of sexting among college students. We found that 89.1% of the sample engaged in some form of sexting, which is higher than most previous studies. Our definition of sexting included two texting behaviors (i.e., sending sexually suggestive texts and texts propositioning sexual activities) and three progressively risky, image-based behaviors (i.e., sending sexually suggestive photo, photo in underwear or lingerie, and a nude or nearly nude photo). By including a broader range of behaviors, we have been able to identify participants in a breadth of sexting behaviors that have not been evident by previous studies only focusing on one narrow component of sexting (e.g., sending a nude photo). Moreover, we also found that most participants indicated needing to be dating regularly or in a committed relationship to engage in sexting with a romantic partner. Like previous research,

we found that men were more likely than women to engage in the lower-risk sexting activities such as texting, propositioning sexual activity, or sending pictures in underwear. This finding could be due to the relative social acceptability of male sexuality and/or the traditional male gender role as the sexual initiator. In contrast, women indicated that they would require a higher degree of commitment in a relationship to engage in sexting than men. This discrepancy between men and women may indicate different strategies in sexting for men and women. Men may use sexting to try to attract or lure a potential partner whereas women may use sexting as a way of keeping a current partner interested.

In addition, those in current romantic relationships indicated sending more sexually suggestive text messages but also requiring a greater degree of commitment in relationships in order to engage in sexting. It could be that sending sexually suggestive text messages may be part of the relationship maintenance strategies couples now use or may be a form of foreplay preceding later sexual activity. Their indications of needing more commitment to engage in sexting may be based on their own experience with using sexting within their current romantic relationship.

In terms of personality factors, the current study provides empirical support that personality factors may relate to sexting behaviors. Males in relationships who are extraverted and neurotic send sexually suggestive text messages. Males who are extraverted send texts sending sexual propositions. The relationship between extraversion and text-based sexting is noteworthy since one might expect that extraversion might relate to the higher risk, visual forms of sexting behavior. It could be that sexting with text requires individuals to put themselves out there with selected words for the relationship partner to evaluate and potentially respond favorably. For the visual forms of sexting (i.e., sending a sexually suggestive photo, a photo in underwear or lingerie, and a nude photo), the combination of high levels of neuroticism and low levels of agreeableness were predictive of engaging in these behaviors. High levels of neuroticism and low levels of agreeableness have been associated with smoking (Malouff, Thorsteinsson, & Schutte, 2006), acting rashly when distressed (Settles et al., 2012), high risk HIV behaviors (Trobst, Herbst, Masters, & Costa, 2002), and depression and substance use disorder comorbidity (Juhász et al., 2009). Sexting by sending visual images may be another form of risky, impulsive behaviors rooted in these combinations of personality traits.

Despite the findings of personality traits, it is surprising that sensation seeking did not emerge as a predictor of sexting behaviors. It may be that sexting does not provide enough novel or intense experiences for high sensation seekers, especially given the frequency with which individuals engage in sexting. It could also mean that sexting has been culturally accepted among young adults, where it is not perceived as risky but rather seen as a normative way to engage romantically. However, the relationship between problematic cell phone use and sexting behaviors may capture more of the impulsive, risky behaviors. Since problematic cell phone use has been likened to a behavioral addiction, it could be that those who sext by text messaging or sending texts propositioning sexual activity use the text messaging feature as a means to precipitate face-to-face interaction. There may be a sense of safety in using text messaging to engage a partner sexually whereas sending visual images in sexting may be too risky.

#### 4.1. Limitations

The results of the current study should be interpreted in light of several important limitations. First of all, the data was cross-sectional, which may not accurately reflect the overall patterns of personality and sexting behaviors over time. Future studies could adopt a longitudinal approach to understand how personality traits

translate into sexting behaviors. Second, the self-report data may not accurately reflect participants' sexting behaviors. Future studies could use an objective measure of the respondents' sexting behavior, such as reports from the recipient of sexting or objective review of the cell phone history. Third, the reliabilities of the personality measure subscales were a bit low, calling into question the consistency of what was being measured. Given that the measure only includes four items per personality trait, a measure that includes more items per personality trait may yield greater reliability and consistency in how the personality traits are measured. By using a more reliable measure, the current results related to sexting may be affirmed or disconfirmed. Lastly, in the absence of established literature in the area, there is a need to further explore the factors related to sexting by conducting more qualitative and quantitative studies to determine the nuances around how sexting is used.

#### 4.2. Implications

The common usage of sexting brings up the question of whether sexting can be used in adaptive ways in romantic relationships. It could be argued that given mutual consensus, sexting can be used to express sexuality relationship that is beneficial for the relationship. Parker, Blackburn, Perry, and Hawks (2013) suggest that couples in safe and caring relationships would be likely to engage in sexting as an alternative way to connect sexually. Clinicians can be more aware of personality traits that make people more likely to sext, explore reasons and different ways in which individuals or couples use sexting, and be mindful of the potential for problematic use of cell phone and sexting. Rather than making assumptions, it is recommended that clinicians discuss with clients what is acceptable and what is not according to their values and world views (Todd, 2004).

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