

Parkview Health

Parkview Health Research Repository

Health Services and Informatics Research

Mirro Center for Research and Innovation

11-1-2015

Sexting Among Married Couples: Who Is Doing It, and Are They More Satisfied?

Brandon T. McDaniel PhD

Michelle Drouin

Follow this and additional works at: <https://researchrepository.parkviewhealth.org/informatics>



Part of the [Health Information Technology Commons](#)

Sexting Among Married Couples: Who Is Doing It, and Are They More Satisfied?

Brandon T. McDaniel, MS¹ and Michelle Drouin, PhD²

Abstract

This study examined the prevalence and correlates of sexting (i.e., sending sexual messages via mobile phones) within a sample of married/cohabiting couples (180 wives and 175 husbands). Married adults do sext each other, but it is much less common than within young adult relationships, and consists mainly of sexy or intimate talk (29% reported engaging in sexy talk with partners) rather than sexually explicit photos or videos (12% reported sending nude or nearly-nude photos). Sending sexy talk messages was positively related to relationship satisfaction only among those with high levels of avoidance, and sending sexually explicit pictures was related to satisfaction for men, and for women with high levels of attachment anxiety. Additionally, sending sexually explicit pictures was related to greater ambivalence among both men and women. These findings support and extend previous research with young adults.

Introduction

IN 2011, BRENDA WIEDERHOLD¹ put forth a call in *Cyberpsychology, Behavior, and Social Networking* for more research on sexting among adults, as most sexting studies had focused on teens and young adults. Fast forward 4 years, and little has changed with regard to the populations targeted for sexting research. Researchers still focus on teens and young adults. In fact, in their recent literature review, Klettke et al.² found that of the 13 studies on adult sexting that contained prevalence statistics, few included nonundergraduate adults outside the 18–30 age range. At present, only two known studies have focused on sexting among married individuals.^{3,4} One³ focused on sexting with committed partners (including married partners), and the other⁴ focused on extramarital sexting and cyber-infidelity. Thus, there is still a dearth of research on sexting among married couples, and although some studies have included married individuals, none has examined sexting behaviors *within* couples. This study begins to fill this gap by examining the prevalence and frequency of sexting within married couples, as well as the attachment patterns that moderate the associations between sexting and satisfaction in adult married relationships.

According to recent statistics, over 97% of American adults aged 18–49 own a mobile phone, and 64% own a smartphone.^{5,6} This widespread mobile phone usage, and smartphone usage in particular, has made it increasingly easy to connect with others instantaneously. Consequently, researchers

have begun to focus their attention on the ways in which mobile phones affect dyadic relationships, including the ways individuals use mobile technology to transmit sexual messages (i.e., sexting). In this area, a growing body of research has emerged, focused on the definitions, prevalence, and risk factors associated with sexting.^{2,7,8} Overall, existing studies with adults have painted a relatively consistent picture of sexting—many young adults (as many as 75% in some studies) are sexting. They send sexually explicit texts more often than pictures.^{9–11} They sext more often within longer-term relationships.^{9,12} Furthermore, sexting is associated with a variety of risk factors, including unprotected sex,^{13–15} alcohol use,^{10,13,14} and even attempted or contemplated suicide.¹⁴

Some sexting research has focused on relationship quality, examining, for example, the attachment patterns of those who send sexually explicit messages to their partners. Again, research in this area has been fairly consistent: Sending sexually explicit messages and propositioning sex via text message is more common among those who have insecure (i.e., anxious or avoidant) attachments with partners.^{11,16} According to Drouin and Landgraff,¹¹ those with insecure attachment patterns may engage in sexting more often because they are either trying to use sexting as a hyperactivating strategy^{17,18} to draw partners nearer so that they will not abandon them (anxious attachment), or they are using sexting as a deactivating strategy^{17,18} to satisfy sexual needs while keeping their partners at a distance (avoidant attachment). Thus, sexting has been

¹Human Development and Family Studies, The Pennsylvania State University, University Park, Pennsylvania.

²Department of Psychology, Indiana University–Purdue University Fort Wayne, Fort Wayne, Indiana.

linked to relationship insecurity rather than relationship well-being. However, in the one study that focused on married individuals (51% were married or cohabiting), Parker et al.³ found that those who reported greater consensus (marker of relationship satisfaction) with partners were more likely to have sent some type of sexual message to that partner. That said, there was a negative relationship between cohesion and sexting frequency that was almost significant ($p=0.068$), and the relationship between satisfaction and sexting frequency was positive but not significant.

A major difference between the Parker et al.³ study and previous work on sexting and relationship quality^{11,16} is the way in which sexting was measured. Drouin and Landgraff¹¹ examined the frequency of sending sexually explicit text or picture/video messages, and Weisskirch and Delevi¹⁶ asked about sexual propositions via text message. Meanwhile, Parker et al.³ had participants indicate the highest rated type of message they had sent partners from 1 = "small talk" to 5 = "nude photos or videos, acts along with explicit language about sex acts or intent to meet with person to engage in acts." Moreover, they included in their analyses anyone who considered their previous behavior(s) sexting. Consequently, double entendres or messages implying sex, when classified as sexting by the sender, were included, and they were not analyzed separately from nude photos or videos. This measurement issue limits the conclusions one can draw from this study, as it is unclear whether sending sexually explicit text or picture messages (i.e., traditional definitions of sexting) among marrieds is related to relationship satisfaction. Nonetheless, Parker et al.³ concluded that sexting can be considered a component of a satisfying relationship and might be useful as a therapeutic strategy to increase intimacy and connectedness in long-term relationships.

This study sought to fill a gap in the sexting and relationship quality research by exploring the associations between relationship well-being (satisfaction and ambivalence), attachment characteristics, and sexting frequency among married couples. Based on the extant literature, it was predicted that:

H1: The prevalence of sending sexually explicit texts and photos would be lower among older, married couples than it would be among young adults.

Mobile phone usage overall is lower among older populations of adults compared with young adults.⁵ Thus, it is likely that older adults are using their mobile phones less often than young adults to navigate sexual relationships. Moreover, although sexting is most common among young adults in committed relationships,^{9,10} Parker et al.³ found a negative association between sexting and relationship length, and the average relationship length in the present sample was expected to be greater than that of most young adult couples. Finally, sexting is associated with sensation seeking¹⁰ and impulsivity.¹⁹ As recent neuroscience-informed models of risk taking suggest that adolescence is characterized by cognitive and neurological processes that heighten risky behavior,²⁰ sexting frequency was expected to be lower in this older sample.

Additionally, with consideration for the previously found links between attachment and sexting,^{11,16} and the nonsignificant correlations between sexting and relationship satisfaction in the Parker et al.³ study, it was expected that:

H2: Attachment avoidance would be related to sexting frequency (both words and pictures), and attachment anxiety would be related to sending words-only sexts (i.e., sexy messages).

H3: Sexting (either with words or pictures) among married couples would not emerge as a predictor of relationship satisfaction or ambivalence. However, attachment characteristics would moderate the relationship between sexting frequency and relationship satisfaction and ambivalence.

Finally, as previous research has shown that relationships between sexting and attachment characteristics differ by gender,¹¹ gender was explored as a moderator.

Methods

Participants and procedure

Participants were part of the Daily Family Life Project (DFLP), an ongoing longitudinal study of family life, who were recruited through three primary sources: (a) database of families in Pennsylvania willing to be contacted by researchers, (b) announcements on parenting Web sites, and (c) announcements in the local community. Data were utilized from 355 individuals (180 wives) from 181 heterosexual families, currently living together in the United States, with at least one child aged 5 years or younger. Participants lived in the following U.S. regions: 52% Northeast, 17% West, 16% South, and 15% Midwest. Most were Caucasian (91%), married (95%), had a college degree (72%), and were not currently attending school (84%); 58% had more than one child. On average, wives were 31.52 years old ($SD=4.42$ years; range 20–42 years), husbands were 33.21 years old ($SD=4.98$ years; range 22–52 years), and yearly household income was \$73,900 ($SD=\$39,500$). Participants' relationship length ranged from 2 to 23 years, with 92% in a relationship of 5 years or longer ($M=9.91$ years, $SD=4.06$ years).

Participants completed an online, ethics board approved survey containing measures described below.

Measures

Sexting. Sexting was measured via three items using a 9-point scale ranging from 0 = "never" to 8 = "almost hourly." Participants were asked to indicate how often with their current relationship partner they: (a) "send sexy messages via mobile device," (b) "talk about sex or intimacy via mobile device," and (c) "send nude or semi-nude photos via mobile device." Items a and b correlated highly ($r=0.85$, $p<0.001$) and were therefore averaged into a single "send sexy messages" composite measure. Item c was analyzed separately as "sending of nude/semi-nude photos."

Relationship satisfaction. The Quality of Marriage Index²¹ includes five items assessing satisfaction (e.g., "We have a good relationship") on a 7-point scale (ranging from 1 = very strongly disagree to 7 = very strongly agree) and one item assessing relationship happiness on 10-point scale (ranging from 1 = "unhappy" to 10 = "perfectly happy"). Wording was revised to "partner" and "relationship" for inclusivity. Higher scores reflect greater relationship satisfaction ($\alpha=0.96$ for wives and 0.95 for husbands).

Relationship ambivalence. Participants were asked to indicate their ambivalence with their current partner across

three items from Braiker and Kelley's²² ambivalence subscale. Items included (a) "How ambivalent or unsure are you about continuing in the relationship with your partner?"; (b) "To what extent do you feel 'trapped' or pressured to continue in this relationship?"; and (c) "How confused are you about your feelings toward your partner?" Participants responded on a 7-point scale (ranging from 1 = "not very much or just a little" to 7 = "very much or a lot"). Higher scores indicate greater ambivalence or uncertainty about the relationship ($\alpha = 0.85$ for wives and 0.88 for husbands).

Attachment in romantic relationships. Participants rated their agreement with 12 statements from the Experiences in Close Relationships Scale–Short Form²³ on a 7-point scale (1 = "disagree strongly" to 7 = "agree strongly"). Six statements measured attachment anxiety (e.g., "I need a lot of reassurance that I am loved by my partner"), and six measured attachment avoidance (e.g., "I try to avoid getting too close to my partner"). One anxiety item ("I do not often worry about being abandoned") was dropped due to low correlation with the other anxiety items, as has occurred in other research.²⁴ Higher scores indicate greater anxiety or avoidance (anxiety $\alpha = 0.72$ for wives and 0.78 for husbands; avoidant $\alpha = 0.83$ for wives and 0.78 for husbands).

Control variables. Controls included depressive symptoms, coparenting quality, frequency of texting, frequency of sex, age, income, race/ethnicity ("not Caucasian" = 1), education ("not college graduate" = 1), number of children ("more than one child" = 1), marital status ("not married" = 1), and relationship length in years. Frequency of sex was measured with one item: "Thinking back about the last 12 months, in general how frequently do you and your partner engage in sexual activity together?" Participants responded on an 8-point scale ranging from 1 = "less than once every few months" to 8 = "multiple times a day." Frequency of texting was measured with participants indicating how much time they spend texting on a cell phone on a typical day on an 11-point scale from 0 = "never/none" to 10 = "7 or more hours."

Depressive symptoms. Depressive symptoms were measured with the CES-D,²⁵ which asked participants to rate how often they experienced 20 symptoms in the past week. Participants responded on a 4-point scale (ranging from 0 = "rarely or none of the time, less than 1 day" to 3 = "most or all of the time, 5–7 days"). Higher scores indicate more depressive symptoms ($\alpha = 0.89$ for both wives and husbands).

Coparenting quality. Coparenting was measured using the Coparenting Relationship Scale,²⁶ which includes 35 items that measure how partners work together (or against one another) in their parenting (e.g., support, undermining, etc.). Higher scores indicate better coparenting ($\alpha = 0.94$ for both wives and husbands). Coparenting quality was included as a control because the current sample included families with children, and researchers have shown that relationship satisfaction and coparenting quality are intricately linked; for example the quality of support parents provide to one another while parenting their child together predicts feelings about the couple's relationship as a whole.²⁷ Therefore, finding effects after controlling for coparenting would fortify the link between sexting and relational well-being.

Results

Prevalence of sexting

Sending sexually explicit photos was rare among married couples. Only 12% of participants reported *ever* sending photos to their partner. Among those who did send nude photos to their partner, 9% of wives and 7% of husbands sent photos less than once a month, and only 3% of wives and 5% of husbands sent photos once a month or more often. Meanwhile, approximately 29% of participants reported sending sexy messages to their partners. About 12% of wives and 11% of husbands sent sexy messages once a month, and another 16% of wives and 19% of husbands sent sexy messages once a week or more often. Paired-sample *t* tests revealed that sending sexy text messages was more frequent than sending nude/semi-nude photos for both wives, $t(179) = 9.38$, $p < 0.001$, and husbands, $t(174) = 9.29$, $p < 0.001$. However, wives and husbands did not differ significantly from each other in their frequency of sending nude/semi-nude photos, $t(173) = 0.87$, n.s., or sexy text messages, $t(173) = 1.49$, n.s.

Associations between sexting and attachment

As shown in Table 1, more frequent sending of nude/semi-nude photos was significantly related to greater attachment avoidance in wives (with a trend toward greater avoidance in husbands). However, avoidance was unrelated to the frequency of sending sexy messages. Meanwhile, frequency of sending nude/semi-nude photos was significantly related to attachment anxiety for husbands. However, again, there were no significant relationships between sending sexy text messages and attachment anxiety for husbands or wives.

Associations between sexting, attachment, relationship satisfaction, and ambivalence

Descriptive statistics and bivariate correlations for the main study variables and controls are displayed in Table 1. As shown, sending sexy messages was not significantly correlated with relationship satisfaction or ambivalence for wives or husbands. However, sending nude/semi-nude photos was related to greater relationship ambivalence in both wives and husbands.

A series of multilevel models in SAS Proc Mixed allowed us to examine our hypothesis (H3) in greater depth. These models were similar to multiple regression models for cross-sectional data. However, women's and men's data could not be treated as completely independent in the current sample, which violates the assumptions of simple regression. Therefore, multilevel modeling was used to account for the nested nature of the data (wives and husbands within families). Two models were run with sending sexy messages as the predictor, and two models with sending nude/semi-nude photos as the predictor, for a total of four models (see unstandardized estimates in Table 2). Within each of these models, relationship satisfaction or relationship ambivalence were predicted, with attachment avoidance and attachment anxiety as moderators (by creating interaction terms between the sexting predictors and the attachment variables). The study tested whether predictions were different for men and women by entering gender as a moderator (coded 1 = "husband" and 0 = "wife"), and controls were also included (e.g., age, income, ethnicity, relationship length, depressive

TABLE 1. DESCRIPTIVES AND BIVARIATE CORRELATIONS BETWEEN STUDY VARIABLES

Variable	Sexy texts	Nude photos	Relationship satisfaction	Relationship ambivalence	Avoidance	Anxiety	Depression	Coparenting	Frequency of sex	Frequency of texting
<i>Frequency of sexting (predictors)</i>										
Sexy texts	0.75***	0.59***	0.11	0.14†	0.01	0.04	0.02	-0.05	0.37***	0.42***
Nude photos	0.57***	0.80***	0.03	0.27***	0.14†	0.17*	0.19*	-0.26**	0.25***	0.33***
<i>Relationship well-being (outcomes)</i>										
Satisfaction	0.12	-0.06	0.51***	-0.57***	-0.59***	-0.17*	-0.25**	0.63***	0.22**	0.03
Ambivalence	0.06	0.31***	-0.67***	0.43***	0.51***	0.28***	0.34***	-0.66***	-0.04	0.16*
<i>Attachment (moderators)</i>										
Avoidance	-0.04	0.20**	-0.64***	0.50***	0.36***	0.29***	0.42***	-0.56***	-0.24**	0.01
Anxiety	0.00	-0.01	-0.28***	0.19*	0.26***	-0.03	0.46***	-0.34***	-0.12	0.11
<i>Control variables</i>										
Depression	0.00	0.14†	-0.49***	0.44***	0.47***	0.49***	0.27***	-0.40***	-0.17*	-0.02
Coparenting	0.03	-0.21**	0.76***	-0.69***	-0.59***	-0.34***	-0.44***	0.43***	0.14†	-0.06
Frequency of sex	0.23**	0.05	0.28***	-0.11	-0.26**	-0.10	-0.06	0.25**	0.72***	0.06
Frequency of texting	0.33***	0.35***	-0.02	0.12	0.11	-0.12	0.05	-0.08	-0.09	0.34***
<i>Women</i>										
Mean	1.00	0.19	38.04	1.56	1.93	3.16	11.21	4.98	4.58	1.81
SD	1.40	0.69	7.03	1.21	0.96	1.14	8.83	0.77	1.46	1.40
<i>Men</i>										
Mean	1.11	0.23	37.96	1.46	2.27	3.07	10.47	4.98	4.34	1.76
SD	1.54	0.89	7.18	1.07	0.97	1.25	8.46	0.76	1.56	1.79

Note. † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. $N=180$ women and 175 men (from 181 families). Correlations for men are presented above the diagonal and for women below the diagonal. Correlations between men and women are bolded, italicized, and on the diagonal.

TABLE 2. MULTILEVEL MODELS OF RELATIONSHIP SATISFACTION AND AMBIVALENCE PREDICTED BY SEXTING (SENDING SEXY MESSAGES VS. SENDING PHOTOS) AND ATTACHMENT AVOIDANCE AND ANXIETY

Fixed effects	Send sexy messages		Send nude or semi-nude photos	
	Model 1: Relationship satisfaction	Model 2: Relationship ambivalence	Model 3: Relationship satisfaction	Model 4: Relationship ambivalence
Intercept	37.61***	1.59***	37.56***	1.58***
Gender	0.65	-0.15	0.65	-0.15
<i>Control variables</i>				
Age	0.002	0.003	0.02	0.005
Family income	0.004	0.001	0.0005	0.001
Not Caucasian	0.40	0.28	0.58	0.29
Not college graduate	-0.36	0.05	-0.39	0.06
Multiple children	0.37	-0.09	0.43	-0.07
Marital status	-1.81	0.31	-1.47	0.25
Relationship length	-0.05	0.005	-0.05	0.004
Depressive symptoms	-0.03	0.02**	-0.03	0.02**
Coparenting quality	4.71***	-0.79***	4.98***	-0.77***
Texting frequency	0.14	0.0005	0.04	-0.002
Frequency of sex	0.22	0.05	0.25	0.06
<i>Sexting, attachment avoidance and anxiety, and interactions with gender</i>				
Sexting	0.39	0.04	0.56	0.27*
Avoidance	-2.08***	0.18**	-2.15***	0.18**
Anxiety	0.20	-0.03	0.06	-0.02
Sexting × gender	—	—	1.09	-0.22*
Avoidance × gender	—	—	—	—
Anxiety × gender	—	—	0.43	—
Sexting × avoidance	0.31*	—	—	—
Sexting × anxiety	—	—	1.46***	—
Sexting × avoidance × gender	—	—	—	—
Sexting × anxiety × gender	—	—	-1.43**	—

For interactions, the main effect is for women, and the interaction is the value to add to the main effect in order to get the effect for men. Nonsignificant interactions were trimmed and are marked with a —.

Control variables were coded as follows: gender (1 = "male," 0 = "female"); not Caucasian (0 = "Caucasian," 1 = "other race"); not college graduate (1 = "college grad.," 0 = "less education than college grad."); multiple children (1 = "multiple children," 0 = "only one child in family"); and marital status (1 = "living together, not married," 0 = "married"). Except for the above-mentioned controls, all other variables were grand mean centered. Family income was in \$10,000 units.

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

symptoms, etc.). All nonsignificant interactions were trimmed from the final models.

Sending sexy messages. As shown in Table 2 (Model 1), attachment avoidance moderated the relationship between sending sexy messages and relationship satisfaction ($b = 0.31$, $p < 0.05$), with no significant differences by gender. Figure 1 shows that sending sexy messages related positively to relationship satisfaction only for those high in avoidance. In terms of relationship ambivalence (Model 2), sending sexy messages was not a significant predictor, and neither attachment anxiety nor avoidance emerged as moderators.

Sending nude/semi-nude photos. As shown in Table 2 (Model 3), attachment anxiety moderated the relationship between sending nude/semi-nude photos and relationship satisfaction ($b = 1.46$, $p < 0.001$), and this was further moderated by gender ($b = -1.43$, $p < 0.01$). Sending nude/semi-nude photos related to better relationship satisfaction for husbands, regardless of attachment anxiety. However, sending nude/semi-nude photos was related to better relationship satisfaction only for wives high in anxiety, and to worse satisfaction

for wives low in anxiety (see Fig. 2). Meanwhile, with regard to relationship ambivalence (Model 4), sending nude/semi-nude photos significantly interacted with gender ($b = -0.22$, $p < 0.05$), with more frequent sending of nude/semi-nude photos related to greater ambivalence for wives only ($b = 0.27$,

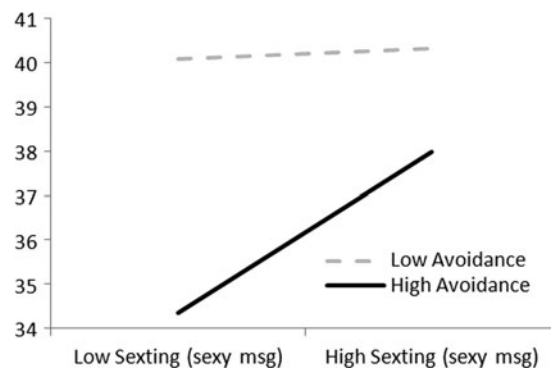


FIG. 1. Predicted values of relationship satisfaction at high and low (1 standard deviation (SD) above and 1 SD below the mean) values of sending sexy messages, moderated by attachment avoidance. High avoidance is 1 SD above the mean (black line), and low anxiety is 1 SD below the mean (gray dashed line).

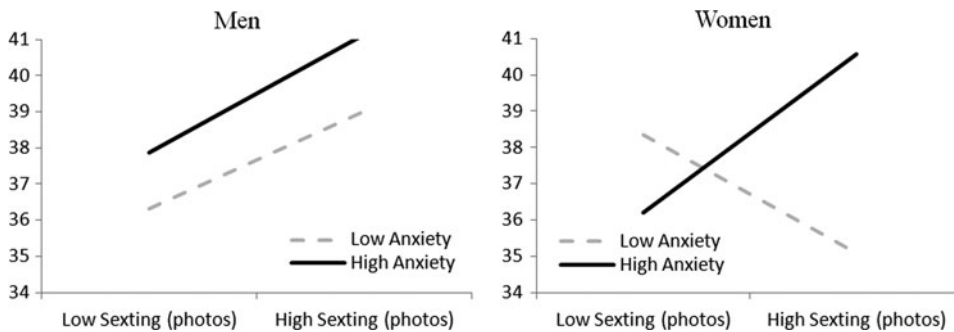


FIG. 2. Predicted values of relationship satisfaction at high and low (1 *SD* above and 1 *SD* below the mean) values of sending photos, moderated by attachment anxiety. High anxiety is 1 *SD* above the mean (black line), and low anxiety is 1 *SD* below the mean (gray dashed line).

$p < 0.05$). Avoidance and anxiety did not moderate the effects of sending nude/semi-nude photos on ambivalence.

Discussion

Some relationship researchers have recently turned their attention to the prevalence and correlates of sexting among teens and young adults. Yet, little is known about the prevalence of sexting within older married or cohabiting couples. Additionally, although one study³ addressed the topic of sexting and relationship satisfaction among those in long-term relationships, it remained unclear whether sexting among married couples is associated with relationship health or relationship insecurity and dissatisfaction.

Older adults in established committed relationships do engage in sexting. However, in support of H1, the prevalence of sexting (both sexy talk and sending sexually explicit pictures) is lower than has been reported among young adults. For example, approximately 12% of husbands and wives sent nude or nearly nude photos to their partners versus approximately 20–30% of young adults who have done so.^{9,16,28} There are several potential explanations for these disparate findings. First, it may be, as was hypothesized, that older individuals are less impulsive and less prone to risk taking than their younger counterparts and therefore more carefully evaluate the risks of their sexual images being catapulted into cyberspace (or found on their phone by others). Second, as the average age of the participants in this study was about 10 years older than the average age of the young adults in undergraduate sexting research, it is probable that some of these older adults established their sexual relationships with their partners without the use of technology and therefore bypassed the sexting trend. Perhaps, had cell phones been as prevalent and advanced 20 years ago as they are now, these married couples would have established sexual intimacy via nude cell phone photos, a practice they might still employ today. Finally, according to the Kinsey Institute,²⁹ married individuals and older adults have sex less frequently than singles and younger adults. Thus, less sexting may just be reflective of overall less sexual activity within this population. Each of these possibilities merits further investigation.

With regard to attachment characteristics, those who were more avoidant tended to send more nude/nearly-nude photos. However, this relationship was significant for wives only. Meanwhile, attachment anxiety was related to higher rates of sending nude/nearly nude photos among husbands only. Thus, H2 was partially supported. Small differences between the current results and those found in Drouin and Landgraff¹¹ could be attributed to several factors, including generational differences between young and older adults and their uses of

technology in relationships, the stability of relationships examined in these different studies (non-marrieds vs. marrieds), or differences in technology use across time that influence perceptions of sexting. Future work should explore this topic over time and across generations to examine whether historical context or age influences these relationships.

In terms of relationship satisfaction, H3 was partially supported. For the most part, sexting did not contribute to greater relationship satisfaction, except for those with insecure attachments and, in some cases, husbands. More specifically, the predictive models showed that among husbands, sending nude/nearly-nude photos was related to relationship satisfaction. However, sending nude photos was related to greater satisfaction only among wives with higher levels of attachment anxiety and to worse satisfaction among wives with low anxiety. Moreover, sending nude/nearly-nude photos was related to relationship ambivalence (i.e., uncertainty about the relationship) among wives. Meanwhile, sending sexy messages (i.e., flirtatious or suggestive texts that did not contain pictures) was related to satisfaction among those with higher levels of attachment avoidance.

Limitations and conclusion

This study has some limitations. First, it included exclusively U.S. and primarily married couples, with many participants from the Northeastern United States. Thus, it is unknown how well these results generalize to married couples in other countries or perhaps even other parts of the United States (although 48% of our sample was from other parts of the United States, which may extend the generalizability). Second, only couples with at least one young child were included. The prevalence and correlates of sexting among couples without a child may be different from what was found here. Finally, the measures of sexting were limited to single items, although two of the items were combined for the sexy talk measure. More detailed questions about sexting within this population will help to extend this work and make comparisons with previous findings from young adult samples. In sum, replication and expansion of this research is recommended in order to create a more complete picture of sexting among committed couples worldwide.

Despite these limitations, this work gives insight into the sexting practices of adult married couples. Married couples do not sext very often. Only approximately one third had ever sent sexy messages to their partners, and only about 1 in 10 had ever sent nude or semi-nude pictures. More importantly, sending these messages was not a predictor of relationship satisfaction, except among those with insecure attachment patterns and, in the case of sexually explicit

pictures, among men. These results are consistent with previous research that links sexting behavior with insecure attachment patterns,^{11,16} but they call into question suggestions that sexting may be used as an intervention strategy to increase intimacy among couples.³ In fact, the results suggest that sexting may not play a positive role in most secure married or committed cohabiting relationships.

Acknowledgments

We would like to thank the families who participated in this research, as well as the research assistants who made all of this recruitment and data collection possible. We would also like to acknowledge the College of Health and Human Development, the Department of Human Development and Family Studies, as well as the Bennett Pierce Prevention Research Center at The Pennsylvania State University, which awarded research funds to the first author to complete this research. The first author's time on this manuscript was also partially funded by the National Institute on Drug Abuse (Award Number T32DA017629).

Author Disclosure Statement

No competing financial interests exist.

References

1. Wiederhold BK. Should adult sexting be considered for the DSM? *Cyberpsychology, Behavior, & Social Networking* 2011; 14:481.
2. Klettke B, Hallford DJ, Mellor DJ. Sexting prevalence and correlates: a systematic literature review. *Clinical Psychology Review* 2014; 34:44–53.
3. Parker TS, Blackburn KM, Perry MS, et al. Sexting as an intervention: relationship satisfaction and motivation considerations. *American Journal of Family Therapy* 2013; 41:1–12.
4. Wysocki DK, Childers CD. "Let my fingers do the talking": sexting and infidelity in cyberspace. *Sexuality & Culture: An Interdisciplinary Quarterly* 2011; 15:217–239.
5. Pew Research Center. Mobile technology fact sheet. 2015. www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/ (accessed Oct. 14, 2015).
6. Pew Research Center. The smartphone difference. 2015. www.pewinternet.org/2015/04/01/us-smartphone-use-in-2015 (accessed Oct. 14, 2015).
7. Döring N. Consensual sexting among adolescents: risk prevention through abstinence education or safer sexting? *Cyberpsychology* 2014; 8:1–18.
8. Drouin M. (2015) Sexual communication in the digital age. In Rosen LD, Cheever N, Carrier LM, eds. *The Wiley handbook of psychology, technology, and society*. New York: Wiley Blackwell, pp. 176–191.
9. Drouin M, Vogel KN, Surbey A, et al. Let's talk about sexting, baby: computer-mediated sexual behaviors among young adults. *Computers in Human Behavior* 2013; 29:A25–A30.
10. Dir AL, Cyders MA, Coskunpinar A. From the bar to the bed via mobile phone: a first test of the role of problematic alcohol use, sexting, and impulsivity-related traits in sexual hookups. *Computers in Human Behavior* 2013; 29:1664–1670.
11. Drouin M, Landgraff C. Texting, sexting, attachment, and intimacy in college students' romantic relationships. *Computers in Human Behavior* 2012; 28:444–449.
12. Samimi P, Alderson KG. Sexting among undergraduate students. *Computers in Human Behavior* 2014; 31:230–241.
13. Benotsch EG, Snipes DJ, Martin AM, et al. Sexting, substance use, and sexual risk behavior in young adults. *Journal of Adolescent Health* 2013; 52:307–313.
14. Dake JA, Price JH, Maziarz L, Ward B. Prevalence and correlates of sexting behavior in adolescents. *American Journal of Sexuality Education* 2012; 7:1–15.
15. Ferguson CJ. Sexting behaviors among young Hispanic women: incidence and association with other high-risk sexual behaviors. *Psychiatric Quarterly* 2011; 82:239–243.
16. Weisskirch RS, Delevi R. "Sexting" and adult romantic attachment. *Computers in Human Behavior* 2011; 27:1697–1701.
17. Mikulincer M, Shaver PR. (2003) The attachment behavioral system in adulthood: activation, psychodynamics, and interpersonal processes. In Zanna MP, ed. *Advances in experimental social psychology*. Vol. 35. New York: Academic Press, pp. 53–152.
18. Mikulincer M, Shaver PR. (2007) *Attachment in adulthood: structure, dynamics, and change*. New York: Guilford Press.
19. Temple JR, Le VD, van den Berg P, et al. Brief report: teen sexting and psychosocial health. *Journal of Adolescence* 2014; 37:33–36.
20. Steinberg L. A social neuroscience perspective on adolescent risk taking. *Developmental Review* 2008; 28:78–106.
21. Norton R. Measuring marital quality: a critical look at the dependent variable. *Journal of Marriage & the Family* 1983; 45:141–151.
22. Braiker HB, Kelley HH. (1979) Conflict in the development of close relationships. In Burgess RL, Huston TL, eds. *Social exchange in developing relationships*. New York: Academic Press, pp. 135–168.
23. Wei M, Russell DW, Mallinckrodt B, et al. The experiences in close relationship scale (ECR)-short form: reliability, validity, and factor structure. *Journal of Personality Assessment* 2007; 88:187–204.
24. Ruppel EK, Curran MA. Relational sacrifices in romantic relationships: satisfaction and the moderating role of attachment. *Journal of Social & Personal Relationships* 2012; 29:508–529.
25. Radloff LS. The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement* 1977; 1:385–401.
26. Feinberg ME, Brown LD, Kan ML. A multi-domain self-report measure of coparenting. *Parenting* 2012; 12:1–21.
27. Schoppe-Sullivan SJ, Mangelsdorf SC, Frosch CA, et al. Associations between coparenting and marital behavior from infancy to the preschool years. *Journal of Family Psychology* 2004; 18:194–207.
28. Gordon-Messer D, Bauermeister J, Grodzinski A, et al. Sexting among young adults. *Journal of Adolescent Health* 2012; 52:301–306.
29. National Survey of Sexual Health and Behavior (NSSHB). Findings from the National Survey of Sexual Health and Behavior, Centre for Sexual Health Promotion, Indiana University. *Journal of Sexual Medicine* 2010; 7:255–265.

Address correspondence to:

Brandon T. McDaniel
Human Development and Family Studies
The Pennsylvania State University
314 Biobehavioral Health Bldg
University Park, PA 16802

E-mail: btmcdaniel.phd@gmail.com