Sexting and Sexual Satisfaction on Young Adults in Romantic Relationship

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Abstract
The integration of technology into everyday life contributes to the urgency to study virtual activities within the context of a romantic relationship, one of them being sexting or the exchange of sensual messages through communication technology. Sexting, until recently, had been looked upon as risky sexual behavior. Researchers, however, have come to view sexting as a positive activity in romantic relationships, especially in regards to sexual satisfaction. Sexual satisfaction may be enhanced by sexting as it can function as a means of sexual communication and activity. This research aims to investigate the relationship between sexting and sexual satisfaction, especially with sexting as the predictor of sexual satisfaction. Regression analysis is used to test the hypothesis, and the result shows that sexting significantly predicted sexual satisfaction ($F(1,70) = 8.602, p = 0.005, <0.01$) with the determinant coefficient of 0.109, interpretable as 10.9% variance of sexual satisfaction explained by sexting.

Keywords
Romantic relationship, Sexting, Sexual satisfaction, Sexuality, Technology, Young adult

Some aspects of human nature, from social interaction and basic fulfillment of necessities to professional work, are already being deeply integrated with technology. The effectiveness and efficiency provided by technology drive the massive shift in activities that are traditionally dealt with human power—or the activities are now mediated via technology. Internet, as a result of the integration of technology, is situated in the core of human interaction. Demographically, teenagers and young adults make up the majority of internet users, and communication is one of the biggest functions of the internet. Interpersonal relations are one of the developmental tasks of young adults (Erikson, 1982, & Miller, 2011), where at a certain age, intimacy formed with other people is critical to determining their success at this developmental stage. Sex is one of the key aspects of intimate relationships nurtured at this stage.

With the rapid advancement of information and communication technology, sexual activity has found its novel form, where activities that are in the past being done physically can now be done virtually. Sexual activities mediated by technology, especially the internet, is known as online sexual activity (OSA). One of the activities included in OSA is sexting, an exchange of sexual messages in the form of text, photos, videos, or graphic content done through communicating gadgets, especially via mobile phones. The content exchanged between participants is usually self-produced (Klettke et al., 2014).

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Exchanging “naughty” messages, especially when involving graphic content, is still widely recognized as deviant behavior. According to a review by Döring (2014), 66% of published articles on sexting investigated the negative impacts of sexting, including risky sexual behavior and other negative influences on the personal well-being of sexters. Nevertheless, in accordance to the continuing growth of a sex-positive paradigm, the view on sexuality mediated by technology, including sexting, is shifting as there are attempts on investigating sexting as healthy and positive sexual behavior. Instead of viewing sexting as a risky and deviant, a sex-positive paradigm recasts sexting as a form of a healthy, albeit, new expression of sexuality and an attempt of increasing and maintaining intimacy in a relationship (Döring, 2014).

The sex-positive paradigm on sexting may have been based on various positive impacts, and the correlation sexting has across various functions, both individually and interpersonally. In the early budding stages of a relationship, communication surrounding sexuality will help strengthen the emotional bond shared between a couple, serving to developing mutual trust. In an ongoing relationship, sexting itself may serve a purpose as a proof of commitment a person has to their partner (Weisskirch & Delevi, 2011). Sexting is also a novel sexual behavior or one that may be found as unique, and thus it may serve as a novelty in the sexual relationship between the couple, and even as a form of an “invitation” for further physical sexual activities (Cupples & Thompson, 2010; Hertlein & Ancheita, 2014).

Researchers have found that there’s a relationship between sexting and sexual satisfaction, where sexting is viewed as a means of communicating sexually within between romantic partners, therefore also a sexual behavior (Parker et al., 2013; Stasko & Geller, 2015a; Stasko & Geller, 2015b; Galovan, et al., 2018). Specifically, there’s a significant increase in sexual satisfaction following the increase of frequency of people exchanging sexual messages with their partners. This finding is important when considering the huge role sexual satisfaction holds in maintaining quality of life, according to a study that showed the correlation between high sexual satisfaction and high emotional and relationship satisfaction (Rosen & Bachmann, 2008). Sexual satisfaction also holds a key role in keeping marriages intact (Sprecher, 2002), amongst other forms of romantic relationships.

Sexual satisfaction can be influenced by both individual and social factors (Henderson et al., 2009, in Sánchez-Fuentes et al., 2014). First, with ideal communication, a person can compromise and discuss with their partner to build and establish a sexual script that respects both persons in the relationship and, in line with the concept of sexual satisfaction based on the exchange model, reward the person in the relationship (Cupach & Comstock, 1990). Second, sexual dynamics may also influence the view a person has on their own sexual behavior, where novelty and variations in sexual behavior may increase satisfaction in their holistic sexual life (Haavio-Mannila & Kontula, 1997).

In the previous studies, sexting and sexual satisfaction were examined in young adults, but not specifically within the context of romantic relationships. However, there were implications that there are effects of relationship status on the relationship between the two variables. This research, therefore, aims to examine the relationship between sexting and sexual satisfaction within a romantic context. In accordance to the urban lifestyle, which is characterized by high mobility and rapid dynamics, people have turned to digital alternatives of romantic and sexual behavior to build and maintain romantic relationships (Hobbs et al., 2016). Thus, sexting and its role in maintaining the quality of romantic and sexual relationships should be studied, as its results may also be of help in giving way for couples to keep their sexual lives intact despite their rapid urban lifestyle.

Theoretical

Sexual satisfaction in this study is defined as the affective response emerging from an individual’s subjective evaluation of the positive and negative dimensions in regards to their sexual relations (Lawrance & Byers, 1995). The sexual satisfaction theory is based on the social exchange theory (Rusbult, 1983; Kelley & Thibaut, 1953) with the assumption that social interaction is hedonistic, yet they still understanding that in order to gain a pleasurable interaction (reward), there has to be an effort or cost that has to be
made, and in this case, the cost is in the form of behavior exerted that can produce psychological “loss”, such as anxiety or shame.

Sexual satisfaction can be influenced by several factors within interpersonal relationships, including sexual communication and sexual behavior variation. Sexual communication can give room for couples to create the sexual script that suits the consensual needs and wants of both sides in the relationship, so that no sides may feel wronged or burdened by the sexual role in the relationship (Metts & Cupach, 1989, in Cupach, 1990). This form of sexual communication can be categorized based on the content exchanged, either as a form of sexual initiation or rejection, or as a means of communicating sexual preferences.

Variation of sexual behavior within a romantic relationship also contributes to the increase in sexual satisfaction. Studies have shown that couples who experimented with novel sexual behavior were found to have higher sexual satisfaction (Greeley, 1991, in Sprecher & Cate, 2004). When couples incorporate variations of sexual behavior by experimenting with positions, sex tools, and even location to have a more enhanced and passionate sexual life (Blumstein & Schwartz, 1983, in Sprecher & Cate, 2004; Frederick et al., 2017). Alongside the development of technology within the context of sexuality, every sexual behavior mediated by technology is seen as an authentic sexual behavior, including sexting (Döring, 2009).

Sexting

Sexting in this study is analyzed by using the concept developed by Gordon-Messer et al., (2013) composed of components from other definitions, that is the act of sending and receiving messages in the form of text and/or picture that is sexual in nature, both suggestive and explicit, that is exchanged by forms of media. Within the context of a romantic and sexual relationship, sexting has several correlated variables. First, some studies have shown that there was a correlation between sexting and physical sexual activity. Kosenko, Luurs, and Binder (2017) have done a meta-analysis on studies conducted surrounding sexting and sexual behavior. Their findings suggest that individuals who sext are in general more active sexually, in regards to physical sexual activity (e.g. Dake et al., 2012, Gordon-Messer et al., 2013). Sexting, therefore, can be viewed as a ‘gateway’ to real-life physical sexual activity, or also may be considered as a form of foreplay (Hertlein & Ancheta, 2014; Hudson & Marshall, 2017). Within romantic relationships, sexting can be viewed as a rewarding sexual activity that can even enhance the dynamic of a person’s romantic endeavors (Parker, et al., 2013).

Sexting can also affect the evaluation one has on his or her sexual life (Parker et al., 2013). In his study, Parker et al., (2013) sees the possibility of sexting as a factor that can influence sexual satisfaction. The assumption is supported by the corresponding results from several following studies (e.g. Castañeda, 2017, Galovan et al., 2018, Stasko & Geller, 2015). The relationship between the two variables is one of the pillars of the sex-positive paradigm towards sexting, where the relationship may serve as a base to place sexting as a form of healthy sexual behavior that can contribute to enhancing the quality of people’s sexual lives.

Methods

Sample

Participants for this research were male and female Indonesian citizens who were in a romantic relationship or had sexted while in romantic relationships. As this research is aimed to determine the dynamics between variables in the context of young adults, participants must be between the ages 20-29 years old. To measure sexual satisfaction, participants were required to be sexually active physically in at least one type of sexual activity with their partner.

Research Design

This research was a quantitative research with correlational research design.

Instruments

Sexual satisfaction was measured by the Global Measure of Sexual Satisfaction (GMSEX), a measurement developed by Lawrence and Byers (1995) consisted of 5 items, acquired from...
Lawrence, Byers, and Cohen (n.d.). The items for GMSEX were 7-points bipolar scale used to express the participants’ rating about their sexual life with their partners. The five responses were Good-Bad, Pleasant-Unpleasant, Positive-Negative, Satisfying-Unsatisfying, and Valuable-Worthless in which the highest score indicated a positive response, and the lowest score indicated a negative response. The higher the score, the higher a person’s satisfaction for his or her sexual life was, and vice versa. The lowest score for this instrument was 5 points, and the highest score was 35 points. The reliability score for this instrument was 0.95 (Lawrence, Byers, & Cohen, n.d.; Mark et al., 2014).

Sexting behavior was assessed by an adapted version (Rahardjo et al., 2015) of the measurement developed by Gordon-Messer et al., (2013). This measurement consists of two subscales that assessed the behavior of sending and receiving sexual texts or pictures (photos or videos). Each scale consisted of four items, meaning this measurement had eight items in total. Each item measured the frequency of sexting behavior based on four sexting contents: texts (formerly described as “SMS”. It was modified in this research to “text messages” in order to increase sensitivity for the technology used), pictures, photos, and videos that were described as “provocative”. The response scale for these instruments consisted of 6 points, one indicating “Never” and six indicating “Very Often.” This measurement had reliability of 0.923.

Research Procedures

In the pilot study, there were three other measurements designed to assess three different variables with the same population. Thirty people participated in the pilot study. Based on the pilot study, there were no changes made to the items in the measurements. The measurements in the pilot study were GMSEX, developed by Lawrance and Byers (1995) and sexting measurement developed by Gordon-Messer et al. (2013). GMSEX was translated to Indonesian and went through readability tests, while sexting measurement was acquired from Indonesian research that assessed the same construct.

A number of 89 participants filled the questionnaires distributed online (ages ranged from 20-36 years old, M = 22.62, 69% female) with a reward of Rp10,000 for each participant in the form of e-money (GoPay or OVO) or phone credit. In the first page, participants were given informed consent to assure willingness to participate in this study. If they agreed to participate, participants were asked to press next to continue with the study. If they declined, participants were allowed to close the page. In the last page, participants were given short debriefing statement regarding the purpose of the research and researchers’ contacts in case they had questions or advice about the research.

Results

Descriptive Results

There were 71 participants who were included for data analysis. In general, most of the participants were between the ages of 20-24 years old (72%), while other participants were between the ages of 25-36 years old (28%) and were dominated by female (69%), with other participants being male (29.6%) and one participant being gender-neutral (1.4%). Participants were mainly dating (91.5%) but there were also participants who were married (7.1%) and single (1.4%). Most of the participants experienced sexting with someone when they were dating (89.9%), and eight people last experienced it when they were married (11.1%). All of the male participants did sexting with their dating partner, while 5 of the female participants did so with their husbands. Regarding who initiated the sexting behavior, half of the participants answered that their partners initiated sexting (50.7%), and others answered they initiated it themselves (31%) or that both initiated sexting (18.3%). For male participants, most of them were initiators for texting (66.7%), while others were started by their partners (9.5%) or both (23.8%). Meanwhile, for female participants, most of them were initiated by their partners (69.4%), and others were initiated by themselves (14.3%), both (14.3%), and one participant answered: “I don’t know.” In sexting, participants, for the most part, were both senders and receivers of ‘sexts’ (78.9%), while some were just senders (11.3%) or receivers (9.9%), and in both genders, a similar ratio was found where most of the participants were both senders and receiv-
ers, but more male were exclusive receivers (14.3%), while more female were exclusive senders (12.2%).

The measured sexual frequency was lifetime sexting experience, meaning there was no specific time range for sexting behavior. The means for the frequency of receiving behavior (M = 11.42) or sending behavior (M = 10.83) of sext were not far apart from the median of each behavior. Similar results were found for sexting scores based on the content of the sext, whether it was texted (M = 7.06), photos, (M = 5.4), videos (M = 5.5), or pictures (M = 4.3), which were all considerably approaching median. Ranges for each score were quite small, averaging on 2-4 scores above or below the mean.

**Main Results**

This part will present the main results aimed to answer the research question, that is whether sexting behavior could predict an individual’s sexual satisfaction score. Data were analyzed using simple linear regression. Table 1 is the result of the regression analysis between the two variables.

Based on the below result, it could be seen that the frequency of sexting behavior significantly predicted sexual satisfaction score ($\beta = 0.331$, $p < 0.01$). Thus, the results support the hypothesis. The correlation was positive, indicating that an individual’s higher frequency for sexting behavior would predict the increase of sexual satisfaction score. Frequency of sexting as a predictor could describe 10.9% variants of sexual satisfaction ($R^2 = 0.109$, $p < 0.01$). Based on Cohen’s G, $f^2$, effect size from the correlation was small ($f^2 = 0.12$) (Cohen, 1988).

**Additional Results**

Aside from the main research question, analyses were also done to see the correlations between sexting behavior and sexual satisfaction based on demographic variables, types of sexting behavior (sending or receiving) and content of ‘sexts’ exchanged (texts, photos, videos, pictures). Based on demographic variables (age, gender, relationship status, sexual orientation, sexting initiator, and sexting partner), no significant correlation was found for each variable with sexual satisfaction ($p < 0.05$). There was a significant correlation between sexual satisfaction with sending ‘sexts’ ($r = 0.384$, $p < 0.01$). Meanwhile, the content of each ‘sext’ exchanged, whether it was texts ($r = 0.308$, $p < 0.01$), photos ($r = 0.278$, $p < 0.05$), video ($r = 0.288$, $p < 0.05$), or pictures ($r = 0.250$, $p < 0.05$), showed a significant positive correlation with sexual satisfaction. In other words, an increase in sexual satisfaction was accompanied by an increase in texts, videos, photos, and pictures sexting scores.

**Discussions**

The main result of this study showed a significant correlation between sexting behavior and sexual satisfaction in individuals in romantic relationships, with no interference from demographic factors like age, gender, sexual orientation, or which partner initiated the sexting. The result was aligned with previous studies (e.g. Parker et al., 2013; Stasko & Geller, 2015a; Stasko & Geller, 2015b; Galovan et al., 2018). The correlation could be explained by looking at sexting as a form of sexual communication or a variation of sexual activity by taking into account a few aspects of individual sexualities, like chances to show individual sexual autonomy as explained below.

Firstly, some researches classified sexting as a form of sexual communication or a way for an individual to communicate or explore their sexual preferences and initiate sexual inter-

| Table 1. Prediction of sexting frequency towards sexual satisfaction |
|-------------------|---|---|---|---|---|---|
| Variable          | B  | SE  | B  | t   | Sig (p) | $R^2$ |
| Sexting Frequency | 0.231 | 0.079 | 0.331 | 2.933 | 0.005** | 0.109 |

Dependent variable: sexual satisfaction

**Significant in L.o.S 0.01
course with their partner. One function of sexting linked with physical sexual activities was its role as a tool for flirting with their partner before continuing on to physical sexual relations, or in other words, sexting was used as an initiator for sexual intercourse (Hartlein & Ancheta, 2014; Hasinoff, 2013; Hudson & Marshall, 2017). When an individual actively participated in sexting, they were able to express their sexuality with their partner through exchanging sensual content, whether through texts, photos, videos, or pictures. Thus, that individual had a means to disclose their preferences with their partners, resulting in increased sexual satisfaction (Rehman et al., 2011). Moreover, the chance to exchange sexual media served as a good source of information and feedback to enrich the sexual relationship with their partner.

Secondly, sexting could also be seen as a variation of sexual activity in an existing sexual relationship. In this research, participants were required to be active in physical sexual activities with their partner. Outside of physical activity, sexting could be a “novel” and “exciting” form of sexual activity (Doring, 2009). Sexting offered different virtual sexual experience compared to the usual physical sexual activities. In fact, as an independent form of sexual activity, some people could exchange sensual messages without continuing on to physical sexual intercourse or when physical meetings were unavailable, thus sexting was seen as a fun variation of sexual activity that could affect sexual satisfaction of said individual (Greely, 1991, in Sprecher & Cate, 2004).

Lastly, from the context of the type of sexting used, receiving or sending sensual messages, sending sensual messages significantly affects sexual satisfaction, while receiving sensual messages did not. This relationship could be explained with the function of sexting as a vessel of sexual self-disclosure, where someone could express their sexuality in their romantic relationship (Rehman et al., 2011). Regarding content types and sexual satisfaction, results in this study were aligned with a previous study by Galovan et al., (2018) which showed that all types of ‘sext’ content were significantly correlated with sexual satisfaction, whether it was texts, photos, videos, or pictures.

The effect size for the result of this study was small, or in other words, sexting could only explain a small number of variants of individual sexual satisfaction. This could be explained as even though sexting functioned as sexual communication or as a variation of sexual activity, sexting was a small and specific aspect of both activities, thus someone’s sexual satisfaction might be explained by other more general types of communication or sexual activities.

Conclusion

This study aimed to find out whether sexting behavior could predict sexual satisfaction in young adults who were in a romantic relationship. In order to answer the research question, data collection was done. Through the collected data, it was found that frequency of sexting behavior significantly predicted sexual satisfaction scores positively, or in other words, the more often someone did sexting, there would be an increase of sexual satisfaction on said individual. This correlation was not affected by demographic variables or characteristics of sexting behavior.

Suggestion

Like the aforementioned explanation in both discussions and limitations, we concluded that the topic of sexting and sexual satisfaction leaves a vast opportunity to be explored. This research limited the population into young adults who were mainly in a dating relationship. Future research could focus more on the dynamics of sexting behavior in older ages, and in types of relationships with bigger commitment and responsibilities like marriage to see whether the significant correlation between sexting and sexual satisfaction persists.

Furthermore, the result of this study could be a reference for sexually active couples in considering sexting as an alternative, especially for couples with problems in maintaining intimacy because of conflict in schedules or distance. Not only couples, but this study could also be beneficial for adults in the context of sex education, especially to change the narrative that sexting is a risky behavior, or even a crime. Even though studies can only occur in the context of consensual adult relationships, the existence of research regarding sexting and its positive outcomes may prove to be a good
source of information about sexual relationships, especially in this digital era.

Declaration of Conflicting Interest

There is no conflict of interest surrounding the authorship and the publication of this manuscript.

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References

Anastasi, A., & Urbina, S. (1997). Psychological testing (7th ed.). Prentice Hall/Pearson Education.

Asosiasi Penyelenggara Jasa Internet Indonesia. (2017). Infografis Penetrasi & Perilaku Pengguna Internet di Indonesia. https://web.kominfo.go.id/sites/default/files/Laporan%20Survei%20APJII_2017_v1.3.pdf

Barrense-Dias, Y., Berchtold, A., Suris, J. C., & Akre, C. (2017). Sexting and the definition issue. Journal of Adolescent Health, 61(5), 544-554. https://doi.org/10.1016/j.jadohealth.2017.05.009

Birnbaum, G. E., & Finkel, E. J. (2015). The magnetism that holds us together: Sexuality and relationship maintenance across relationship development. Current Opinion in Psychology, 1, 29-33. https://doi.org/10.1016/j.copsyc.2014.11.009

Buss, D. M. (1994). The evolution of desire: Strategies of human mating. Basic Books.

Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. Personal relationships, 15(1), 141-154. https://doi.org/10.1111/j.1475-6811.2007.00189.x

Castañeda, D. M. (2017). Sexting and sexuality in romantic relationships among Latina/o emerging adults. American journal of sexuality education, 12(2), 120-135. https://doi.org/10.1080/15546128.2017.1298069

Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences (2nd Edition). Lawrence Earlbaum Associates.

Cupach, W. R., & Comstock, J. (1990). Satisfaction with sexual communication in marriage: Links to sexual satisfaction and dyadic adjustment. Journal of Social and Personal Relationships, 7(2), 179-186. https://doi.org/10.1177/0265407590072002

Cupples, J., & Thompson, L. (2010). Heterotextuality and digital foreplay: Cell phones and the culture of teenage romance. Feminist Media Studies, 10(1), 1-17. https://doi.org/10.1080/14680770903457063

Curran, J. M., Jayne, C. N., Hammer, T. R., Brim, T., & Hubach, R. D. (2016). Explicitly pressing send: Impact of sexting on relationship satisfaction. The American Journal of Family Therapy, 44(3), 143-154. https://doi.org/10.1080/01926187.2016.1145086

Dake, J. A., Price, J. H., Maziarz, L., & Ward, B. (2012). Prevalence and correlates of sexting behavior in adolescents. American Journal of Sexuality Education, 7(1), 1-15. https://doi.org/10.1080/15546128.2012.650959

Davis, M. J., Powell, A., Gordon, D., & Kershaw, T. (2016). I want your sext: Sexting and sexual risk in emerging adult minority men. AIDS Education and prevention, 28(2), 138-152. https://doi.org/10.1521/aeap.2016.28.2.138

De Ryck, I., Van Laeken, D., Nöstlinger, C., Platteau, T., Colebunders, R., & Eurosustainable study group. (2012). Sexual satisfaction among men living with HIV in Europe. AIDS and Behavior, 16(1), 225-230. https://doi.org/10.1007/s10461-011-9987-x

Dir, A. L., Coskunpinar, A., Steiner, J. L., & Cyders, M. A. (2013). Understanding differences in sexting behaviors across gender, relationship status, and sexual identity, and the role of expectancies in sexting. Cyberpsychology, Behavior, and Social Networking, 16(8), 568-574. https://doi.org/10.1089/cyber.2012.0545

Döring, N. M. (2009). The Internet’s impact on sexuality and sexual satisfaction. Psychological Research on Urban Society, 36(4), 360-367.
sexuality: A critical review of 15 years of research. *Computers in Human Behavior, 25*(5), 1089-1101. https://doi.org/10.1016/j.chb.2014.09.069

Döring, N. (2014). Consensual sexting among adolescents: Risk prevention through abstinence education or safer sexting? Cyberpsychology: *Journal of Psychosocial Research on Cyberspace, 8*(1). https://doi.org/10.5817/CP2014-1-9

Döring, N., & Mohseni, M. R. (2018). Are Online Sexual Activities and Sexting Good for Adults’ Sexual Well-Being? Results From a National Online Survey. *International Journal of Sexual Health, 1-14.* https://doi.org/10.1080/19317611.2018.1491921

Drouin, M., & Landgraf, C. (2012). Texting, sexting, and attachment in college students’ romantic relationships. *Computers in Human Behavior, 28*(2), 444-449. https://doi.org/10.1016/j.chb.2011.10.015

Drouin, M., Vogel, K. N., Surbey, A., & Stills, J. R. (2013). Let’s talk about sexting, baby: Computer-mediated sexual behaviors among young adults. *Computers in Human Behavior, 29*(5), A25-A30. https://doi.org/10.1016/j.chb.2012.12.030

Drouin, M., Ross, J., & Tobin, E. (2015). Sexting: A new, digital vehicle for intimate partner aggression? *Computers in human behavior, 50*, 197-204. https://doi.org/10.1016/j.chb.2015.04.001

Drouin, M., & Tobin, E. (2014). Unwanted but consensual sexting among young adults: Relations with attachment and sexual motivations. *Computers in Human Behavior, 31*, 412-418. https://doi.org/10.1016/j.chb.2013.11.001

Dundon, C. M., & Rellini, A. H. (2010). More than sexual function: Predictors of sexual satisfaction in a sample of women age 40–70. *The journal of sexual medicine, 7*(2), 896-904. https://doi.org/10.1111/j.1743-6109.2009.01557.x

Fincham, F. D., & Cui, M. (Eds.). (2010). *Romantic relationships in emerging adulthood*. Cambridge University Press.

Frederick, D. A., Lever, J., Gillespie, B. J., & Garcia, J. R. (2017). What keeps passion alive? Sexual satisfaction is associated with sexual communication, mood setting, sexual variety, oral sex, orgasm, and sex frequency in a national US study. *The Journal of Sex Research, 54*(2), 186-201. https://doi.org/10.1080/00224499.2015.1137854

Galovan, A. M., Drouin, M., & McDaniel, B. T. (2018). Sexting profiles in the United States and Canada: Implications for individual and relationship well-being. *Computers in Human Behavior, 79*, 19-29. https://doi.org/10.1016/j.chb.2017.10.017

Gordon-Messer, D., Bauermeister, J. A., Godzinski, A., & Zimmerman, M. (2013). Sexting among young adults. *Journal of Adolescent Health, 52*(3), 301-306. https://doi.org/10.1016/j.jadohealth.2012.05.013

Gossmann, I., Mathieu, M., Julien, D., & Chartrand, E. (2003). Determinants of sex initiation frequencies and sexual satisfaction in long-term couples’ relationships. *The Canadian Journal of Human Sexuality, 12*(3-4), 169-182.

Gravetter, F. J., & Forzano, L. B. (2012). Research Methods for the Behavioral Sciences (4th ed.). Wadsworth.

Haavio-Mannila, E., & Kontula, O. (1997). Correlates of increased sexual satisfaction. *Archives of sexual behavior, 26*(4), 399-419. https://doi.org/10.1023/A:1024591318836

Hasinoff, A. A. (2013). Sexting as media production: Rethinking social media and sexuality. *New Media & Society, 15*(4), 449-465. https://doi.org/10.1177/1461444812459171

Hertlein, K. M., & Ancheta, K. (2014). Advantages and disadvantages of technology in relationships: Findings from an open-ended survey. *The Qualitative Report, 19*(11), 1-11. https://nsuworks.nova.edu/tqr/vol19/iss11/2

Hobbs, M., Owen, S., & Gerber, L. (2016). Liquid love? Dating apps, sex, relationships and the digital transformation of intimacy. *Journal of Sociology, 53*(2), 271-284. https://doi.org/10.1177%2F1440783316662718

Hudson, H. K., Fetro, J. V., & Ogletree, R. (2014). Behavioral indicators and behaviors related to sexting among undergraduate students. *American journal of health education, 45*(3), 183-195. https://doi.org/10.1080/019325037.2014.901113

Ji, J., & Norling, A. M. (2004). Sexual satisfaction of married urban Chinese. *Journal of Developing Societies, 20*(1-2), 21-38. https://doi.org/10.1002/j.1743-6109.2009.01557.x
Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. John Wiley & Sons.

Klettke, B., Hallford, D. J., & Mellor, D. J. (2014). Sexting prevalence and correlates: A systematic literature review. *Clinical psychology review*, 34(1), 44-53. https://doi.org/10.1016/j.cpr.2013.10.007

Kosenko, K., Luurs, G., & Binder, A. R. (2017). Sexting and sexual behavior, 2011–2015: A critical review and meta-analysis of a growing literature. *Journal of Computer-Mediated Communication*, 22(3), 141-160. https://doi.org/10.1111/jcc4.12187

Lawrance, K. A., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, 2(4), 267-285. https://doi.org/10.1111/j.1475-6811.1995.tb00092.x

Lenhart, A. (2009). *Teens and sexting. Pew internet & American life project*. 1, 1-26. http://www.ncdsv.org/images/pewinternet_teen_sandsexting_12-2009.pdf . http://hdl.handle.net/11212/2060

Mark, K. P., Herbenick, D., Fortenberry, J. D., Sanders, S., & Reece, M. (2014). A psychometric comparison of three scales and a single-item measure to assess sexual satisfaction. *The Journal of Sex Research*, 51(2), 159-169. https://doi.org/10.1080/00224499.2013.816261

McClelland, S. I. (2010). Intimate justice: A critical analysis of sexual satisfaction. *Social and Personality Psychology Compass*, 4(9), 663-680. https://doi.org/10.1111/j.1751-9004.2010.00293.x

McDaniel, B. T., & Drouin, M. (2015). Sexting among married couples: Who is doing it, and are they more satisfied?. *Cyberpsychology, Behavior, and Social Networking*, 18(11), 628-634. https://doi.org/10.1089/cyber.2015.0334

Meston, C. M., & Buss, D. M. (2007). Why humans have sex. *Archives of sexual behavior*, 36(4), 477-507. https://doi.org/10.1007/s10508-007-9175-2

Neustaedter, C., & Greenberg, S. (2011). Intimacy in long-distance relationships over video calling. Research Report 2011-1014-26, Dept. of Computer Science.

Miller, P. H. (2011). *Theories of developmental psychology*. 5th ed. New York

Papalia, D. E., Martorell, G., (2014). *Experience human development* (13th ed.). McGraw-Hill.

Parker, T. S., Blackburn, K. M., Perry, M. S., & Hawks, J. M. (2013). Sexting as an intervention: Relationship satisfaction and motivation considerations. *The American Journal of Family Therapy*, 41(1), 1-12. https://doi.org/10.1080/01926187.2011.635134

Rahardjo, W., Saputra, M., & Hapsari, I. (2015). Harga Diri, Sexting dan Jumlah Pasangan Seks yang Dimiliki oleh Pria Lajang Pelaku Perilaku Seks Berisiko. *Jurnal Psikologi*, 42(2), 101-114. https://doi.org/10.22146/jpisi.7172

Rehman, U. S., Rellini, A. H., & Fallis, E. (2011). The importance of sexual self-disclosure to sexual satisfaction and functioning in committed relationships. *The journal of sexual medicine*, 8(11), 3108-3115. https://doi.org/10.1111/j.1743-6109.2011.02439.x

Rosen, R. C., & Bachmann, G. A. (2008). Sexual well-being, happiness, and satisfaction, in women: The case for a new conceptual paradigm. *Journal of sex & marital therapy*, 34(4), 291-297. https://doi.org/10.1080/00926230802096234

Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of personality and social psychology*, 45(1), 101. https://doi.org/10.1037/0022-3514.45.1.101

Sánchez-Fuentes, M. D. M., Santos-Iglesias, P., & Sierra, J. C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology*, 14(1). https://doi.org/10.1016/S1697-2600(14)70038-9

Simms, D. C., & Byers, E. S. (2013). Heterosexual daters’ sexual initiation behaviors: Use of the theory of planned behavior. *Archives of Sexual Behavior*, 42(1), 105-116. https://doi.org/10.1007/s10508-012-9994-7

Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of sexual behavior*, 15(2), 97-120. https://doi.org/10.1007/BF01542219
Sprecher, S. (2002). Sexual satisfaction in pre-marital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of sex research, 39*(3), 190-196. https://doi.org/10.1080/0022490209552141

Sprecher, S., & Cate, R. M. (2004). Sexual satisfaction and sexual expression as predictors of relationship satisfaction and stability. In J. H. Harvey, A. Wenzel, S. Sprecher, J. H. Harvey, A. Wenzel & S. Sprecher (Eds.), *The Handbook of Sexuality in Close Relationships* (pp. 235-256). Lawrence Erlbaum Associates Publishers.

Stasko, E. C., & Geller, P. A. (2015). Reframing sexting as a positive relationship behavior. *American psychological association*, 6-9. https://www.apa.org/news/press/releases/2015/08/reframing-sexting.pdf

Stasko, E. C., & Geller, P. (2015). *Sexting and Intimate Partner Relationships Among Adults* (Doctoral dissertation, Drexel University).

Strohmaier, H., Murphy, M., & DeMatteo, D. (2014). Youth sexting: Prevalence rates, driving motivations, and the deterrent effect of legal consequences. *Sexuality Research and Social Policy, 11*(3), 245-255. https://doi.org/10.1007/s13178-014-0162-9

Temple J.R., Lu Y. (2018) Sexting from a Health Perspective: Sexting, Health, and Risky Sexual Behaviour. In Walrave M., Van Ouytsel J., Ponnet K., Temple J. (eds) *Sexting. Palgrave Studies in Cyberpsychology*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-71882-8_4

Twenge, J. M., Sherman, R. A., & Wells, B. E. (2017). Declines in sexual frequency among American adults, 1989-2014. *Archives of sexual behavior, 46*(8), 2389-2401. https://doi.org/10.1007/s10508-017-0953-1

Vannier, S. A., & O’Sullivan, L. F. (2011). Communicating interest in sex: Verbal and nonverbal initiation of sexual activity in young adults’ romantic dating relationships. *Archives of Sexual Behavior, 40*(5), 961-969. https://doi.org/10.1007/s10508-010-9663-7

Weisskirch, R. S., & Delevi, R. (2011). “Sexting” and adult romantic attachment. *Computers in Human Behavior, 27*(5), 1697-1701. https://doi.org/10.1016/j.chb.2011.02.008

Ybarra, M. L., & Mitchell, K. J. (2014). “Sexting” and its relation to sexual activity and sexual risk behavior in a national survey of adolescents. *Journal of Adolescent Health, 55*(6), 757-764. https://doi.org/10.1016/j.jadohealth.2014.07.012