



2017

# A MULTIPLE GOALS THEORETICAL APPROACH TO SEXTING: MESSAGE CONTENT AND SCALE DEVELOPMENT

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Digital Object Identifier: <https://doi.org/10.13023/ETD.2017.204>

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A MULTIPLE GOALS THEORETICAL APPROACH TO SEXTING: MESSAGE  
CONTENT AND SCALE DEVELOPMENT

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DISSERTATION

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A dissertation submitted in partial fulfillment of the  
Requirements for the degree of Doctor of Philosophy in the  
College of Communication and Information  
at the University of Kentucky

By

Christina J. Harris

Lexington, Kentucky

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Lexington, Kentucky

2017

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## ABSTRACT OF DISSERTATION

### A MULTIPLE GOALS THEORETICAL APPROACH TO SEXTING: MESSAGE CONTENT AND SCALE DEVELOPMENT

Recently, sexting has gained popularity in both popular press and academic publications. Despite the prevalence of this communicative behavior, there is limited research that focuses on a theoretical explanation as well as how it can potentially enhance relationships. The purpose of this dissertation was threefold: to utilize the multiple goals theoretical perspective to examine sender goals when sexting, to assess if multiple goals within sexting was associated with relational behaviors and outcomes, and to develop a reliable and valid scale for sexting goals.

A two-phase study was implemented. In phase 1, participants provided actual sexting messages they had recently sent to another person, and also provided their goal when they sent that particular message. Participants also answered scales related to relationship, communication, and sexual satisfaction, affectionate communication, and relational maintenance behaviors. Analytic coding was utilized for the open-ended responses regarding message content and goals, and the researcher also used the responses to develop participant- and theoretically-driven scales. Nine themes were identified for the type of goal participants had when sending sext messages. For phase 2, the proposed scale for the multiple goals of sexting was added to the preexisting survey. The researcher coded 204 sexting messages provided by participants as instrumental, relational, or identity goals and conducted multiple regressions to assess how the type of goal influenced each of the five relational outcomes. Multiple regressions revealed no significant associations among multiple goals and outcomes. Finally, exploratory factor analysis and confirmatory factor analysis was used to assess the proposed scale for the

multiple goals of sexting. The EFA revealed a four-factor solution and the CFA demonstrated factorial validity for the scale. Post hoc analysis revealed significant associations for the goals from the scale and the relational outcomes. The results of this dissertation demonstrate that multiple goals are utilized in the context of sexting, and that specific goals are important for relational outcomes.

KEYWORDS: Multiple Goals, Sexting, Message Content, Relational Outcomes,  
Exploratory Factor Analysis

Christina J. Harris

April 27, 2017

Date

A MULTIPLE GOALS THEORETICAL APPROACH TO SEXTING: MESSAGE  
CONTENT AND SCALE DEVELOPMENT

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## ACKNOWLEDGMENTS

A dissertation is not done alone, and there are many people who have helped me. To my advisor, Brandi Frisby, thank you for your support, encouragement, and hundreds of track changes. I always dreaded looking at your feedback, but your meticulous attention to detail and critique have made this work infinitely better. Thank you for dealing with my eternal pessimism and sarcasm.

Thank you to the rest of my dissertation committee: Allison Scott Gordon, Patric Spence, and Nathan Wood. I am so happy to have had such supportive and intelligent mentors who pushed for this dissertation to be better. To Annie Beck, who not only read and coded hundreds of horrifying sext messages, but who has also been an incredible friend. Your support and friendship helped me get through this program. I will miss you terribly.

Finally, thank you to my family, especially my mom and dad for always believing in me and being proud of me, no matter what. And to my husband, Justin – this would not have been possible without you. Thank you for your encouragement, support, and everlasting patience. Thank you for shouldering so many burdens. Thank you for all the quiet things that no one ever knows. I love you. Always.

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## CHAPTER ONE – INTRODUCTION

Research on interpersonal communication and sexuality remains relatively unexplored. Manning (2014) argues that the majority of communication articles related to sexuality examine it from a health and risk perspective. This is surprising, given the important benefits of sex for relationships and personal well being. In regard to relationships, sexual satisfaction has been linked to relationship satisfaction, love, longevity, and commitment (Sprecher, 2002), as well as marital satisfaction, and may even serve as a buffering effect for couples with negative communication behaviors (Litzinger & Gordon, 2005). The association between well-being and sexual activity has also been established. Individuals who engage in satisfying sexual experiences (e.g., intercourse or masturbation) experience enhanced immune function, mood enhancement, and greater longevity (Levin, 2007). Thus, despite the clear association between relationships and sexuality, Manning (2014) notes the following:

Without studies of sexuality and interpersonal communication, full understandings of sexual health also falter. Communication researchers need to continue to widen perspectives so that researchers can ask questions that probe deeper and yield more reliable findings; teachers can disseminate these understandings to others; and practitioners can help people in their quest for sexual health (p. 271).

This dissertation is an attempt to probe deeper into exploring interpersonal communication and sexuality by examining sexting, defined as “the willing interactive exchange of sexual-oriented messages using a digital mobile communications device” (Manning, 2013, p. 2510).

Sexting has become an increasingly prevalent behavior – in one study, 80% of participants reported receiving sexts and 67% reported sending sexts (Dir, Coskunpinar, Steiner, & Cyder, 2013). This behavior can function as information seeking and uncertainty reduction for relational partners, which can lead to more communication about sex, as well as behavioral enactment when partners are physically together (Manning, 2014). Other research has found that sexting is positively correlated with sexual satisfaction (Harris, Frisby, & Beck, in progress) and sexual pleasure (Klettke, Hallford, & Miller, 2014). Despite some of the positive aspects associated with it, the majority of research on sexting has focused on the occurrence of this behavior among adolescents, and the legal ramifications and risk factors associated with it (Dir & Cyders, 2015; Klettke et al., 2014; Manning, 2014). However, researchers are beginning to recognize the prevalence of sexting among adults, and consequently have started to focus on this population. Despite this renewed focus, much of the research on this behavior suffers due to the lack of both consistent and adequate conceptualization and operationalization of the construct across studies. For instance, scholars have noted that the definition for sexting is both vague and large in scope (Currin, Jayne, Hammer, Brim, & Hubach, 2016). In addition, the majority of researchers operationalize sexting based on the frequency of the behavior (e.g., Dir & Cyders, 2015; McDaniel & Drouin, 2015; Weisskirch & Delevi, 2011; Wysocki & Childers, 2011).

Thus, what we currently know about sexting is limited to the quantity of the behavior rather than the actual content. This is problematic for a few reasons. First, sexting is an inherently communicative behavior and measures of frequency ignore the specific features of the sext message. In support of this critique, Scott and Caughlin

(2014) established in their research on end-of-life decision making that when researchers focus on communication quantity, it often produces mixed or null findings, as more communication is not necessarily indicative of better communication. Second, this critique is also consistent with research on sexual frequency in the context of romantic relationships, in that more sex is not necessarily better for outcomes such as relational satisfaction (Muise, Schimmack, & Impett, 2015). Consequently, research that focuses less on the frequency of the behavior and more on the actual message is warranted. Finally, much of the research on sexting is largely atheoretical, and therefore, further research on sexting that is theory-driven is necessary.

Consequently, the multiple goals theoretical perspective will guide this dissertation. Researchers using this perspective examine different facets of message design, production, and quality, and are also able to better assess if and how that communication is related to relational well-being (Caughlin, 2010). Although a few studies have indicated some positive benefits of sexting, many of the findings on sexting are mixed or inconclusive. Assessing if sexting can positively impact relational well-being is important. Not only is it becoming a more ubiquitous behavior, but also sexual activity/behavior is associated with positive relational outcomes. It therefore seems plausible that sexting can serve to enhance similar outcomes. By using the multiple goals theoretical perspective, researchers can assess if and how interpersonal communication within a sexual context is linked to relational well-being, thereby providing us with a deeper understanding of the behavior. Further, by developing a scale that is theoretically driven and based on communication content, researchers can produce more valid and meaningful findings than what can be ascertained using measures of the frequency of

communication.

The purpose of this dissertation is: a) to employ a multiple goals theoretical approach to assess actual sext messages, b) analyze which goals are most salient, c) to assess if the goals are associated with relational well-being and outcomes, specifically that of relationship satisfaction, communication satisfaction, sexual satisfaction, relationship maintenance, and affectionate communication, and d) to develop and implement a valid scale based on multiple goals theory that will measure the goals of sexting as opposed to frequency. The second chapter of this dissertation will overview current research on sexting, explicate the multiple goals theoretical perspective and apply it to sexting, analyze the relevant relational outcomes that will be examined, and argue for the need for a better conceptualization and operationalization of sexting. The third chapter will discuss the procedures, participants, variables, and methodology that will be utilized to conduct the two phases of this dissertation. The fourth chapter will provide the results and the fifth chapter will provide a summary and discussion of findings, as well as limitations and suggestions for future research.

## CHAPTER TWO – REVIEW OF LITERATURE

### **Overview**

This chapter will present an overview of current research on sexting, an explanation of the MGT perspective and its relevance to this dissertation, and argue for the need for better conceptualization and explication of sexting. In addition, each of the relational variables will be discussed to demonstrate their importance and potential association with sexting. As sexting is the primary focus of this dissertation, this variable will be examined first.

### **Sexting**

Much of our understanding of sexting revolves around the negative health and mental repercussions of this behavior. For instance, sexting was associated with feelings of guilt and shame when the individual was caught or when the sext was spread to unintended others, and sexting was related to hookups, sensation seeking, negative urgency, and trait impulsivity (Dir & Cyder, 2015). Other researchers found that individuals who engaged in sexting behavior versus those who did not were more likely to engage in risky sexual behaviors, such as unprotected sex, number of sexual partners, and sexual activity, as well as substance abuse (Benotsch, Snipes, Martin, & Bull, 2013; Klettke et al., 2014). Sexting can also result in instances of cyberbullying or violation of privacy when content is shared without consent (Lenhart, 2007).

However, many of the previous studies examined sexting among adolescents, and research by Dir and Cyder (2015) established that the negative instances found among an adult population were relatively uncommon. More researchers are beginning to examine sexting among adults and have found positive benefits. For example, Hertlein and



Anechta's (2014) qualitative research asked participants open-ended questions about the benefits and disadvantages of using mediated communication in relationships, particularly related to reasons why individuals engaged in sexting. Specifically for individuals who may be socially anxious, communicating via a mediated device about a sensitive or risky topic (i.e., sexting) can be beneficial. For instance, participants stated that technology made it easier for shy individuals to initiate conversations and made them feel more confident asking for sex or engaging in a sexual interaction. Further, participants noted that technology helped to reduce anxiety when communicating about sexual topics because they had time to think about what they wanted to say without feeling or appearing nervous to the other person. These findings were echoed in research by Drouin, Vogel, Surbey, and Stils (2013), in which participants indicated that a primary motivation for engaging in sexting was because they were too shy to say/do so face-to-face. Other positive associations with sexting include uncertainty reduction regarding sexual preferences (Manning, 2014), sexual pleasure (Ferguson, 2011), sexual satisfaction (Harris et al., in progress), and some aspects of relational satisfaction (McDaniel & Drouin, 2015; Parker, Blackburn, Perry, & Hawks, 2013). However, none of the previous studies examined the message content of sexting messages. Thus, the following section will explicate and argue for the multiple goals theoretical perspective to guide the current research, as this theory focuses on message creation, content, and quality.

### **Theoretical Overview**

In his publication on multiple goals theories (MGT), Caughlin (2010) argues that this particular set of interpersonal theories "has the potential to bring much needed

nuance to our understanding of communication in relationships” (p. 825), in particular the theory’s ability to demonstrate the association between interpersonal communication and the well-being of a relationship. Goals are defined as “as states of affairs (events, processes, or outcomes) that people wish to attain or maintain”, and “studying how goals are enacted is essential for understanding interaction because goals motivate and explain behaviors” (Donovan-Kicken & Caughlin, 2010, p. 233). This is particularly salient in the context of sexting because studying the enactment of goals can help us to better understand and explain how individuals communicate about sex in general, which is an area that is lacking in both empirical research (e.g., Manning, 2014) and within interpersonal relationships. For example, Byers (2011) found that even for couples in long-term relationships, sexual self-disclosure, such as likes and dislikes, was uncommon.

The MGT framework is important and different from other theories because it views communication from a macro perspective. Researchers are able to utilize the theory to examine the vast complexities that are present in relational communication, whereas a micro perspective is better suited when examining and explaining a few variables. Thus, in utilizing a macro perspective like that represented in MGT, researchers can gain a better understanding of how individuals communicate in specific contexts and how that communication can influence interpersonal relationships. In other words, MGT gives us the ability to link micro-level processes (e.g., goals attended to in sexting messages) to macro-level outcomes (e.g., relational variables/outcomes).

Many theories can be categorized under this particular theoretical perspective. Wilson and Feng (2007) described several theories that can be viewed as MGT, such as

politeness theory (Brown & Levinson, 1978), the theory of message design logics (O’Keefe, 1988), the goals-plan-action model (Dillard, 2008), and identity implications theory (Wilson, Aleman, & Leatham, 1988). Clearly, there are many situations in which a multiple goals perspective can be utilized, and thus, one of the primary strengths of the theory is its theoretical scope, such that the theory can be widely applied. For instance, this perspective has been used to examine end-of-life health decisions (Scott & Caughlin, 2014), topic avoidance in families (Caughlin & Afifi, 2004), communication patterns between children and their parents (Caughlin & Scott, 2010) and HIV disclosures (Caughlin et al., 2009). The theory is also useful because it can better explain the complexities associated with relational communication (Caughlin, 2010). Additionally, Caughlin (2010) argues that researchers can look beyond specific situations/interactions and apply this perspective to more global relational issues and outcomes. He expounds on this in the following excerpt:

It is reasonable to expect that conversational-level aspects of goals are relevant to broader constructs. The goals that individuals have in particular conversations probably become linked to broader goal tendencies, and their perceptions about goals in specific interactions probably aggregate into perceptions of goal tendencies (p. 836).

Consequently, even if a researcher is examining a specific message, this is likely indicative of how an individual typically crafts a message toward another, and can thus be linked to more global relational outcomes. Therefore, a multiple goals perspective in examining sexting messages is appropriate and necessary – no studies have analyzed actual sexting messages, and in utilizing this perspective, we can assess how multiple

goals can impact the production of the message, as well as how specific goals during message production can predict global relational outcomes.

One typical way to categorize types of goals is into instrumental, identity, and relational goals. Instrumental goals are defined as the primary task of the interaction, such as trying to persuade another person. Identity goals refer to those in which an individual is most “concerned with managing the impressions of the interactants” (Scott & Caughlin, 2014, p. 264). Relational goals are categorized as goals that serve to facilitate a desirable relationship between the individuals communicating. These goals are relevant to relational communication when communicating about sensitive topics such as end of life decision-making because they tend to be “salient across social situations” (Scott & Caughlin, 2014, p. 263). In other words, these goals are common when individuals communicate with one another, and should thus also be salient in the context of sexting.

For example, in regard to instrumental goals, an individual may sext another for the specific purpose of eliciting sex or a sexual interaction. Other potential instrumental goals could include obtaining information from the other (e.g., getting to know the person’s sexual preferences and turn-ons), uncertainty reduction (Manning, 2014), and to alleviate boredom (Dir et al., 2013). Identity goals are also salient in the context of sexting. An example of this goal could include sexting to enhance or validate one’s self esteem. For example, if the receiver responds and engages in the sexting interaction, this is likely to make the sender feel that they are desirable/attractive to others, and vice versa for the receiver. Finally, common relational goals could include sexting to maintain/enhance the relationship in some way, particularly in terms of sexual

satisfaction (Klettke et al., 2014). Additional relational goals might be to increase affection or intimacy in the relationship, to engage in flirting (Drouin et al., 2013), or to indicate to the other the importance of the relationship in that the person is taking time and potentially putting him/herself in a vulnerable situation – what if the other person is offended, views it as a joke, or feels uncomfortable and doesn't respond?

These particular examples also highlight the ways in which these goals can create potential communication dilemmas by interfering with one another, which is one of the three primary assumptions of the MGT perspective (Caughlin, 2010). For instance, the goal of eliciting a sexual interaction may compete with the goal of enhancing intimacy in the relationship – the other person may view it as a cheap or dirty form of sexual communication. The goal of enhancing self-esteem might also interfere with the goal of relationship improvement – the individual could make the interaction centered on one's desire for attention and fail to connect with the other person, thereby decreasing satisfaction. Or the sender could easily be rejected, especially if it is a new relationship.

Another primary assumption of the theory is that communication serves a specific purpose. Individuals have specific goals in mind when they engage in communication, and these goals subsequently influence their communication with others. Although communication is purposeful, it is also enacted without conscious thought (Caughlin, 2010). For example, an individual might send his/her romantic partner a kind message expressing how much the partner means to him/her without realizing that the goal in this interaction is to maintain or enhance the relationship. Finally, people can pursue multiple goals at the same time. For instance, with the previous example, the individual who sent a kind message may be doing so to enhance the relationship by making the partner feel

appreciated, but also to make oneself feel like a good partner (e.g., identity goal).

As argued by Scott and Caughlin (2014), “a multiple goals theoretical perspective provides a useful means of conceptualizing and evaluating what counts as better or worse communication...by focusing on how well individuals attend to the various relevant goals” (p. 264). Thus, in utilizing this perspective we can assess how individuals attend to the multiple goals in their sexting interactions, how attending to specific goals facilitates more or less desirable communication, and how this communication relates to specific relational outcomes. The following sections will explain the relational variables that will be utilized in this study: relational satisfaction, communication satisfaction, sexual satisfaction, relational maintenance, and affectionate communication. Each of these variables is important for the health and stability of interpersonal relationships and will thus provide us with a better understanding of if and how sexting can positively contribute to relational well being.

### **Relationship Satisfaction**

Relationship satisfaction is defined as the level of contentment an individual feels for his/her relationship (Anderson & Emmers-Sommer, 2006). Although it sounds straightforward, Meeks, Hendrick, and Hendrick (1988) noted that this construct is a “complex and multi-determined aspect of intimate romantic relationships” (p. 768) and indeed, its associations with numerous communication behaviors, such as self-disclosure (Sprecher & Hendrick, 2004), topic avoidance (Sargent, 2002), maintenance (Ogolsky & Bowers, 2013), and affection (Floyd, 2002), among other variables, has been well documented. In addition, relationship satisfaction is also positively associated with sexual communication and satisfaction (Montesi, Fauber, Gordon, & Heimberg, 2010), and

because sexting is a form of sexual communication, it is an important and necessary relational outcome that should be examined.

Researchers using the multiple goals framework established that, although relationship satisfaction and topic avoidance in the context of breast cancer were negatively correlated, this association was moderated by specific reasons for avoidance (Donovan-Kicken & Caughlin, 2010). In other words, multiple goals helped to explain “the numerous and diverse reasons why people might avoid” (p. 251) and those reasons influenced the extent to which relationship satisfaction was impacted. Other researchers examined HIV disclosure messages between siblings and indicated that message features impacted the perceived closeness of the relationship following the disclosure (Caughlin et al., 2009). Although not a direct measure of relationship satisfaction, closeness can be considered a sub component, and based on these two studies, multiple goals can influence different facets of relational satisfaction.

Research has also established that mediated behaviors can influence relationship satisfaction. For instance, Utz and Beukeboom (2011) found that the SNS relationship happiness scale – designed to measure the likelihood that participants would become happy when their partner displayed specific types of behavior (e.g., writing a nice comment on a partner’s wall) on a social networking site – was positively associated with relationship satisfaction. Similarly, Saslow, Muise, Impett, and Dubin (2012) established that individuals who experienced greater relationship satisfaction were more likely to post a dyadic Facebook profile picture, and were also more likely to post information about their relationship on Facebook. The type of mediated channel can also influence relational satisfaction. Phone and video calls were positively associated with one’s

overall satisfaction with relationships, while text messaging and instant messaging was negatively associated with satisfaction (Goodman-Deane, Mieczkowski, Johnson, Goldhaber, & Clarkson, 2016). The researchers surmised that these findings might be due to the richness of the channel, such that channels that have greater opportunity for multiple cues and availability of instant feedback could have a more positive impact on the relationship.

In the context of sexting, similar to Saslow et al.'s (2012) finding that satisfied partners used Facebook to communicate about their relationships, individuals who are satisfied may also be more likely to choose to engage in sexting with their partner. Satisfied individuals may also be strategic about the type of medium they choose to engage in when sexting, as Goodman-Deane et al. (2016) found in their assessment of the association between the channel and satisfaction. Relationship satisfaction could also impact the type of goal an individual decides to pursue when sexting, and vice versa, as indicated by Caughlin et al. (2009). For example, satisfied individuals might be more apt to pursue relational goals when sexting to maintain or enhance the relationship, and pursuing those relational goals could contribute to greater relationship satisfaction.

Studies that have examined the association between relationship satisfaction and sexting are limited and findings are mixed. Parker et al. (2013) used the Revised Dyadic Adjustment scale to operationalize relational satisfaction and found that the subcomponent of consensus was a positive predictor of sexting behavior for married individuals, but neither satisfaction nor cohesion were significant predictors of sexting. Research by Currin et al. (2016) found significant differences for participant sex, which was not found in Parker et al.'s study. Specifically, heterosexual women who received



but did not send sexts had lower relationship satisfaction compared to women who neither sent nor received sexts. However, there were no differences in relational satisfaction for heterosexual women who sent and received sexts compared to women who neither sent nor received sexts, and no differences for men and nonheterosexual women regardless of whether sexts were sent and/or received. For heterosexual women, a willingness to participate in the exchange matters. One's attachment style (as well as participant sex) also influenced relationship satisfaction. McDaniel and Drouin (2015) examined married couples and found that male individuals with insecure attachment styles who sent sexually explicit photos (i.e., nude photos) indicated positive associations with relationship satisfaction. For women with high attachment anxiety, sending photos was associated with greater satisfaction, whereas women with low anxiety reported worse satisfaction.

Clearly, the findings on sexting and its association with relationship satisfaction are mixed, and it is also unclear how sexting relates to relationship satisfaction in terms of the actual content of the messages, as no research has examined this. Also relevant to this study is the assessment of sexual satisfaction, as sexting is a type of sexual communication. Further, its association with relationship satisfaction is another reason it should be examined. For instance, Parker et al. (2013) states "relationship satisfaction and sexual satisfaction are so intertwined, that neither one causes the other; both seem to be in concordance with one another" (p. 3).

### **Sexual Satisfaction**

Sexual satisfaction is defined as "the affective response arising from one's evaluation of his or her sexual relationship, including the perception that one's sexual

needs are being met, fulfilling one's own and one's partner's expectations, and a positive evaluation of the overall sexual relationship" (Ashdown, Hackathorn, & Clark, 2011, p. 41). Sexual satisfaction has been positively linked to a number of important relationship variables, such as commitment, love, and longevity (Sprecher, 2002). In addition, researchers found that high levels of sexual satisfaction can potentially buffer the negative effects of poor communication in marriages (Litzinger & Gordon, 2005). Thus, even if couples are unable to communicate effectively, a gratifying sex life can potentially salvage the relationship. However, other findings indicate that communication can actually contribute to a more satisfying sex life. For example, Byers (2011) established that engaging in sexual self-disclosure led participants to report greater sexual well being, and Yoo, Bartle-Haring, Day, and Gangamma (2013) found that emotional intimacy was predictive of sexual satisfaction for couples. Although frequency and sexual satisfaction are often viewed as a linear relationship (e.g., the more sex, the better sexual satisfaction), researchers argue that sexual quality may have a greater impact on sexual satisfaction than frequency (e.g., Rehman, Fallis, & Byers, 2013). Muise, Schimmack, and Impett (2015) also established that more sex is not necessarily better for outcomes such as relational satisfaction.

Researchers have not investigated the potential association between multiple goals and sexual satisfaction, nor have they examined how online relationships or mediated interactions can influence sexual satisfaction. Other research on sexting and sexuality primarily examines its associations with risky sexual behavior (Benotsch et al., 2013), number of sex partners (Dir, Cyders, & Coskunpinar, 2013), and sexual disinhibition and enhancement (Dir et al., 2013). Only a few studies have examined the

association between elements of sexual satisfaction and sexting. Sexting frequency has been positively associated with sexual pleasure (Ferguson, 2011) and sexual satisfaction (Harris et al., in progress). Couples may be more likely to engage in frank discussions regarding sexual wants and desires via sexting because the mediated framework presents a less face-threatening situation due to decreased nonverbal cues. If sexual disclosure is enacted via sexting, then participants may feel more comfortable engaging in sexual activity with their sexting partner and potentially enacting new or different sexual behaviors. This could facilitate enhanced sexual satisfaction. However, more research is needed that examines how one's goals within sexting messages might influence sexual satisfaction. Another important measure of satisfaction is communication satisfaction, particularly as participants will be providing actual sexting messages.

### **Communication Satisfaction**

Communication satisfaction is conceptualized as the “the positive reinforcement that is related to the fulfillment of positive communicative expectations” (Pornsakulvanich, Haridakis, & Rubin, 2008, p. 2297). Similar to sexual satisfaction, this construct is predictive of one's overall satisfaction with the relationship (Anderson & Emmers-Sommer, 2006; Emmers-Sommer, 2004). Scott and Caughlin (2014) used a multiple goals perspective in their research on end-of-life communication and found that enactment of identity and relational goals, such as attention to one's own and one's partner's positive face and attention to the relationship, positively predicted communication satisfaction. Instrumental aspects of the conversation were not significant, “suggesting that discussing end-of-life choices in a way that attends [to]

identity and relationship goals may be more important in determining conversational satisfaction than is actually reaching a decision” (p. 276).

In regard to computer-mediated communication (CMC), research has indicated that individuals tend to be more concerned with their personal well being than with their partner’s when communicating via CMC (Frisby & Westerman, 2010; Vangelisti, Middleton, & Ebersole, 2013), which could have a negative effect on each partner’s communication satisfaction. In addition, Pornsakulvanich et al. (2008) found that an individual’s motivations for using CMC to communicate predicted his/her communication satisfaction, such that individuals who used CMC to express affection and for self-fulfillment experienced greater communication satisfaction than those who used it for informative purposes. Based on these findings, individuals who use sexting for relational purposes rather than instrumental purposes may also experience greater communication satisfaction. Attending to identity goals may also facilitate better satisfaction with the conversational exchange, as was indicated in Scott and Caughlin’s (2014) research on end-of-life communication. Finally, if sexting is used as a way to attend to relational goals by attempting to increase affection, it is likely other variables such as relational and sexual satisfaction would also be positively affected. The following section will examine affectionate communication, as this type of communication may be present in sexting messages, particularly those that attend to relational goals.

### **Affectionate Communication**

Affectionate communication is defined as a strategic form of communication that involves “behaviors that encode feelings of fondness and intense positive regard, and are generally decoded as such by their intended receivers” (Floyd, Judd, & Hesse, 2008, p.

288), and can consist of both verbal and nonverbal behaviors. Floyd et al. (2008) asserts that this type of communication is necessary for relationships and is due to an evolutionary, biological need to form attachments in order to reproduce. Thus, affection should be inherently rewarding, which has been empirically supported.

Research on affectionate communication has demonstrated positive associations with relationship satisfaction (Horan & Booth-Butterfield, 2010; Punyanunt-Carter, 2004) and communication satisfaction (Punyanunt-Carter, 2004). More specifically, individuals who expressed high levels of affection reported greater levels of happiness, less susceptibility to depression and stress, and greater satisfaction in their romantic relationship compared to low-affection communicators (Floyd, 2002). Floyd et al. (2005) retested the previous study and controlled for affection received to see if there were benefits associated solely with expressed affection. The researchers found that many of the results were still statistically significant. Those who expressed high levels of affection indicated higher degrees of happiness and self-esteem, lower degrees of depression and fear of intimacy, and more satisfaction within their romantic relationships. This demonstrates that expressing affection, even without receiving it, has unique benefits, particularly in regards to relationship satisfaction. Denes (2012) also found that individuals who engaged in affectionate communication after sex (i.e., pillow talk) reported greater relational satisfaction, trust, and closeness. Additionally, this type of communication was engaged in with greater frequency and was more beneficial for couples as opposed to individuals in open and/or casual relationships. Thus, depending on the type of relationship, the type of message, and how the receiver perceives the message,

sexting can be conceptualized as a type of affectionate communication. As such, individuals are likely to experience positive relational outcomes.

As noted with the previous studies, affectionate communication, similar to findings on sex and sexuality, is beneficial for both relationships and personal health and well being. In addition to being linked to a reduced susceptibility to depression and a positive association with self-esteem (Floyd, 2002; Floyd et al., 2005), Floyd and Riforgiate (2008) found that affectionate communication expressed to and received from an individual's spouse was positively associated with healthy stress hormone levels, although the association was greater with affection received. Researchers also demonstrated that affectionate communication expressed via writing was able to significantly reduce total serum cholesterol (Floyd, Mikkelsen, Hesse, & Pauley, 2007). Thus, although sexting is a mediated behavior, based on the previous study, there are still benefits to expressing affectionate communication in writing via CMC contexts. This has also been empirically demonstrated in studies assessing affection expressed via CMC, although only a few studies have done so.

Mansson and Myers (2011) examined affectionate communication via Facebook among close friends and found that individuals reported 29 expressions of affection through Facebook. These included expressions such as: *writing on one's wall*, *posting pictures with someone*, and *telling a person you are thinking about them*. The researchers also found that women engaged in more expressions of affection through Facebook than did men, and that women perceived expressions of affection as more appropriate than did men. Finally, individuals who were highly affectionate expressed more affection and perceived affection as more appropriate than individuals who were less affectionate.

Coyne, Stockdale, Busby, Iverson, and Grant (2011) similarly found that individuals in committed romantic relationships were most likely to use mediated forms of communication specifically for the purpose of expressing affection, with women more likely to use CMC to connect with others. Overall, sexting messages can function as a form of affectionate communication. Further, affectionate communication is beneficial for both relationships and well being, and can be communicated across a variety of mediated platforms. Relationship maintenance is the final relational variable that will be examined, as Punyanunt-Carter (2004) explained that affectionate communication is “integral to the maintenance of relationships” (p. 1155).

### **Relational Maintenance**

Relationship maintenance can be conceptualized as “strategic and routine” behaviors that “function [to] sustain partners’ desired relational features” (Stafford, 2011, p. 280). Strategic maintenance behaviors are enacted with the specific and conscious purpose to maintain the relationship, whereas routine behaviors are those that occur more regularly and “consist of everyday interactions that serve the implicit function of maintenance” (Ogolsky & Bowers, 2013, p. 344). Relationship maintenance can serve a variety of functions, ranging from maintaining the current existence of the relationship to attempting to improve it. Not only can relationship maintenance function in numerous ways, it has also been found to consistently correlate with a number of important relationship variables. In fact, a meta-analysis conducted with 35 studies found that relationship maintenance was significantly and positively correlated with relationship satisfaction, commitment, liking, love, and control mutuality (Ogolsky & Bowers, 2013).

Stafford (2011) posited that there were fundamental flaws associated with the

conceptualization of the factors in previous relationship maintenance scales (Stafford & Canary, 1991; Stafford, Dainton, & Haas, 2000). Stafford (2011) contended that some of the factors' definitions measured more than one construct and another major flaw was the inclusion of items that "tap[ped] (in to) other entities" (p. 282) outside of behaviors. Thus, Stafford (2011) proposed and tested a new measure of relationship maintenance to account for these flaws, which consists of seven factors: positivity, understanding, self-disclosure, relationship talks, assurances, tasks, and networks (Stafford, 2011). *Positivity* refers to a partner who is kind, pleasant, and generally upbeat when interacting with his/her significant other. *Understanding* includes being forgiving, nonjudgmental, and apologizing when incorrect. *Self-disclosure* entails being open and discussing fears/feelings, and encouraging one's partner to engage in the same behaviors. *Relationship talks* refer to having discussions about how one feels about the quality of the relationship. *Assurances* is defined as communication that assures one's partner about their future together, as well as an individual who shows and tells his/her significant other "how much" they mean to him/her (Stafford, 2011, p. 291). *Tasks* involve the distribution of responsibilities, and refer to a partner who is willing to help out with duties that need to be accomplished. Finally, *networks* entails a partner who spends time with his/her significant other's friends and family, as well as seeks them out for advice and help. Relationship maintenance behaviors can be viewed as a means to achieve relational goals, or can be viewed as the relational goal itself.

Clearly, individuals can maintain the relationship in a number of ways, including through mediated channels. The most common maintenance behaviors that individuals enact via CMC are assurances, positivity, and openness (Johnson, Haigh, Becker, Craig,



& Wigley, 2008; Rabby, 2007; Wright, 2004). These maintenance behaviors are likely the easiest to enact in an online environment, but they also are associated with other positive relationship variables. For example, Sidelinger, Ayash, Godorhazy, and Tibbles (2008) examined relational maintenance via CMC and found assurances were positively correlated with commitment, positivity and communication satisfaction, and each maintenance behavior was positively linked to relationship satisfaction. Consequently, whether it is strategic or unconscious, individuals may use different types of relational maintenance behaviors when sexting that can enhance the relationship. Further, relational goals, such as wishing to maintain or improve the relationship when sexting, can potentially influence the creation of the message. For instance, in their assessment of problematic occurrences in relationships, Samp and Solomon (1999) found that individuals were more likely to engage in message embellishments when they were instructed to adopt the primary goal of relationship maintenance for varying hypothetical problematic events. For individuals who pursue relational goals when sexting, such as relationship maintenance, the message may be different from those pursuing other primary goals, which can subsequently influence relational outcomes. For example, a sexting message that attends to relational goals and maintaining the relationship may focus more on illustrating the connection between the two individuals communicating, whereas a sexting message that attends to instrumental goals may focus specifically on eliciting a purely sexual interaction. The following part of this chapter will critique issues with conceptualization and operationalization of sexting to argue for the need for a new measure of sexting.

### **A Case for Measure Development: Conceptualization of Sexting**

Sexting is still a relatively unexplored construct, and assessing the type of goals and how they correspond to relational outcomes is only one part of the process to develop a better and more well-rounded understanding of the behavior. As part of this dissertation will involve creating a new measure of sexting behavior, the first step is to define “the conceptual domain of the construct” (MacKenzie, Podsakoff, & Podsakoff, 2011, p. 298). This involves examining previous research on the construct and assessing prior definitions, specifying the conceptual domain and themes, and then providing a clear and concise definition of the construct.

One of the primary issues with sexting research lies in the conceptualization of the construct. Currin et al. (2016) note, “one challenge in conducting research on sexting is the breadth of what is considered sexting” and that “the term ‘sexting’ remains vague” (p. 147). Drouin et al. (2013) also identified this lack of clarity, and stated that the “inconsistency in terminology makes comparability between previous studies almost impossible” (p. 26). Thus, this may be why there is a brevity of mixed findings associated with sexting (e.g., Klettke et al., 2014). Although there seems to be primary agreement that sexting involves the sending or receiving of sexually-charged messages and/or photos through mediated channels, there is some variance across definitions that limits aspects of this behavior or the channels through which it occurs. Additionally, most of the researchers fail to provide a rationale for why they chose their specific definition, and thus, their conceptualization is problematic. To offer a frame of reference, a few current definitions of the behavior are as follows: “the exchange of sexually charged material (picture or text) via mobile phone or social- networking site” (Dir, et al., 2013, p. 568); “propositioning sexual activity through text messaging” (Morey, Gentzler, Creasy,

Oberhauser, & Westerman, 2013, p. 1772); “the sending, receiving, or forwarding of sexually explicit messages, images, or photos to others through electronic means, primarily between cellular phones” (Klettke et al., 2014, p. 45); and the “sending and receiving of sexually explicit photos and/or text using cell phones with digital cameras” (Wysocki & Childers, 2011, p. 220). There are several issues with each of these definitions that will be subsequently addressed.

First, many of the definitions limit the behavior to specific types of technology, such as a cell phone or text message, when many people use sexting through other mediums, such as social media via direct messaging. Second, most of the previous definitions imply sexting has to involve explicit sexual language or visuals. Particularly problematic is the Morey et al. (2013) definition, which states that sexting is a strategic attempt to elicit sex. Manning (2013) found through interviews with participants that sexting can involve more innocent exchanges that provoke a sexual meaning only for the parties involved (e.g., a dirty inside joke or referencing a memory associated with a sexual experience without directly stating it). Further, there are likely many more goals sexting behavior may serve beyond the instrumental goal of eliciting sex, such as relational bonding or flirting. Third, the definitions do not encompass the transactional nature of communication, but rather imply that sexting is a linear exchange (i.e., one either sends or receives sexts). In fact, a few of the studies grouped participants into specific groups based on whether the individual sent, received, or sent and received sexts (e.g., Currin et al., 2016).

Finally, despite the inherently communicative nature of sexting, none of these definitions characterize sexting as a means of interpersonal communication. Currently,

only Manning's (2013) definition characterizes the behavior as an evolving, transactional conversation between willing parties: "the willing interactive exchange of sexual-oriented messages using a digital mobile communications device" (p. 2510). In addition, the definition is also verified by information and sources other than Manning's (2013) own understanding of the construct. Manning's (2013) creation of this definition was the result of a threefold process. It came from interviews with participants, in which he asked them to explicitly define sexting, observations of how the participants were talking about sexting in interviews, and examination of participants' actual sexting messages. The result of these three varying forms of "data enabled the creation of a definition that was not pre-formed by me as a researcher, but that instead was created by the participants in the study as they communicated about the process" (p. 2510). Consequently, Manning's definition is used to guide this dissertation.

In assessing each part of the definition, the "willing interactive exchange" component means that each individual involved in the exchange of messages must be a willing participant. For example, receiving unwanted messages or photos, even if they are sexual in nature, will not be considered sexting because both parties must want the exchange to happen. Further, an exchange implies a back and forth in the conversation and thus implies an individual's willingness. The participant will also determine the sexual-oriented nature of the message. For example, as stated previously, Manning (2013) notes that sexting can involve messages that are not necessarily sexual in nature, but evoke a sexual meaning for the participants (e.g., "I loved the way you looked in that dress last night"). The final component of the definition is that sexting must occur via a mediated channel. This could include email, instant messaging, social media, text

message, or video message, among others. Because technology is changing so quickly and more ways to communicate remotely are becoming available, it is important we do not limit sexting to only a few channels, as researchers have previously done.

### **A Case for Measure Development: Operationalization of Sexting**

In addition to conceptualization, there are also problems with the current operationalization of sexting behavior. Due to inconsistencies and issues with the scales currently utilized to measure sexting, a new scale is warranted that encompasses message content, as the majority of studies measure sexting in regard to frequency of the behavior (Dir et al., 2013; Dir & Cyders, 2015; Currin et al., 2016; McDaniel & Drouin, 2015; Weisskirch & Delevi, 2011; Wysocki & Childers, 2011). For instance, many of the studies asked only a few questions related to the behavior in terms of the frequency of sending and receiving sexts, and some studies coded the responses based on a Likert-type scale (e.g., never = 1, always = 8), while others coded the responses based on the presence or absence of the behavior (e.g., yes or no). Thus, even measures of frequency are inconsistent across studies, as some are interested in the specific amount of sexting frequency (e.g., once a week), while others are only concerned with whether an individual has ever engaged in the behavior (e.g., yes or no to participating in sexting). Further, coding based on the presence or absence of the behavior reflects a poor understanding of the complexity of this behavior, and thus, the findings produced are questionable.

Consequently, our current understanding of sexting is based primarily on the frequency of use. This is problematic, because not only do we have limited knowledge of the behavior, we are also ignoring the message and its specific communicative

characteristics. Scott and Caughlin (2014) have empirically demonstrated that researchers must assess the quality, rather than frequency, of messages, as it is a better determinant of outcomes. In fact, often times when researchers focus on frequency, it produces null or mixed findings. Indeed, in their meta-review of sexting research, Klettke et al. (2014) demonstrated a variety of mixed findings, which could be the result of operationalizing sexting based on frequency. Finally, Dir et al. (2013) found that participants indicated relatively low sexting frequency, and if that is consistent across other studies, measures of frequency are even more irrelevant. Therefore, a new measure of sexting behavior focused on message content, which is the first step in assessing quality communication, is warranted.

### **Study Overview**

Two phases of data collection will be implemented. For phase one, participants will provide sexting messages and then respond to measures that assess relational well being and outcomes. The second phase of the study will involve the creation, implementation, and validation of a measure that assesses multiple goals in sexting messages. As no previous work has examined multiple goals in sexting messages, or how multiple goals in different contexts affect maintenance behaviors, affectionate communication, and sexual satisfaction, the following two research questions are proposed:

RQ1: Which goals are most salient in sexting messages?

RQ2: Do sexting messages that vary in the extent to which they address different goals elicit different relational outcomes for: a) maintenance behaviors, b) affectionate communication, and c) sexual satisfaction?

Previous research has indicated an association between the enactment of relational goals and relationship satisfaction (Caughlin et al., 2009; Donovan-Kicken & Caughlin, 2010) and communication satisfaction (Scott and Caughlin, 2014). As relational goals focus on facilitating a desirable relationship between the individuals communicating, sexting messages in which the primary goal is relational are predicted to be positively associated with these two variables.

H1: Sexting messages that attend to relational goals will be positively associated with relationship satisfaction and communication satisfaction.

Finally, researchers have also found a positive association between the enactment of identity goals and communication satisfaction (Scott and Caughlin, 2014), and it is therefore predicted that sexting messages that attend to identity goals will demonstrate a positive relationship with communication satisfaction.

H2: Sexting messages that attend to identity goals will be positively associated with communication satisfaction.

The findings from the first study will allow the researcher to create a scale that is meant to encompass the multiple goals individuals have when sexting. Thus, the final research question is offered:

RQ3: Based on the multiple goals captured in sexting messages, can a valid and reliable measure be created to assess the extent to which instrumental, relational, and identity goals are present when sexting?

## **Summary**

In sum, MGT is an important and salient theory to utilize when examining messages in multiple contexts. The results of the previous research questions and

hypothesis will provide a better understanding of the types of goals that are important when sexting, and how the goals within sext messages may impact relational outcomes. The next chapter will outline the procedures, instrumentation, and methodology for the two phases of research.



## CHAPTER 3 – METHOD

Two phases of data collection were conducted to assess if and how the MGT perspective was present in sexting. First, a survey was administered in which participants provided their goal when sexting, an actual sext message, and responded to measures of relationship, communication, and sexual satisfaction, affectionate communication, and relational maintenance. The purpose of this was to provide an initial subset of information related to the relational outcomes and qualitatively analyze participants' goals and sext messages. Second, another survey was implemented that included all of the items and measures from phase one in addition to a scale created based on the qualitative data from phase one. The responses from phase one were combined with part of the responses from phase two to dummy code sext messages into the three multiple goals and test the associations with relational outcomes. Finally, all of the responses from phase two were used to test the validity of the proposed scale assessing the importance of goals when sexting.

### **Phase 1: The Multiple Goals Present in Sexting Messages**

#### **Participants**

Following IRB approval, individuals were recruited via an electronic recruitment system at a large southeastern university and received minimal credit for their participation. To be eligible for participation, individuals were informed via the study description that they needed to have participated in a recent sexting exchange with another individual. Participants ( $N = 42$ ) consisted of male ( $n = 15$ ) and female ( $n = 27$ ) individuals who ranged in age from 19 to 36 ( $M = 21.69$ ,  $SD = 2.59$ ). For relationship status, 17 indicated single, 6 were casually dating, and 19 were in a relationship. For

those in a relationship, the average length couples had been together was 18.88 months ( $SD = 20.16$ ). Participants also indicated the type of relationship they had with the person whom they provided the sext message; one individual said the person was a friend, 12 selected casual hook-up partner, 12 indicated dating partner, and 17 said romantic partner. For the type of medium participants used to send the sext message, the majority of participants indicated text message ( $n = 37$ ), and five participants indicated Snapchat.

### **Procedures**

After completing demographic information, participants provided one sexting message that they recently sent to another individual by entering the message verbatim into the Qualtrics survey, and what their goal was when they sent that particular message. Before providing the message, participants were given the definition of sexting used in the current study. The survey stated: “Sexting is defined as a willing, interactive exchange of sexual-oriented messages using a mediated device. Please provide a recent example (within the past two months) of a sexting message – not image or photo – you sent to another person by typing out the message word for word.” The questions regarding a recent sext message and their goals were open-ended to allow for coding of those responses to categorize different types of goals individuals engaged in when sexting, as well as to code responses as either relational, instrumental, or identity goals. The final part of the survey involved participants answering measures for each of the five relational outcomes. The relational outcomes were not assessed until phase two.

### **Data Analysis**

An iterative analysis was utilized for the open-ended responses provided by participants regarding their goals when sexting. An iterative analysis is described by

Tracy (2013) as one that “alternates between emic, or emergent, readings of the data and an etic use of existing models, explanations, and theories” and also “encourages reflection upon the active interests, current literature, granted priorities, and various theories the researcher brings to the data” (p. 184). Each of the goals described by participants was coded in three cycles. The first round of coding involved primary-cycle coding, which “beg[an] with an examination of the data and assigning words or phrases that capture their image” (p. 189). For example, one participant’s goal was “To still be with my partner, even though we were not with each other geographically,” which was coded by the researcher as “feel connected.” The researcher then examined the first-level codes to identify patterns and group the codes into logical goal-oriented themes. The final round of coding involved each of the themes being coded as an instrumental, identity, or relational goal. The researcher also created a codebook based on participant’s actual sext messages. The sext messages were coded as either instrumental, relational, or identity goals.

## **Phase 2A: The Association with Relational Outcomes**

### **Participants**

The participants from phase one were combined with a subset of the participants from phase two, resulting in 204 individuals. They were recruited via an electronic recruitment system at a large southeastern university and received minimal credit for their participation. Participants consisted of male ( $n = 65$ ) and female ( $n = 139$ ) individuals who ranged in age from 18 to 37 ( $M = 20.07$ ,  $SD = 2.51$ ). For relationship status, 87 indicated single, 23 were casually dating, 92 were in a relationship, one was engaged, and one was married. For those in a relationship, the average length couples had been

together was 17.25 months ( $SD = 20.47$ ). Participants also indicated the type of relationship they had with the person whom they provided the sext message; 17 individuals said the person was a friend, 57 selected casual hook-up partner, 56 indicated dating partner, 67 said romantic partner, one indicated fiancé, two indicated spouse, and three said “other” but did not provide an explanation. For the type of medium participants used to send the sext message, the majority of participants indicated text message ( $n = 175$ ), 25 participants indicated Snapchat, two people indicated Facebook messenger, and two said Instagram messenger.

### **Procedures**

The procedures from phase one were replicated in phase two. Participants provided demographic information, one sexting message that they recently sent to another individual, and their goal when they sent that particular message. Following this, participants provided responses for each of the five relational outcomes and the proposed scale that was developed from the data in phase one.

### **Instrumentation**

**Relationship Satisfaction.** Relationship satisfaction was measured using Funk and Rogge’s (2007) Couples Satisfaction Index (CSI). Compared with other relationship satisfaction measures, the “increased precision of the CSI scales offers researchers a method of drastically reducing that measurement error and increasing power without increasing the length of assessment” (p. 580). The index consists of 32 items, but shorter versions were created to minimize participant fatigue, and thus, the 16-item measure was utilized in the current study. Items are assessed using a variety of Likert-type and semantic differential scales on a six-point scale. Previous reliability for the 16-item scale

was .98 (Funk & Rogge, 2007). The reliability for the current study was  $\alpha = .96$  ( $M = 72.63$ ,  $SD = 18.04$ ).

**Communication Satisfaction.** Communication satisfaction was assessed using a shortened version of Hecht's (1978) communication satisfaction scale. The shortened scale was a 7-point Likert type scale (1 = strongly disagree, 7 = strongly agree) with eight items that has been factor analyzed and reliable in previous studies (VanLear, 1991). Participants were asked to rate their level of agreement with statements such as, "I feel accepted and respected during conversations." Previous reliabilities have ranged from .93 to .96 (Anderson & Emmers-Sommer, 2006; VanLear, 1991). The reliability for the current study was  $\alpha = .95$  ( $M = 16.85$ ,  $SD = 8.99$ ).

**Sexual Satisfaction.** Participants completed Stulhofer, Busko, and Brouillard's (2010) New Sexual Satisfaction Scale. The short version of the scale consists of 12 items and asks participants to rate their satisfaction on a 5-point Likert-type scale (1 = not at all satisfied, 5 = extremely satisfied) to items such as "The quality of my orgasms" based on their experiences during the last six months. Previous reliabilities range from .90 to .93 (Stulhofer et al.). The reliability for the current study was  $\alpha = .95$  ( $M = 25.48$ ,  $SD = 10.74$ ).

**Relationship Maintenance.** Relationship maintenance was measured using Stafford's (2011) updated Relationship Maintenance Behavior Measure (RMBM). This scale consists of seven factors: positivity (four items, previous reliabilities ranging from .94 to .95); understanding (four items, reliabilities ranging from .90 to .93); self-disclosure (four items, reliabilities ranging from .89 to .92); relationship talks (three items, reliabilities ranging from .90 to .93); assurances (four items, reliabilities ranging

from .88 to .91); tasks (four items, reliabilities ranging from .92 to .94); and networks (five items, reliabilities ranging from .82 to .83). Each of the previous reliabilities is from Stafford's (2011) scale testing. The items were measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Because the scale reflects what maintenance strategies an individual's partner enacts, the scale was modified so that it measured the individual's maintenance behaviors toward his/her partner. For example, the item "acts positively with me" was changed to "I act positively with my partner." Other sample items include, "I am forgiving of my partner" (understanding), "I am open with my partner about my feelings" (self-disclosure), "I discuss the quality of our relationship" (relationship talks), "I talk about our plans for the future" (assurances), "I share in the joint responsibilities that face us" (tasks), and "I ask my partner's family member for help" (networks). Each of the maintenance items was reliable; positivity was .96 ( $M = 22.51$ ,  $SD = 5.71$ ), understanding was .92 ( $M = 22.65$ ,  $SD = 5.44$ ), self-disclosure was .94 ( $M = 22.52$ ,  $SD = 6.17$ ), relationship talks was .95 ( $M = 15.86$ ,  $SD = 5.08$ ), assurances was .95 ( $M = 20.21$ ,  $SD = 7.29$ ), tasks was .93 ( $M = 20.40$ ,  $SD = 6.69$ ), and networks was .91 ( $M = 22.44$ ,  $SD = 8.77$ ).

**Affectionate Communication.** Affectionate communication was measured using Floyd and Mormon's (1998) Affectionate Communication Index. The scale consists of 18 Likert-type items that assess three types of affectionate behavior expressed through verbal (e.g., statements such as "I love you"), nonverbal (e.g., hugging, kissing), and supportive behaviors (e.g., issuing praise). Previous reliabilities for verbal affection, nonverbal affection, and supportive affection have ranged from .84-.92, .83-.92, and .75-

.82, respectively (Floyd & Riforgiate, 2008; Punyanunt, 2004). The reliabilities for the current study were  $\alpha = .86$  for verbal affection ( $M = 12.39$ ,  $SD = 7.80$ ),  $.91$  for nonverbal affection ( $M = 17.96$ ,  $SD = 10.29$ ), and  $.91$  for supportive affection ( $M = 9.02$ ,  $SD = 5.61$ ).

### **Data Analysis**

As noted, participants provided a recent sext message they had sent, and the researcher coded these messages as instrumental, relational, or identity goals. Because the actual messages were used to assess if a type of multiple goal was predictive of outcomes, the researcher used the codebook created in phase one (see Appendix A). The codebook was based on Tracy's (2013) recommendation and included the type of multiple goal, the description of the goal, and example items of the goal that participants had provided. Examples of instrumental goals within messages included requests, desires, or demands related to engaging in sexual activity, such as "I want to have sex," and "Come join me in the shower." Relational goals included content that focused on longing for, excitement at seeing, or engaging in sexual behaviors with the other person, as well as assessing how to improve or spice up the relationship. Example messages were "I can't wait to see you tonight [with winking kiss face emoji]" and "Do you want to try something new?" Finally, identity goals involved content that focused specifically on the sender's sexual prowess or the receiver's physical attributes. Example messages included "I love it when I turn you on" and "You look sexy as hell, I want to touch you."

The researcher trained a graduate student who was familiar with MGT to code the sexting messages provided by participants. The researcher and the graduate student met and the researcher explained the codebook, answered questions, and clarified

information. Then, each person independently coded the first 104 messages. Intercoder reliability was assessed using Cohen's kappa. An acceptable reliability for Cohen's kappa is .6 or greater (Landis & Koch, 1977), and the intercoder reliability was .86. Following acceptable reliability, the researcher coded the remaining 100 messages. In total, 204 sexting messages provided by participants were dummy coded in SPSS to reflect the presence (labeled as a 1) or absence (labeled as a 0) of each of the three multiple goals. Then, multiple regressions were run to assess if the different multiple goals (i.e., the predictor variables) would uniquely contribute to each of the relational outcomes (i.e., the criterion variables).

## **Phase 2B: The Development and Validation of a Multiple Goals Sexting Scale**

### **Participants**

The second part of phase two focused on creating a valid and reliable measure to assess the importance of instrumental, relational, and identity goals when sexting. Participants ( $N = 540$ ) were recruited from communication courses and via an electronic recruitment system for minimal credit. They consisted of male ( $n = 166$ ) and female ( $n = 358$ ) individuals who ranged in age from 18 to 38 ( $M = 19.66$ ,  $SD = 2.35$ ). Participants identified as single ( $n = 255$ ), casually dating ( $n = 62$ ), in a relationship ( $n = 197$ ), engaged ( $n = 6$ ), married ( $n = 3$ ), and other ( $n = 3$ ). In regard to the type of relationship the participant had with the person whom they sexted, 41 indicated it was a friend, 136 indicated casual hook-up partner, 120 indicated dating partner, 124 indicated romantic partner, seven indicated fiancé, three indicated spouse, and 18 indicated "other." Participants primarily sexted using text messages ( $n = 352$ ), followed by Snapchat ( $n =$



78), Facebook messenger ( $n = 9$ ), Instagram messenger ( $n = 4$ ), and direct message on Twitter ( $n = 2$ ). Tinder ( $n = 1$ ) and KIK ( $n = 1$ ) were also used to sext.

## **Procedures**

DeVellis (2017) states “theory plays a key role in how we conceptualize our measurement problems” (p. 13) and “is a great aid to clarity (p. 106). In other words, researchers should use a particular theory as a guide when creating a scale because it can illuminate the specific aspects that should be included in the scale. Thus, the multiple goals theoretical perspective was used in the creation of the scale. The first phase of the dissertation involved qualitatively coding participants’ goals, and therefore, the items from participants were used in the development of the scale, as they reflected the scale’s overarching purpose (DeVellis, 2017): to create a measure of sexting that encompasses instrumental, relational, and identity goals. Further, using items that participants provided also yielded content validity.

DeVellis (2017) also notes that multiple items are best for each latent variable to enhance reliability, and thus, multiple items were provided for each of the three multiple goals. The scale thus consisted of three latent variables for the three multiple goals, with multiple items provided for each goal. Following this, DeVellis (2017) suggests that the items be reviewed by individuals who have expertise related to the construct or phenomena to assess the relevance, clarity, and conciseness of the items, as well as offering suggestions for additional items. Therefore, two members of the dissertation committee reviewed the items, one who has expertise with scale development and one who has expertise with the multiple goals theoretical perspective. Appropriate modifications were made based on their suggestions. For example, because only three

items were initially categorized as identity goals, additional items that reflected identity goals but were not provided by participants were added to create a more robust measure. The final scale consisted of 36 items; 19 items were instrumental, 10 were relational, and seven were categorized as identity goals. For each item, participants were asked to assess the importance of each goal when they sexted (1 = extremely important, 5 = not at all important;  $M = 91.78$ ,  $SD = 27.46$ ).

### **Data Analysis**

The researcher “evaluate[d] the performance of the individual items so that appropriate ones can be identified to constitute the scale” (DeVellis, 2017, p. 139) using an exploratory factor analysis (EFA). An EFA is appropriate because it analyzes the correlations among items and determines if there is an underlying categorical structure (i.e., factors), which items from the scale load onto factors, and which items do not load and thus should not be included (Keppel & Wickens, 2004). According to DeVellis (2017), 300 participants is considered an appropriate number of subjects to run an EFA. This sample had 540 participants, which Comrey and Lee (1992) and DeVellis (2017) consider very good. A reliability analysis was first run for the Multiple Goals of Sexting scale and proved to be reliable ( $\alpha = .96$ ).

Then, a principal components analysis with varimax rotation was used, as the priority for this type of factor rotation is to find the smallest number of factors with the highest loading (Keppel & Wickens, 2004). Based on the recommendations of Comrey and Lee (1992), the following criteria were used for factor and item retention: (1) the eigenvalues for factors needed to exceed 1.0, (2) the primary factor loadings had to be .60

or greater, (3) secondary factor loadings could not exceed .40, and (4) there needed to be a minimum of two items per factor.

Following the EFA, a confirmatory factor analysis (CFA) was performed with the same sample using AMOS. A CFA was used because it can assess if the proposed model from the EFA fits the data (DeVellis, 2017). To analyze model fit, four criteria were used based on the recommendations of Byrne (2001) and Kline (2011). The researchers state that the model should demonstrate a 2:1 chi-square ratio, a comparative fit index (CFI) and normed fit index (NFI) above .90, and a root mean square error of approximation (RMSEA) and a standardized root mean square residual (SRMR) of less than .10.

### **Summary**

The two phases of data collection and analysis were theoretically driven by MGT. The data provided the goals individuals have when sexting (phase 1), and the multiple goals present in sexting messages and their association with relational outcomes (phase 2a). Utilizing the responses from phase one allowed the researcher to create and test a scale assessing the presence and importance of goals when sexting (phase 2b). The following chapter will present the results of the data analysis.

## CHAPTER 4 – RESULTS

### **Phase 1: Qualitative Assessment of Goals**

In phase one, participants provided both qualitative and quantitative responses regarding sexting goals and relational outcome variables. The qualitative data was used to answer the first research question and also was the basis for the creation of a multiple goals of sexting scale that was implemented in phase two. The results for the first research question are described below.

#### **Research Question 1: Which goals are most salient when sexting?**

Based on the iterative analysis, nine themes for the types of goals participants said they had when sexting were identified. *Relational maintenance* ( $n = 11$ ) was defined as goals that sought to maintain connection and intimacy with one's partner (e.g., "to keep up intimacy"); *arousal* ( $n = 9$ ) was conceptualized as goals that focused specifically on stimulating one's self or one's partner (e.g., "my goal was to turn him on"); *sexual solicitation* ( $n = 6$ ) was defined as goals in which the primary objective was to engage in sexual activity with the other person (e.g., "to get some"); *enjoyment* ( $n = 6$ ) was defined as goals that focused on having fun or entertaining oneself or partner (e.g., "playfully saying that I wanted to see his nudes"); *face to face contact* ( $n = 5$ ) was defined as goals in which the strategy was to physically see or meet up with the other person (e.g., "to get my boyfriend to come home"); *conversation* ( $n = 4$ ) was defined as goals that facilitated sexual communication or a specific reaction/response from the partner (e.g., "to get a sexual response"); *alleviate boredom* ( $n = 2$ ) was defined as goals that sought to assuage oneself or the other person of boredom (e.g., "we were bored and he was out of town"); *uncertainty reduction* ( $n = 2$ ) was defined as goals that were designed to seek out or

provide information (e.g., “to see if she had mutual feelings”); and the final theme was *reciprocation* ( $n = 2$ ), which was defined as goals that focused on mirroring the other person’s behavior (e.g., “to reciprocate a message sent by him”). A few of the items were assigned two codes/themes. At the end of the second round of data collection, the researcher coded an additional 100 goals provided by participants when sexting to assess the validity of themes and if saturation had been reached. With the exception of the theme alleviate boredom ( $n = 1$ ), each of the previous themes was sufficiently established and only one new theme emerged: *affirmation* ( $n = 6$ ) was defined as goals that focused on receiving positive feedback and attention from the sext partner. Thus, after coding a total of 142 responses, saturation had been reached and the themes were refined to nine total.

Five of the themes – arousal, sexual solicitation, uncertainty reduction, conversation, and face-to-face contact – were coded as instrumental goals because they were considered to be the main or primary task of the communication interaction. In the context of sexting, the primary goal is associated with a specific aspect of sex, whether it is fulfilling one’s own or the other’s sexual desires/fantasies, or assessing if the individual is interested in having a sexual relationship in general. Relational maintenance was coded as a relational goal because the theme encompassed goals that sought to preserve or enhance the interpersonal relationship. Finally, enjoyment, reciprocation, and affirmation were coded as identity goals because the focus was on managing or creating desired impressions of the sender or receiver.

### **Phase 2A: Multiple Goals and Association with Relational Outcomes**

Research question two and hypothesis one and two are comprised of previous research on multiple goals and relational outcomes (Caughlin et al., 2009; Donovan-

Kicken & Caughlin, 2010; Scott & Caughlin, 2014). Specifically, they examine how the type of multiple goal present in a sext message can influence one's assessment of his/her relationship. Data from phase one were combined with a subset of participants from phase two, resulting in a total of 204 participants. The results of each research question and hypothesis are described below.

### **Research Question 2: Multiple Goals and its Effect on Relational Maintenance, Affectionate Communication, and Sexual Satisfaction**

As noted, the messages provided by 204 participants were dummy coded as instrumental, relational, and identity goals. The majority of the messages ( $n = 111$ ) were coded as instrumental, 51 of the messages were coded as relational goals, and 42 messages were coded as identity goals. Following this, multiple regressions were run. Tolerance and VIF scores were analyzed and indicated multicollinearity, meaning that the goals likely were correlated with one another. Although this is problematic because it limits the model's ability to tease apart the effects of different predictors, it does not impact the overall regression model (Baguley, 2012). Further, none of the regression models were significant, and multicollinearity would only be problematic if there was significance and the researcher had to assess the unique variance of each goal.

The first research question asked if the multiple goals within sext messages were associated with relational maintenance, affectionate communication, and sexual satisfaction. The multiple regression model for the maintenance items for *positivity* ( $F(2, 196) = 1.34, p = .265, R^2 = .013, \text{Adjusted } R^2 = .116$ ), *understanding* ( $F(2, 196) = 0.583, p = .559, R^2 = .006, \text{Adjusted } R^2 = -.004$ ), *self-disclosure* ( $F(2, 197) = 1.49, p = .227, R^2 = .015, \text{Adjusted } R^2 = .015$ ), *relationship talks* ( $F(2, 197) = 2.09, p = .126, R^2 = .021$ ,

Adjusted  $R^2 = .011$ ), *assurances* ( $F(2, 197) = 1.91, p = .151, R^2 = .019$ , Adjusted  $R^2 = .009$ ), *tasks* ( $F(2, 193) = 2.03, p = .135, R^2 = .021$ , Adjusted  $R^2 = .010$ ), and *networks* ( $F(2, 192) = 1.27, p = .284, R^2 = .013$ , Adjusted  $R^2 = .003$ ) were not significant.

For affectionate communication, the regression model was not significant for verbal affection ( $F(2, 194) = 1.13, p = .326, R^2 = .011$ , Adjusted  $R^2 = .001$ ), nonverbal affection ( $F(2, 195) = .282, p = .755, R^2 = .003$ , Adjusted  $R^2 = -.007$ ), or supportive affection ( $F(2, 195) = 2.30, p = .103, R^2 = .023$ , Adjusted  $R^2 = .013$ ). Finally, the model for sexual satisfaction ( $F(2, 195) = 1.31, p = .271, R^2 = .013$ , Adjusted  $R^2 = .116$ ) also was not significant. Thus, instrumental, relational, and identity goals in sexting messages were not associated with relational maintenance behaviors, affectionate communication, or sexual satisfaction.

### **Hypothesis 1**

Hypothesis one stated that sexting messages that attend to relational goals would be positively associated with relationship satisfaction and communication satisfaction. The regression models for relationship satisfaction ( $F(2, 193) = 0.96, p = .384, R^2 = .010$ , Adjusted  $R^2 = .000$ ) and communication satisfaction ( $F(2, 198) = 1.06, p = .347, R^2 = .103$ , Adjusted  $R^2 = .001$ ) were not significant. Relational goals within sexting messages were not associated with relationship and communication satisfaction. Thus, hypothesis one was not supported.

### **Hypothesis 2**

Hypothesis two predicted that sexting messages that attend to identity goals would be positively associated with communication satisfaction. The regression model

for communication satisfaction ( $F(2, 198) = 1.06, p = .347, R^2 = .103$ , Adjusted  $R^2 = .001$ ) was not significant. Identity goals within sexting messages were not associated with communication satisfaction. Therefore, hypothesis two was not supported.

### **Phase 2B: Creating a Valid and Reliable Scale**

To create a scale that encompassed the multiple goals individuals have when sexting, the researcher utilized participant responses from phase one. The scale represents content validity due to participant responses and expert panel validity, as an individual who is an expert on MGT and one who is an expert on scale development assessed the proposed scale. The scale was modified and refined based on their suggestions, and resulted in a total of 36 items that were reflective of instrumental, relational, and identity goals individuals had when sexting. The results of the final research question are detailed below.

### **Research Question 3: Creating a Reliable and Valid Measure of Multiple Goals of Sexting**

An EFA using a principal components analysis with varimax rotation revealed a four-factor solution accounting for 62.8% of the total variance. The first factor had six items and was labeled relational maintenance as it indicated an individual's goal was to maintain intimacy and connection with one's relational partner ( $\alpha = .89, M = 13.60, SD = 5.63$ ). The second factor also had six items and was labeled flirtation, as these items were comprised of goals associated with an individual's desire to be seen as sexy, playful, and fun ( $\alpha = .90, M = 12.78, SD = 5.28$ ). The third item was comprised of four items and was labeled sexual solicitation ( $\alpha = .85, M = 11.96, SD = 4.43$ ), as each of the items indicated an individual's primary goal was to engage in sexual activity



with another person. Finally, the fourth factor had four items and was labeled conversation, as the items indicated a participant's desire to engage in or reciprocate a sexual discussion with one's partner ( $\alpha = .88$ ,  $M = 10.18$ ,  $SD = 3.90$ ).

Based on the result of the EFA, a CFA was also run for the four-factor model. Using the CFA assessment criteria previously outlined by Byrne (2001) and Kline (2011), the results of the CFA indicated a good model fit as a four dimensional scale,  $\chi^2(164) = 597.15$ ,  $p < .001$ ; CFI = .92, NFI = .90, RMSEA = .07. Thus, factorial validity was established.

### **Post Hoc Analysis: Pearson Correlations**

A post hoc analysis was run for a few reasons. First, the Multiple Goals of Sexting scale proved to be reliable and valid, and testing the associations among this scale and the other relational scales would test the convergent validity of the newly created sexting scale. Second, although the multiple regressions revealed no significant associations between the type of goal present in a sext message and relational outcome variables, it is possible that an individual's perception of the importance of certain goals could impact their assessment of the relational outcome variables. Pearson product-moment correlations were run to assess how the goals present in the Multiple Goals of Sexting scale were associated with each of the relational outcomes.

The results revealed that relationship satisfaction was positively correlated with the goals of relational maintenance ( $r(426) = .36$ ,  $p < .001$ ), flirtation ( $r(430) = .16$ ,  $p < .001$ ), and conversation ( $r(428) = .10$ ,  $p < .05$ ). Communication satisfaction was positively correlated with the goals of relational maintenance ( $r(434) = .34$ ,  $p < .001$ ), flirtation ( $r(439) = .21$ ,  $p < .001$ ), and conversation ( $r(437) = .10$ ,  $p < .05$ ). Sexual

satisfaction was positively correlated with relational maintenance ( $r(428) = .45, p < .001$ ), flirtation ( $r(433) = .39, p < .001$ ), sexual solicitation ( $r(433) = .29, p < .001$ ), and conversation ( $r(431) = .28, p < .001$ ). Verbal ( $r(429) = .49, p < .001$ ), nonverbal ( $r(427) = .21, p < .001$ ), and supportive affection ( $r(429) = .51, p < .001$ ) were positively correlated with the goal of relational maintenance. Verbal ( $r(434) = .16, p < .001$ ), nonverbal ( $r(432) = .20, p < .001$ ), and supportive affection ( $r(434) = .26, p < .001$ ) were also positively correlated with flirtation.

For the maintenance behaviors, positivity was positively associated with relational maintenance ( $r(434) = .21, p < .001$ ) and flirtation ( $r(439) = .15, p < .001$ ); understanding was positively associated with relational maintenance ( $r(433) = .25, p < .001$ ) and flirtation ( $r(438) = .18, p < .001$ ); self-disclosure was positively associated with relational maintenance ( $r(435) = .36, p < .001$ ) and flirtation ( $r(440) = .15, p < .05$ ), but negatively correlated with sexual solicitation ( $r(440) = -.11, p < .05$ ); tasks was positively associated with relational maintenance ( $r(433) = .34, p < .001$ ) and flirtation ( $r(438) = .10, p < .05$ ); relationship talks was positively correlated with relational maintenance ( $r(433) = .34, p < .001$ ), but negatively associated with sexual solicitation ( $r(438) = -.10, p < .05$ ); assurances was positively correlated with relational maintenance ( $r(434) = .35, p < .001$ ), but negatively associated with sexual solicitation ( $r(439) = -.09, p < .05$ ); and networks was positively correlated with the goal of relational maintenance ( $r(431) = .19, p < .001$ ).

### **Post Hoc Analysis: Regression Analysis**

Regression models were also run to assess the unique variance the four types of goals (relational maintenance, flirtation, sexual solicitation, and conversation) had on

each of the relational outcomes. The results of the regression model for communication satisfaction were significant and accounted for 12% of the variance,  $F(4, 421) = 15.73, p < .001, R^2 = .13, \text{Adjusted } R^2 = .12$ . Specifically, relational maintenance ( $\beta = .375, p < .001$ ) emerged as a significant predictor. For sexual satisfaction, the regression model was significant and accounted for 24% of the variance,  $F(4, 415) = 33.31, p < .001, R^2 = .243, \text{Adjusted } R^2 = .236$ . Specifically, relational maintenance ( $\beta = .327, p < .001$ ), flirtation ( $\beta = .128, p < .05$ ), and sexual solicitation ( $\beta = .153, p < .05$ ) emerged as significant predictors. For relationship satisfaction, the regression model was significant and accounted for 14% of the variance,  $F(4, 413) = 18.52, p < .001, R^2 = .152, \text{Adjusted } R^2 = .144$ . Specifically, relational maintenance ( $\beta = .470, p < .001$ ) and flirtation ( $\beta = -.140, p < .05$ ) emerged as significant predictors.

In regard to the relationship maintenance variables, for positivity, the regression model was significant and accounted for 6% of the variance,  $F(4, 421) = 7.60, p < .001, R^2 = .067, \text{Adjusted } R^2 = .059$ . Specifically, relational maintenance ( $\beta = .221, p < .001$ ) and sexual solicitation ( $\beta = -.145, p < .05$ ) emerged as significant predictors. For understanding, the regression model was significant and accounted for 9% of the variance,  $F(4, 420) = 11.14, p < .001, R^2 = .096, \text{Adjusted } R^2 = .087$ . Specifically, relational maintenance ( $\beta = .280, p < .001$ ) and sexual solicitation ( $\beta = -.164, p < .05$ ) emerged as significant predictors. For self disclosure, the regression model was significant and accounted for 19% of the variance,  $F(4, 422) = 25.26, p < .001, R^2 = .194, \text{Adjusted } R^2 = .186$ . Specifically, relational maintenance ( $\beta = .492, p < .001$ ) and sexual solicitation ( $\beta = -.220, p < .001$ ) emerged as significant predictors. For relationship

talks, the regression model was significant and accounted for 17% of the variance,  $F(4, 420) = 23.07, p < .001, R^2 = .180, \text{Adjusted } R^2 = .172$ . Specifically, relational maintenance ( $\beta = .514, p < .001$ ), flirtation ( $\beta = -.149, p < .05$ ), and sexual solicitation ( $\beta = -.199, p < .001$ ) emerged as significant predictors. For assurances, the regression model was significant and accounted for 19% of the variance,  $F(4, 421) = 25.87, p < .001, R^2 = .197, \text{Adjusted } R^2 = .190$ . Specifically, relational maintenance ( $\beta = .552, p < .001$ ), flirtation ( $\beta = -.176, p < .05$ ), and sexual solicitation ( $\beta = -.167, p < .05$ ) emerged as significant predictors. For tasks, the regression model was significant and accounted for 16% of the variance,  $F(4, 420) = 21.26, p < .001, R^2 = .168, \text{Adjusted } R^2 = .160$ . Specifically, relational maintenance ( $\beta = .482, p < .001$ ) and sexual solicitation ( $\beta = -.164, p < .05$ ) emerged as significant predictors. Finally, for networks, the regression model was significant and accounted for 7% of the variance,  $F(4, 418) = 8.66, p < .001, R^2 = .077, \text{Adjusted } R^2 = .068$ . Specifically, relational maintenance ( $\beta = .341, p < .001$ ), emerged as a significant predictor.

Regressions were also run for the affectionate communication variables. For verbal affection, the regression model was significant and accounted for 29% of the variance,  $F(4, 416) = 44.15, p < .001, R^2 = .298, \text{Adjusted } R^2 = .291$ . Specifically, relational maintenance ( $\beta = .672, p < .001$ ), flirtation ( $\beta = -.193, p < .05$ ), and sexual solicitation ( $\beta = -.161, p < .05$ ) emerged as significant predictors. For nonverbal affection, the regression model was significant and accounted for 22% of the variance,  $F(4, 414) = 29.75, p < .001, R^2 = .223, \text{Adjusted } R^2 = .216$ . Specifically, relational maintenance ( $\beta = .549, p < .001$ ) emerged as a significant predictor. For supportive

affection, the regression model was significant and accounted for 30% of the variance,  $F(4, 416) = 45.02, p < .001, R^2 = .302, \text{Adjusted } R^2 = .295$ . Specifically, relational maintenance ( $\beta = .612, p < .001$ ) and sexual solicitation ( $\beta = -.170, p < .001$ ) emerged as significant predictors.

### **Summary**

Based on the previous results, it is evident that multiple goals are present in sexting messages. Despite the researcher's predictions, the results of the multiple regressions were not significant, indicating that the goals present in sexting messages as coded by the researcher do not impact relational outcomes. However, the goals from the Multiple Goals of Sexting scale were correlated with the relational outcomes. Multiple regressions revealed that the goals from the scale emerged as unique predictors for the relational outcomes. The final chapter will discuss the findings, offer implications and limitations, and propose future directions for research.

## CHAPTER 5 – DISCUSSION

### **Overview**

Although there is a fair amount of empirical research on sexting, there is a dearth of research examining the content of sext messages, sexting in non-adolescent populations, theoretical explanations for this communication phenomenon, and relational outcomes associated with sexting behavior. The larger purpose of this dissertation was to fill those gaps by examining sexting in adult relationships to gain a deeper understanding of the relational outcomes related to satisfaction (relationship, communication, and sexual), affectionate communication, and maintenance behaviors, and provide a potential explanatory theoretical framework. More specifically, the researcher sought to establish and categorize the types of goals that were present in sexting messages using MGT, to assess if sexting messages that were deemed as either instrumental, relational, or identity goals would affect relational outcomes such as satisfaction, maintenance behaviors, and affectionate communication, and to develop and validate a measure of the presence and type of goals individuals view as important when sexting.

Theoretically, utilizing the MGT perspective in the context of sexting was relevant for a few reasons. First, this theory allows for a specific examination and understanding of how message content can potentially influence larger components of a relationship (i.e., relational outcomes). Second, no matter the interaction or context, individuals have specific goals they wish to achieve and those goals drive and explain one's subsequent behavior (Donovan-Kicken & Caughlin, 2010). Because sexting is a mediated behavior and is potentially a "high-stakes" situation due to the sensitive nature of the messages, goals may be more likely to be highly attended to and recognized, and

thus influence the creation of those messages. The remainder of this chapter will discuss each of the findings in greater detail, offer theoretical, methodological, and practical implications, critically evaluate and expand on the limitations of the dissertation, and propose future directions for sexting research.

### **The Multiple Goals of Sexting**

The first research question examined the specific types of goals participants had when sexting using a qualitative assessment. Nines themes emerged from the analysis, and the themes were categorized as one of the three goals: arousal, sexual solicitation, face-to-face contact, conversation, and uncertainty reduction were coded as instrumental goals, relational maintenance was coded as a relational goal, and enjoyment, reciprocation, and affirmation were coded as identity goals. Because sexting frequently involves the discussion or enactment of sexual behaviors and desires, it is logical that the majority of the themes identified were labeled as instrumental goals. In addition, sexting involves various aspects of sexuality and elements related to one's personality, so identity goals, which involve wanting to portray a certain image of oneself or manage the recipient's image, were also commonly identified. In their examination of sexual resistance strategies, Afifi and Lee (2000) note that sexual encounters can inherently threaten instrumental and identity goals if the sexual request is denied. In the context of sexting, an individual who sends a sext message that is not reciprocated not only has his/her instrumental goal restricted (e.g., the attempt to engage in sexual activity is denied), but also threatens one's identity because "it implies that the attempt... was inappropriate" (p. 287). However, in regard to relational goals, these may be less salient in sexting conversations because the individual is more focused on sexual pleasure and

short-term satisfaction as opposed to fostering intimacy. Intimacy may be a result of sexting as opposed to the overarching goal and motivating force behind it.

Several of these themes have been similarly established in previous work, and similar to the current findings, many involved instrumental goals and motivations. For example, Dir et al. (2013) examined expectancies associated with sexting, and established that sending sext messages makes individuals feel aroused and horny (i.e., arousal), and makes individuals feel it is more likely for them to have sex or hook up (i.e., sexual solicitation). Additionally, Parker et al. (2013) used the sext motivations measure to assess motivations for sexting and found that three of the subscales were represented. One was hedonism, which focused on pleasure and satisfying sexual needs (i.e., sexual solicitation). Drouin et al. (2013) also found that a common motivation for sexting was to initiate sex (i.e., sexual solicitation). Finally, Manning (2014) established that sexting served as an information seeking strategy to reduce uncertainty regarding sexual desires and behaviors. Sexual solicitation in the context of sexting is the most common expectancy and goal individuals have when sexting, but arousal and uncertainty reduction also are salient.

Identity expectancies and motivations have also been identified in previous research on sexting. Additional expectancies associated with sexting were that sending messages makes the sender feel excited, playful, and adventurous (i.e., enjoyment), and makes the sender feel sexy, attractive to others, and more likeable (i.e., affirmation) (Dir et al., 2013). Another subcomponent of the sext motivations scale from Parker et al. (2013) was affirmation, which focused on feeling attractive and better about one's self. It is evident that a primary motivation for sexting involves a sender's goal to feel desirable



and adventurous. Finally, in regard to relational expectancies and motivations, Dir et al. (2013) found that individuals indicated sexting makes relationships more interesting and makes individuals feel intimate and affectionate (i.e., relational maintenance). The final subscale in the Parker et al. (2013) study found that a motivation for sexting was intimacy, which focused on making an emotional connection and expressing love (i.e., relational maintenance), and Drouin et al. (2013) found that common motivations for sexting were to flirt, which can serve as a form of relational maintenance.

Three of the themes – face to face contact, reciprocation, and conversation – were not identified in previous studies, but can add to our understanding of sexting behavior and underlying goals. Because sexting occurs via mediated channels, partners are likely physically apart when engaging in this behavior. Thus, individuals use sext messages to entice their partner to meet up with them in person so that they can physically engage in a sexual encounter. Participants also said their goal was to reciprocate a sext message when they received one from their partner, indicating that they wish to make their partner happy by engaging in behavior their partner desires. They may also want to validate their partner's behavior – as sexting can be a somewhat risky endeavor, participating in the exchange demonstrates that sexting in general is acceptable or even wanted. As noted previously, ignoring or denying sexual requests and activities can threaten one's positive face (Afifi & Lee, 2000). Finally, participants noted that engaging in sexual conversations was their goal. Although sexting may be considered a risky or stigmatized behavior, because it occurs via CMC, engaging in sexual discussions is likely easier to do so. For example, Drouin et al. (2013) found that another motivation for participants to sext was because they were too shy to say/do so face-to-face.

## **The Multiple Goals of Sexting Scale**

Based on the previous goal-oriented themes and items provided by participants, the researcher created the Multiple Goals of Sexting scale and used an EFA and CFA to test the scale for validity. Factorial validity was established for a four-factor solution. This solution was comprised of relational maintenance, defined as intimacy and connection with one's relational partner; flirtation, or a desire to be seen as attractive playful, and fun; sexual solicitation, which is attempting to engage in sexual behavior with the other person; and conversation, or a desire to engage in or reciprocate a sexual discussion with one's partner.

Consistent with the previous categorizations, relational maintenance represents a relational goal, and sexual solicitation and conversation represent instrumental goals. Flirtation emerged as a new theme and consisted of items associated with enjoyment, arousal, and affirmation. Because the items focus on presenting oneself a certain way or wishing to be viewed a desired way (e.g., "To seem like a sexy person," "To show that I can have fun"), flirtation was categorized as an identity goal, and thus, each of the multiple goals is represented in the current scale. Although relational maintenance, sexual solicitation, and flirtation (i.e., affirmation) have been established in previous sexting studies regarding expectancies and motivations (e.g., Dir et al., 2013; Drouin et al., 2013; Parker et al., 2013), conversation represents a new addition to the literature on sexting. The conversation goal is particularly important for this line of research. It represents the communicative elements of this behavior, which has been missing from previous work that has primarily focused on sexting frequency. Further, as individuals often have a difficult time communicating about sex, even with committed partners (Byers, 2011),

sexting could represent a less face-threatening way to engage in sexual conversations. For instance, Hertlein and Anechta (2014) found that communicating via a mediated device about a sensitive or risky topic (i.e., sexting) was particularly beneficial for anxious individuals. Technology made it easier to initiate conversations and made participants feel more confident engaging in a sexual interaction because they had time to think about what they wanted to say without feeling or appearing visibly nervous to the other person.

### **Multiple Goals of Sexting and Association with Relational Outcomes**

A second purpose of this dissertation was to assess if multiple goals were predictive of relational outcomes. Previous research has indicated an association between the enactment of relational goals and relationship satisfaction (Caughlin et al., 2009; Donovan-Kicken & Caughlin, 2010) and communication satisfaction (Scott and Caughlin, 2014). As relational goals focus on facilitating a desirable relationship between the individuals communicating, it was predicted that sext messages in which the goal was relational would be positively associated with relationship and communication satisfaction. Multiple regressions for these two variables were not significant. One explanation for the lack of significance may be due to the prevalence of instrumental goals. The majority of the messages were coded as instrumental goals, so within the context of sexting, it seems as though participants primarily want to “get off.” Thus, communication that is typically considered inappropriate or relationship detracting (e.g., an intense focus on one’s needs and desires, and demanding behavior) may actually be relevant, desired, and necessary within this particular context. Therefore, one’s goals when sexting and their subsequent messages may not be indicative of or accurate in regard to how they normally communicate in the relationship, and thus are unrelated to

both relationship and communication satisfaction. Second, many of the participants were casually dating or in a serious relationship with the person they sexted, indicating that they likely spend quality time with this person in a face-to-face context rather than solely sexting. Consequently, sext messages may not be significant to relationship and communication satisfaction because they consist of a small part of their larger series of interactions. Previous research has also found that face-to-face contact versus other mediums of communication is more relevant to relationship satisfaction, which suggests “that nonverbal cues (e.g., proximity, physical presence, facial expression) are necessary for maintaining close and satisfying relationships” (Emmers-Sommer, 2004, p. 408). Goodman-Deane et al. (2016) also established that text messaging was negatively associated with relationship satisfaction compared to other mediums such as phone and video calls. As the majority of participants used text messages and Snapchat for sexting, the channel of communication also can explain the lack of significance.

Researchers have also found a positive association between identity goals and communication satisfaction (Scott and Caughlin, 2014), and thus, it was predicted that sexting messages categorized as identity goals would have a positive relationship with communication satisfaction. A multiple regression revealed that there was no significant association between identity goals in sext messages and communication satisfaction. One reason for this may be due to how identity goals were coded – these messages focused on sexual prowess and physical attributes, which are superficial, surface level forms of communication. Superficial communication represents low communication quality (Emmers-Sommer, 2004), and thus, it is not surprising that messages categorized as identity goals were therefore not associated with communication satisfaction.

Finally, as no previous work has specifically examined how multiple goals can affect sexual satisfaction, affectionate communication, and relational maintenance behaviors, a research question was posed and multiple regressions were run for each of these variables. Similar to relationship and communication satisfaction, the multiple regressions for the three types of affectionate communication, sexual satisfaction, and seven relational maintenance behaviors were not significant. For sexual satisfaction, the frequency of sexting behavior may account for the lack of significance. Although the current study did not assess frequency, Dir et al. (2013) found that participants in their sample indicated relatively low sexting frequency, which may contribute to the lack of significant impact on sexual satisfaction. Additionally, in an age of consistent and sometimes constant multitasking, individuals may be doing other things while simultaneously sexting. This could impact their ability to be fully present and experience significant sexual pleasure. Further, there is no way of knowing if an individual's sext message was reciprocated and a sexting conversation ensued – the exchange could have ended immediately after the participant sent the sext message, leaving him/her sexually unfulfilled.

It is unsurprising that messages categorized as instrumental or identity goals were not associated with any of the three subsets of affectionate communication or any of the seven relational maintenance behaviors. Affectionate communication involves showing another the various ways in which they care, such as giving them a hug or saying they love them. Similarly, the relational maintenance behaviors represent specific, prosocial behaviors individuals engage in with the intent of maintaining or enhancing the current relationship. As noted, messages that were labeled as instrumental and identity goals

consist of rather selfish and superficial communication (e.g., requests, demands, and a focus on physical characteristics), and are therefore inconsistent with the affectionate communication and relational maintenance items. However, as messages categorized as relational goals involved communication that was affectionate and focused on connecting with the partner (e.g., missing the other person, excitement at seeing them and engaging in sexual behaviors), it is surprising that there was no association between relational goals and affectionate communication and relational maintenance. A potential explanation is that mediated communication could alter and inhibit the extent to which affectionate communication and relational maintenance behaviors are engaged. For instance, mediated communication lacks nonverbal and social context cues, and particularly with short, sexual messages, it may make it more challenging to invoke or recognize affectionate communication and maintenance behaviors. Craig and Wright (2012) also argue that the CMC context can increase uncertainty, thus making it harder to develop/maintain relationships. However, Coyne et al. (2011) found that individuals in romantic relationships were most likely to use mediated forms of communication specifically for the purpose of expressing affection, but taking into account the Goodman-Deane et al. (2016) findings, the type of mediated device used may detract from the interaction.

In sum, there are several potential reasons why the type of goal in sexting messages was not associated with any of the relational outcomes. The lack of nonverbal cues (Emmers-Sommer, 2004), the prevalence of instrumental goals and thus messages that may not be characteristic of routine communication behaviors, and the relative infrequency of the behavior may all contribute to the lack of significance. Further,

Caughlin (2010) notes that although communication is purposeful, it is often unconscious. Participants may thus be unaware of what their goals are when sexting, which could also explain why goals were not associated with participants' assessments of the relational outcomes.

### **Multiple Goals Scale and Relational Outcomes**

As stated, there are multiple reasons why there were no significant associations among multiple goals present in sext messages and relational outcomes. However, it is still surprising that goals did not impact any of the dependent variables. Research has consistently indicated how important goals are for understanding and explaining interpersonal relationships (e.g., Caughlin, 2010). Because of this, as well as that short messages may be hard to accurately categorize, and that the messages provided by participants may not be indicative of normal or consistent sexting behavior, Pearson product-moment correlations were run to assess how the goals identified in the Multiple Goals of Sexting scale were associated with the relational outcomes. This scale asked participants to assess the importance of specific goals when sexting. As noted, this scale is comprised of four factors. Each of the dependent variables was significantly associated with one or more of the four factors, and will be subsequently discussed.

Relationship satisfaction was positively correlated with the goals of relational maintenance, flirtation, and conversation, indicating positive associations with relational, instrumental, and identity goals. This is consistent with previous research that examined the association between relational goals and relationship satisfaction (Caughlin et al., 2009; Donovan-Kicken & Caughlin, 2010). Further, certain types of mediated behaviors are correlated with relationship satisfaction, demonstrating that engaging in specific

behaviors can be a form of relational maintenance. For example, Saslow et al. (2012) found that participants who reported greater relationship satisfaction were more likely to post relationship-enhancing content on social media, such as pictures of them and their partner, and information about the relationship. Similarly, Utz and Beukeboom (2011) found that participants whose partner posted specific content, such as writing a nice comment about the participant, was positively associated with relationship satisfaction. It is likely that individuals who are satisfied in their relationship view relational maintenance as an important goal when sexting, and indeed, numerous studies have found a positive relationship between maintenance and relational satisfaction (e.g., Ogolsky & Bowers, 2013). Although research has not examined the association between identity and instrumental goals, they clearly are important when sexting. Individuals who engage in flirtatious behaviors via sexting may feel sexually empowered (Hawkes & Dune, 2013), causing them to feel more confident, powerful, and desirable in the relationship. Subsequently, this can lead to more sexually satisfying encounters and better relationship satisfaction. Green and Faulkner (2005) also found that sexual assertiveness, defined as “communicating about satisfying sexual behavior and the willingness and ability to talk about sex” (p. 241), was positively associated with relationship satisfaction, which may be one reason why conversation and relationship satisfaction are correlated.

Communication satisfaction was positively correlated with the goals of relational maintenance, flirtation, and conversation, indicating a positive association among relational, identity, and instrumental goals. The associations with relational and identity goals are consistent with Scott and Caughlin’s research (2014). Researchers have also found that individuals tend to be more concerned with their own well being (i.e., identity



goals) when communicating via CMC (Frisby & Westerman, 2010; Vangelisti et al., 2013). Further, Pornsakulvanich et al. (2008) found that when an individual's motivations when communicating via CMC were for self-fulfillment and to express affection, they experienced greater communication satisfaction. In regard to instrumental goals, Scott and Caughlin (2014) did not find an association between communication satisfaction and instrumental goals, demonstrating that context matters. In their research on end-of-life decision making, they note that the relationship between instrumental goals and communication satisfaction may not be salient because reaching a decision is less important than attending to identity and relationship goals. However, engaging in sexting when the specific instrumental goal is to have a sexual conversation may positively contribute to communication satisfaction because the conversation goal is likely being accomplished. Having sexual conversations via a mediated device can also further open up the lines of sexual communication that may be missing in daily, face-to-face interactions (e.g., Byers, 2011).

Sexual satisfaction was positively correlated with all four of the goals: relational maintenance, flirtation, sexual solicitation, and conversation, indicating positive associations with relational, identity, and instrumental goals. In general, past research has demonstrated a positive association between sexting and sexual satisfaction (Harris, Frisby, & Beck, in progress) and sexual pleasure (Klettke, Hallford, & Miller, 2014). Sexual empowerment (i.e., flirtation) and feeling desired can potentially enhance one's own desire, leading to more satisfying sexual experiences. Henningsen (2004) also identified six motivations for flirtation, one of which is sex. This flirting motivation is enacted with the specific purpose to engage in sexual activity, and indeed, one of the

flirting items involves wanting to arouse the other person. Further, seeking out and engaging in sexual conversations can also be beneficial for one's sex life. Byers (2011) demonstrated that "individuals who self-disclose more about their sexual likes and dislikes to their partner report greater sexual well-being" (p. 22). Finally, researchers found that couples who expressed emotional intimacy reported increased sexual satisfaction (Yoo et al., 2013), which can explain the association between the relational maintenance goal and sexual satisfaction.

Verbal, nonverbal, and supportive affection was positively correlated with the goals of relational maintenance and flirtation, indicating a positive association with relational and identity goals. Individuals who communicate with relational goals in mind may feel more connected to their partner, and thus engage in more affectionate behaviors. Conversely, those who are more affectionate may be more likely to view relational goals as most important when sexting. As noted, Coyne et al. (2011) found those in committed relationships were most likely to use CMC specifically for the purpose of demonstrating affection. Myers, Byrnes, Frisby, and Mansson (2011) also demonstrated that individuals use CMC to maintain relationships. Taken together, these findings indicate that individuals may use affectionate communication in sexting as a way to maintain their relationships. For individuals whose primary goal is flirtation, feeling sexy and desired by one's partner could cause those individuals to become more affectionate. However, as the analysis was a correlation, causation cannot be claimed.

Finally, relational maintenance behaviors were examined. Positivity, understanding, tasks, and self-disclosure were positively associated with relational maintenance and flirtation, but self-disclosure was negatively correlated with sexual

solicitation. Relationship talks and assurances were positively correlated with the goal of relational maintenance, but negatively associated with sexual solicitation. Finally, networks was positively correlated with the goal of relational maintenance. Each of the maintenance behaviors was positively associated with the goal of relational maintenance. As these behaviors function to sustain the desired components of one's relationships, it is logical that each is correlated with the maintenance goal, which involves wanting to feel connected and intimate with one's partner, as well as wanting to maintain a satisfying relationship. In regard to the identity goal of flirtation, positivity may be correlated with it because this behavior involves being kind to one's partner, and wanting to arouse one's partner and be sexy can be viewed as a way to demonstrate kindness. Previous research has also established that flirting, specifically attentive and display flirting, was positively associated with positivity (Frisby & Booth-Butterfield, 2012). Display flirtation involves "the overt display of affectionate behavior" (Egland, Spitzberg, & Zormeier, 1996, p. 109), and attentive flirtation involves "involves various expressions of concern for, attention to, and interest in one's conversational partner" (p. 114). Understanding was also correlated with flirtation. As this behavior involves being forgiving and nonjudgmental, an individual who wants to have fun, enjoy the moment, and feel desirable may be more open-minded (i.e., nonjudgmental) with the partner. Self-disclosure includes being willing to discuss topics and was also correlated with flirtation. Being able to embrace one's sexuality could facilitate more open discussions about a wider range of topics, and Frisby and Booth-Butterfield (2012) found that attentive and display flirting were positively correlated with this behavior. Tasks was also the final maintenance behavior that was associated with the goal of flirtation, and this behavior

entails being willing to help out with responsibilities. Individuals who feel that they are positively and equitably contributing to their relationship may feel empowered, thus resulting in sexual empowerment and enjoyment. Further, attentive and display flirting have been previously associated with tasks (Frisby & Booth-Butterfield, 2012). Overall, different types of flirting behaviors have been previously linked with several of the maintenance behaviors (Frisby & Booth-Butterfield, 2012).

An interesting finding that emerged was that relationship maintenance behaviors were the only variables to have a negative correlation with any of the goals. Relationship maintenance tends to be more specific to romantic relationships, and thus, for those whose primary goal when sexting is sexual solicitation, engaging in self-disclosure, relationship talks, and assurances would likely be behaviors that would be less likely to be enacted. Discussing important topics such as the well being of the relationship and plans for the future typically happens in the context of committed and serious relationships. For example, in their analysis of cross-sex friendships, Guerrero and Chavez (2005) found that participants who wanted the friendship to turn romantic reported the most maintenance behaviors, one of which was relationship talk. Those who wanted the relationship to remain platonic did not engage in this maintenance behavior. Therefore, it is unlikely that individuals who truly care about their partner and view them in a romantic context would consistently report that having sex or hooking up is their primary goal when sexting.

### **Theoretical Contributions**

Although the MGT perspective has been examined in a variety of contexts, this is the first study to examine if and how multiple goals are enacted when sexting. It is

evident that multiple goals are salient when individuals engage in this behavior, which was demonstrated through qualitative coding of participants' goals when sexting as well as a quantitative analysis that demonstrated factorial validity for a four-factor solution of the Multiple Goals of Sexting scale. Thus, the theory was supported. Both the qualitative and quantitative analysis revealed that instrumental goals were the most common goals individuals had when sexting, but that relational and identity goals were more frequently and positively associated with relationship, communication, and sexual satisfaction, affectionate communication, and relational maintenance behaviors, as demonstrated by Pearson product-moment correlations. These findings have been established in previous research examining the enactment of multiple goals and the association with relationship (Caughlin et al., 2009; Donovan-Kicken & Caughlin, 2010) and communication satisfaction (Scott & Caughlin, 2014), such that instrumental goals are less important than relational and identity goals.

Scott and Caughlin (2014) argue that utilizing the MGT perspective allows researchers to better evaluate quality communication by focusing on the extent to which people implement multiple goals. Further, Caughlin (2010) notes that the MGT perspective can be used to explain and predict how goals are associated with global relational measures. In the context of sexting, it is evident that individuals who focus on preserving and enhancing the relationship (relational goals), as well as creating or managing a desired impression of the self or partner (identity goals) demonstrate better relational outcomes compared to those who focus on instrumental goals, such as sexual solicitation. However, it is important to note that this study does not represent a true multiple goals analysis, as sext messages were coded as one of the three multiple goals.

Effective communication attends to all three multiple goals (Scott & Caughlin, 2014), and therefore, our understanding of quality communication in the context of sexting is still lacking. Assessing the message design of the sext rather than the message interpretation via the researcher can also help contribute to identifying quality communication. For example, individuals who have identity and relational goals as most important when sexting may design sext messages that vary compared to solely identity or solely relational goals within messages.

Although the categorization of goals within sext messages were not associated with the relational outcomes, the participant's perception of goal importance when sexting was associated with each of the relational variables of relationship, communication, and sexual satisfaction, affectionate communication, and relationship maintenance behaviors. Therefore, the MGT perspective is a viable option for continued research in this area, particularly for researchers who are interested in assessing sexting conversations as opposed to single messages. This will be further explained in the limitations and future directions section.

### **Measurement Contributions**

A large number of studies have measured sexting in regard to frequency of the behavior (Currin et al., 2016; McDaniel & Drouin, 2015; Weisskirch & Delevi, 2011; Wysocki & Childers, 2011), and therefore our current understanding of sexting is incomplete and potentially inaccurate. For example, in their research on end of life communication, Scott and Caughlin (2014) argue that quality rather than quantity of communication is a better indicator of outcomes. The Multiple Goals of Sexting scale,

which was created based on participants' responses to what their goal was when they sent a sext message, is the first scale to assess multiple goals in the sexting context.

Multiple forms of validity were established. Content validity was established by using participant responses for item generation. Expert panel validity was established because two committee members, one who is an expert in MGT and one who is an expert in scale development, helped to edit and revise the scale before it was implemented. Convergent validity was established through the post hoc analysis in which correlations between the scale and outcomes that were expected to be related were assessed. Previous research on MGT has found that relational and identity goals are associated with relationship and communication satisfaction (Caughlin et al., 2009; Donovan-Kicken & Caughlin, 2010; Scott & Caughlin, 2014), and this was replicated in the current study – both the goal of relationship maintenance (a relational goal) and flirtation (an identity goal) were positively correlated with relationship and communication satisfaction. Finally, factorial validity was established using a CFA, which indicated good model fit for the four-factor model (see Table 1 for items and factor loadings).

As noted previously, a multiple goals perspective allows researchers to account for effective communication by examining the enactment of certain goals and their association with relational outcomes. Although dummy coding participants' sext messages as one of the three multiple goals did not affect the dependent variables, participants' level of importance for each of the goals when sexting did affect the relational outcomes. Overall, the scale is reliable, possesses multiple forms of validity, and is relatively brief in that it consists of only 20 items. Consequently, this scale can and

should be used in future studies of sexting to assess how the different goals are associated with other communication and relationship variables.

### **Practical Contributions**

Much of the work on sexting from both an empirical lens and popular press depiction has focused on the negative aspects of this behavior, such as the associations between sexting and the greater likelihood to engage in risky sexual behaviors such as unprotected sex, number of sexual partners, and sexual activity, as well as substance abuse (Benotsch, Snipes, Martin, & Bull, 2013; Klettke et al., 2014). This dissertation adds to the growing body of work that has established positive outcomes associated with sexting (Ferguson, 2011; Harris et al., in progress; Hertlein & Anechta, 2014; Manning, 2013; McDaniel & Drouin, 2015; Parker et al., 2013). Although participants' goals in actual sext messages were not predictive of relational outcomes, the perceived importance of specific goals was associated with positive relational variables. In general, participants who indicated that the goals of relational maintenance, flirtation, and conversation were important when sexting reported enhanced relationship, communication, and sexual satisfaction, and greater likelihood to engage in affectionate communication and maintenance behaviors. Except for sexual satisfaction, participants who noted that engaging in the goal of sexual solicitation was important had no effect on satisfaction or affection, and had a negative association with the likelihood to engage in relationship talks and self-disclosure with their partner. Although specifically seeking out a sexual encounter with another may be beneficial for sexual satisfaction, in that it facilitates having sex with the other, it is likely that the sender is unconcerned with other aspects of the relationship. Further, consistently having this mentality when sexting could



demonstrate the lack of a close connection with the other, which would make it difficult or unlikely that the individual would want to talk about the state of the relationship or discuss important topics. Thus, individuals who are invested in their relational outcomes with their partner should focus on their own sexual empowerment, demonstrating intimacy and connection with the other, and being willing to engage in sexual communication and self-disclosure when sexting. They should also avoid sexual solicitation, as this goal when sexting may be viewed as cheap or dirty, or again, may occur in relationships that are purely for hook-up purposes.

Clinicians have recognized the prevalence and potential positive outcomes associated with sexting and assigned this behavior as homework to couples (Hertlein & Anechta, 2014). Based on the results of this dissertation, this is a valid recommendation for individuals who view sexting as a way to maintain connection, enhance intimacy and arousal, and invoke a playful, sexual identity. In addition, it could be beneficial for clinicians to facilitate a conversation between couples regarding each individual's specific goals and motivations for engaging in sexting, and then offer recommendations for how individuals should engage in this behavior. Further, if an individual knows his/her partner wants to sext to enhance intimacy and affection, it could make the behavior more appealing, especially if an individual views sexting negatively. However, couples who feel uncomfortable with sexting might be better off avoiding it. For instance, previous research found that women who received sext messages but did not reciprocate the behavior reported decreased relationship satisfaction (Currin et al., 2016), and women with a low anxiety attachment style who sent sexually explicit photos also reported worse relationship satisfaction (McDaniel & Drouin, 2015). Thus, although sexting can be

beneficial, it is certainly not a necessary behavior for maintaining or enhancing one's relationship

### **Limitations and Future Directions**

There are several limitations with the current study. As with most convenience samples, the majority of participants were around 20 years of age and female. In addition, a limited number of participants were married – these three factors could impact the type of sext messages sent, in addition to the assessment of relationship, communication, and sexual satisfaction, affectionate communication, and maintenance behaviors. In regard to more specific limitations for the current study, although participants provided both a sext message they had sent as well as their goals when they sent that sext, the researcher only assessed the actual messages for the multiple regression analysis. It is possible that their stated goals were significantly different than what the researchers perceived the goals to be in the sext messages. For example, an individual whose goal was to feel connected to the partner (i.e., relational goal) may have actually provided a message that was coded as instrumental.

Therefore, the validity of coding the sext messages may have suffered and not be an accurate indicator of how goals affect relational outcomes. It could be more important to code the participant's stated goal and then assess how the intended goal affects the relational outcomes. For instance, the Multiple Goals of Sexting scale assessed the importance of specific goals and was correlated with relationship outcomes. Thus, for the sender, the importance of goals when sexting in general was most important, not how the goal influenced and was perceived in the actual message content for a specific situation. Additionally, this study assessed both the participant's perception and the researcher's

perception of goals, but not the perception of the message recipient. As noted previously, what the participant states is the goal versus the actual goal present in the message may be interpreted differently by the individual receiving the message, and have a greater impact on the relationship for the other person. With the previous example, an individual who sends what is deemed to be an instrumental message but whose goal is relational might be perceived by the recipient to actually be relational, depending on normal sexual scripts for that relationship.

Therefore, a dyadic study of sexting should be implemented in future research that focuses on both the sender and recipient's perception of goals within a sexting message, as well as each individual's assessment of relational variables. For instance, although in this study participants whose goals were focused on relational and identity reported the most associations with satisfaction, affection, and maintenance, it is unclear how those goals would affect their partner's self-report measures for each of these variables. Further, it would be interesting to have the recipient report on what they thought the sender's goal was for the specific sext message, as this may vary from the researcher's perception. Additionally, Scott and Caughlin (2014) found in their research on end-of-life communication that a sender's communication significantly affected the receiver's perception of the relationship. Thus, a dyadic analysis might reveal significant associations for sexting messages and the receiver's assessment of the relationship.

Another limitation that also may have contributed to the lack of significant associations for the multiple regressions pertains to the validity of the sext messages. Participants had to provide a recent sext message, but there is no way to assess whether it was an actual message they had sent. Both the lead researcher and research assistant

questioned whether several of the messages were real, or whether participants may have looked up example sext messages online or even made them up. Even though the survey was anonymous, there were still participants who did not provide a sext message, and a few who even wrote that they did not feel comfortable providing that information. If this feeling was relatively common, it could mean that other individuals provided fake messages to appease those uncomfortable feelings. Additionally, participants may have provided messages that were not indicative of how they normally sext and instead gone to an extreme by providing either the most graphic or most tame messages, which would also be another reason why the relational outcomes would be unaffected. It may have been better to require individuals to provide a screen shot of the message to prove that it is real, but this only would have worked for text messages and a few other social media channels – for the plethora of participants who used Snapchat, the content disappears immediately after the recipient opens the message and would have therefore been impossible to provide. This also could cause issues with anonymity and other potentially identifying or problematic information if participants do not properly edit out other components beside the message (e.g., the recipient’s name, phone number, etc.).

It is also possible that evaluating a single, often short message does not provide enough nuance to detect significant differences among goals. Evaluating a longer sexting conversation, or having participants provide multiple messages could be a better indicator of how they routinely participate in sexting exchanges as well as how goals influence messages. Caughlin (2010) argues that “it is reasonable to expect that conversational-level aspects of goals are relevant to broader constructs” (p. 836), and thus, a

conversational analysis may make goals more apparent and be a better indicator of how the goals within sext messages are associated with relational outcomes.

Another limitation pertains to the creation of the Multiple Goals of Sexting scale. The first round of data collection occurred at the end of a semester and resulted in only 42 participants. To create the Multiple Goals of Sexting scale, the researcher used the 42 responses from participants. As noted, an additional 100 responses were coded to account for additional goals and support the presence of the previously identified themes, but this was done after the scale had already been implemented. An additional theme was identified (affirmation). Therefore, future researchers interested in sexting should continue to test and validate the Multiple Goals of Sexting Scale, as there may be more goals that can influence relational outcomes, such as affirmation. Further testing can also assess if the existing goals are associated with other important communication and relationship variables. In addition, recoding the goals participants provided as well as the Multiple Goals of Sexting Scale in regard to the type of goal (instrumental, relational, or identity) could strengthen the analysis. Several of the goals, such as enjoyment and reciprocation, could be defined as instrumental rather than identity goals. The items for each of the goals should therefore be assessed and evaluated more carefully.

Specific to this study, the researcher created and implemented another scale based on the sext message content provided by participants. An EFA should be run to assess if there are different factors for sext message content, and these factors should be tested with the factors from the goals scale to assess if there are significant correlations between factors. In other words, is the importance of goals associated with the specific type of message content that an individual sends? The message content should also be tested with

the relationship variables to assess if there are significant correlations. Because this would not account for causality, depending on the results of the correlations, it would be interesting to analyze these variables using structural equation modeling to assess if goals are predictive of message content, and if message content potentially mediates the association between goals and relational outcomes. The MGT framework argues that goals influence communication behavior, and thus, the proposed direction of the model is theoretically supported.

### **Conclusion**

In sum, the results of this dissertation support the existence of instrumental, relational, and identity goals within the context of sexting. The importance of goals for relational outcomes such as relationship, communication, and sexual satisfaction, maintenance behaviors, and affection communication was also established. With the exception of the goal of sexual solicitation, the other three goals identified by the EFA and CFA – relational maintenance, flirtation, and conversation – were consistently, positively correlated with participants' reports of relational variables. Despite previous research on multiple goals and relational outcomes, multiple regressions revealed there was no association between the type of perceived goal present in sext messages and relationship, communication, and sexual satisfaction, affectionate communication, and relational maintenance behaviors. Thus, it is likely that people's perception of their goals when sexting is more important to relational outcomes than the goals within the actual content of the sext message. This study assesses message content, which is the first step in identifying quality communication. Future studies should continue to assess how the

incorporation of more than one of the multiple goals predicts message design and how that contributes to relational outcomes.

Table 1

*Revised Multiple Goals of Sexting Scale with Items and Factor Loadings*

Item	Relational Maintenance	Flirtation	Sexual Solicitation	Conversation
1. To be playful		.670		
2. To have sex			.679	
3. To spend quality time with the person	.696			
4. To get a sexual response				.736
5. To get a sext message in return				.787
6. To reciprocate a message sent by the person				.776
7. To continue the sexual conversation				.647
8. To have fun		.776		
9. To seem like a sexy person		.665		
10. To enjoy that moment		.732		
11. To feel connected to the person	.729			
12. To arouse the person		.663		
13. To show that I can have fun		.643		
14. To hookup with the person			.677	
15. To get the person in the mood to have sex later			.775	
16. To maintain intimacy	.722			
17. To get the person to come over			.608	
18. To let the person know I am thinking about him/her	.742			
19. To keep the relationship satisfying	.710			
20. To tell the person I miss him/her	.793			

*Extraction Method: Principal Components Analysis with Varimax Rotation*



Appendix A: Codebook

<b>Type of Multiple Goal</b>	<b>Description of Goal</b>	<b>Examples</b>
<b><i>Task</i></b>	<p>The main task toward which communication is directed – making requests, providing comfort/support, seeking information, persuading.</p> <p><u>Include requests, desires, or demands related to engaging in sexual activity.</u></p>	<p>“I want to have sex”</p> <p>“Come join me in the shower”</p> <p>“We can have loud sex and fuck in the kitchen”</p>
<b><i>Relational</i></b>	<p>Maintaining desired relationships – communicating in ways which reflect or promote the type of relationship one has or wishes to have.</p> <p><u>Focused on longing for, excitement at seeing or engaging in sexual behaviors with the other person, or assessing how to improve or spice up the relationship.</u></p>	<p>“I can't wait to see you tonight”</p> <p>“Do you want to try something new?”</p> <p>“Can't wait to have sex”</p>
<b><i>Identity</i></b>	<p>Creating, managing, and protecting impressions of both the self and others</p> <p><u>Focused specifically on the sender/receiver's sexual prowess or the sender/receiver's physical attributes.</u></p>	<p>“I love it when I turn you on”</p> <p>“You look sexy as hell, I want to touch you”</p> <p>“I can make it worth your while and up to you when i get home”</p>

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# CHRISTINA J. HARRIS, Ph.D.

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**Western Michigan University** | Kalamazoo, Mich.

M.A. Communication; April, 2013

Advisor: Dr. Autumn Edwards

Thesis: Using Attachment Theory and the Hyperpersonal Model to Examine Relationship Maintenance, Satisfaction, and Affectionate Communication in Romantic Relationships

**Michigan State University** | East Lansing, Mich.

B.A. Communication; May, 2011

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## RESEARCH AND SCHOLARSHIP

### Referred Journal Articles

Spence, P. R., Westerman, D., Lachlan, K., Lin, X., **Harris, C. J.**, Sellnow, T. L., & Sellnow-Richmond, D. D. (2017). Exemplification effects: Response to perceptions of risk messages. *Journal of Risk Analysis*, *20*, 590-610. doi: 10.1080/13669877.2015.1100658

Wombacher, K., **Harris, C. J.**, Buckner, M. M., Frisby, B. N., & Limperos, A. (2016). The effects of computer-mediated communication anxiety on student perceptions of instructor behaviors, perceived learning, and quiz performance in online courses. *Communication Education*. doi: <http://dx.doi.org/10.1080/03634523.2016.1221511>

Edwards, A., Edwards, C., Spence, P. R., **Harris, C. J.**, & Gambino, A. (2016). Communicating with a robot in the classroom: Differences in perceptions of credibility and learning between teacher as robot and robot as teacher. *Computers in Human Behavior*. doi: 10.1016/j.chb.2016.06.005

Edwards, A., & **Harris, C. J.** (2016). To tweet or 'subtweet'? Impacts of social networking post valence and directness on interpersonal impressions. *Computers in Human Behavior*, *63*, 304-310. doi: 10.1016/j.chb.2016.05.050.

**Gentile, C. J.**, & Edwards, A. (2014). Long-distance versus geographically close romantic relationships: Relational maintenance, satisfaction, and affectionate communication on Facebook. *Iowa Journal of Communication*, *46*, 94-113.

Edwards, C., Spence, P., Edwards, A., & **Gentile, C. J.** (2013). Editorial Comment. *Academic Exchange Quarterly*, *17*, 3-4.

Edwards, C., Spence, P. R., **Gentile, C. J.**, Edwards, A., & Edwards, A. (2013). How much Klout do you have: A test of system generated cues on source credibility. *Computers in Human Behavior*, 29, 12-16.

Spence, P. R., Lachlan, K. A., Spates, S. A., Shelton, K. A., Lin, X., & **Gentile, C. J.** (2013). Exploring the impact of ethnic identity through other generated cues on perceptions of spokesperson credibility. *Computers in Human Behavior*, 29, 3-11.

### **Book Chapters**

Frisby, B. N., Matig, J., & **Harris, C. J.** (Accepted, 2017). Uncertainty management in parent and child bereavement: Parent and child uncertainty sources and management strategies. In J. Theiss and K. Greene (Eds.) *Relationships, Health, and Wellness*.

**Gentile, C. J.** (2012). Communication apprehension. In T. M. Roberts, L. Henderson, & C. Edwards (Eds.), *Communication and community engagement*, pp. 53-55. Thousand Oaks, CA: Sage.

### **Conference Proceedings**

**Harris, C. J.** (2017). The multiple goals of sexting messages. Submitted to the 103<sup>rd</sup> annual meeting of the *National Communication Association*, Dallas, TX.

**Harris, C. J.**, Frisby, B. N., & Beck, A. C. (2016). An exploratory study of sexting behavior: The influence of attachment style and demographics. Accepted to the 102<sup>nd</sup> annual meeting of the *National Communication Association*, Philadelphia, PA.

Matig, J., Frisby, B. N., & **Harris, C. J.** (2016). Navigating the maze of grief: Recommendations for parent-child communication following the death of a parent. Accepted to the 102<sup>nd</sup> annual meeting of the *National Communication Association*, Philadelphia, PA.

Beck, A. C., Buckley, A., Matig, J. J., **Harris, C. J.**, & Hadden, A. (2016). Openness and closed-ness in parent-child relationships: Disclosing information about becoming sexually active. Poster presented at the annual meeting of the *International Association for Relationship Research*, Toronto, Canada.

**Harris, C. J.** (2016). Queen Bey or nay? A feminist critique of Beyoncé's lyrical works. (2016). Paper presented at the 2016 meeting of the *Central States Communication Association*, Grand Rapids, MI.

**Gentile, C. J.**, Frisby, B. N., Beck, A. C., & Matig, J. (2015). Conflict in romantic

relationships: Initial examination of relational and physiological outcomes. Poster presented at the 2015 *International Association for Relationship Research*, New Brunswick, New Jersey. **Top Four Poster.**

Edwards, A., **Gentile, C. J.**, & Edwards, C. (2015). To tweet or 'subtweet'? Impacts of social networking post valence and directness on interpersonal impressions. Paper presented at the annual meeting of the *International Communication Association*, San Juan, Puerto Rico.

Spence, P. R., Westerman, D., Lachlan, K., Lin, X., **Gentile, C. J.**, & Sellnow, T. (2015). Experience or perception: Exemplification and risk messages. Paper presented at the annual meeting of the *International Communication Association*, San Juan, Puerto Rico.

Frisby, B. N., Limperos, A. M., Burchett, M. R., Nestmann, M. A., **Gentile, C. J.**, Wombacher, K., & Shapiro, R. M. (2014). Rhetorical and relational strategies of online instructors: Enhancing students' experiences in online courses. Paper presented at the 100<sup>th</sup> annual meeting of the *National Communication Association*, Chicago, IL.

Edwards, C., Edwards, A., Spence, P. R., **Gentile, C. J.**, & Gambino, A. (2014). Communicating with a robot in the classroom: Differences in perceptions of credibility and behavioral learning between robot as teacher and teacher as robot. Paper presented at the 82<sup>nd</sup> annual meeting of the *Central States Communication Association*, Minneapolis, MN. **Top Paper Panel.**

**Gentile, C. J.** (2013). Using attachment theory and the hyperpersonal model to examine relationship maintenance, satisfaction, and affectionate communication in romantic relationships. Paper presented at the 99<sup>th</sup> annual meeting of the *National Communication Association*, Washington, DC.

Spence, P. R., Spates, S. A., Lin, X., **Gentile, C. J.**, Lachlan, K. A., & Reno, K. (2013). Exploring the impact of ethnic identity through other generated cues on perceptions of spokesperson credibility among Caucasian and African American audiences. Paper presented at the annual meeting of the *International Communication Association*, London, UK.

**Gentile, C. J.**, Edwards, C., Spence, P. R., Edwards, A., & Edwards, A. (2012). The impact of system influence rating on perceptions of target credibility: An experimental test. Paper presented at the 81<sup>st</sup> annual meeting of the *Central States Communication Association*, Kansas City, MO.

Roberts, T. L., & **Gentile, C. J.** (2012). Media awareness: Exploring the "idealized" performance of gender, race, and beauty. G.I.F.T. presented at the 81<sup>st</sup> annual meeting of the *Central States Communication Association*, Kansas City, MO.



**Gentile, C. J.** (2012). Examining the effect of Facebook on relationship maintenance and satisfaction of individuals in long-distance romantic relationships. Paper presented at the 98<sup>th</sup> annual meeting of the *National Communication Association*, Orlando, FL.

Beck, A. N., **Gentile, C. J.**, & Spates, S. A. (2011). Building #classroom community through @Twitter. G.I.F.T. presented at the 80<sup>th</sup> annual meeting of the *Central States Communication Association*, Cleveland, OH.

### **Research In Progress**

Matig, J., Frisby, B. N., & **Harris, C. J.** (preparing for submission). Improving parent-child communication following parental loss. *Journal of Family Communication*.

**Harris, C.J.**, Frisby, B. N., & Beck, A. (preparing for submission). The influence of attachment style on sexting and the association among relationship, communication, and sexual satisfaction. *Journal of Social and Personal Relationships*.

**Harris, C. J.**, Frisby, B. N., Beck, A., & Matig, J. (data collection). Physiological responses and relational outcomes to romantic conflict in face-to-face vs. computer-mediated contexts.

### **Grant Proposals**

#### **2016**

Research Assistant: Christina Harris (PI: Jennifer Scarduzio)

Title: Enhancing the “Speak up, Stand up” Intimate Partner Violence Campaign: A Community-Based Pilot Study with the Fayette County Sheriff’s Office

Funding Source: SDRV: College of Communication and Information

Amount: \$9,103 (funded May 2016 – December 2016)

#### **Awards**

Graduate Student Fellow, Presentation U! (\$500)	Fall 2016
Recipient, Martha and Howard Sypher Memorial Graduate Scholarship (\$500)	Spring 2016
Attendee, Wayne State University Summer Doctoral Seminar	Summer 2015
Recipient, R. Lewis Donohew Fellowship (\$500)	Fall 2013- Spring 2014
All-University Graduate Research and Creative Scholar	Spring 2013
Recipient, Student Travel Grant (\$1,500)	Spring 2012
Recipient, Student Research Aid Grant (\$750)	Spring 2011

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#### **Professional Memberships**

International Association for Relationship Research	2015-present
International Communication Association	2013-Present
National Communication Association	2012-Present

## SERVICE ACTIVITIES

### Service Activities

*Interpersonal Research Task Force Group Leader – Communication Graduate Student Association, University of Kentucky (2015)*

*Reviewer – Interpersonal Communication Division: The National Communication Association (2016-present)*

*Reviewer – Human Communication and Technology Division: The National Communication Association (2014-present)*

*Reviewer – Student Section: The National Communication Association (2015)*

*Editorial Assistant, Academic Exchange Quarterly (Spring, 2013 Edition)*

*Conference Planning Assistant, Central States Communication Association (CSCA) 2013 Conference*

*Treasurer of Communiqué, School of Communication Graduate Student Organization (Western Michigan University, 2012-2013)*

*Reviewer – The Hilltop Review: A Journal of Western Michigan University Graduate Research (Spring, 2012)*

*Graduate Financial Allocation Committee (Western Michigan University, 2011-2013)*

*Graduate Student Advisory Committee (Western Michigan University, 2011-2013)*