Examining Emerging Adults' Motivations for Sexting, Subjective Well-being, and

Relationship Quality: A Self-Determination Perspective

by

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Abstract

Researchers have documented many reasons why young people participate in sexting and a range of positive and negative outcomes associated with the activity. However, almost no research links outcomes with specific reasons, and the few instances where they are linked (e.g., Drouin et al., 2015; Klettke et al., 2019) focus on coerced sexting and lack a theoretical framework to guide the design and interpretation of results. This study addresses this gap by employing Self-determination theory to assess how autonomous and controlled motivations for sexting were related to subjective well-being and relationship quality among emerging adults. Online survey data from 267 emerging adults ages 18-25 who had sent sexually explicit images or videos of themselves through electronic means to a committed partner were analyzed using Structural Equation Modelling. Controlled motivations for sexting were significantly harmful to all indicators of subjective well-being operationalized as pleasant affect, negative affect, and life satisfaction. Autonomous motivations for sexting were related to increased pleasant and negative affect but had no statistically significant relationship with life satisfaction. Autonomous motivations for sexting were related to enhanced relationship quality, whereas controlled motivations for sexting were related to decreased relationship quality. These results demonstrate that the quality of motivations for sexting among emerging adults in committed relationships contributes to different outcomes. Implications for counsellors, educators, and practitioners working with emerging adults who sext are discussed.

Preface

This dissertation has received research ethics approval from the University of Alberta Research Ethics Board: "Sexting, subjective well-being, and relational quality: A Self Determination Theory perspective," No. Pro00094908 November 1, 2019.

Chapter 2 of this dissertation, "The impact of autonomous and controlled sexting motivations on subjective well-being and relationship quality" is currently under review at *Archives of Sexual Behaviour*. I was responsible for the design of the study, data collection, data analysis, and manuscript composition. Lia M. Daniels was the supervisory author and guided the design of the study, data analysis, and manuscript composition.

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"The clearest message we get from this 75 year study is this:
Good relationships keep us happier and healthier. Period."

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"I can speak five languages: English, emoji, sexting, sarcasm and sass."

Tyler Oakley

CHAPTER ONE: GENERAL INTRODUCTION

Growing up fluent in the language of technology, 'digital natives' (Prensky, 2001) readily incorporate technologies for forms of expression, creation, and communication in their everyday life (Gasser, 2008) including their relationships. Cell phone usage is almost ubiquitous, with 75% of adolescents and 95% of emerging adults owning a cell phone (Lenhart et al., 2010). This population is more likely to use the Internet, social networking sites (Lenhart et al., 2010), and other media forms such as text messaging compared to older adults (Coyne et al., 2011). As adolescence and emerging adulthood are stages of development characterized by the need for identity expression and the establishment of intimate connections (Arnett, 2000; Erikson, 1959), it may be unsurprising that sexting has become a regular part of relationships. In general, sexting describes the "sending, receiving, or forwarding of sexually explicit messages, images, or videos to others through electronic means, primarily between cellular phones" (Klettke et al., 2014).

With topics such as the legality of underage sexting and young women's images being distributed without consent resulting in devastating outcomes salient in the media, sexting research emerged. Like the media, the early research tended to treat sexting as a cause for concern. One area of research interest has been learning about what draws young people to engage in sexting despite its known risks. These investigations have produced extensive data on participants' reported reasons for sexting; however, few studies have differentiated these reasons

according to any type of theory or classification system. In this dissertation, I argue distinguishing between autonomous and controlled motivations for sexting as delineated by Self-determination Theory (Ryan & Deci, 2000; Ryan & Deci, 2002; Ryan & Deci, 2017) is essential to situate outcomes of sexting among emerging adults. This dissertation is composed of three sections. In the General Introduction, I provide background information on sexting, how it relates to my professional interests, and illustrate the motivational framework that guides this research, Self-determination theory. Next, I present a free-standing manuscript describing the research I undertook to meet the requirements of this dissertation. Lastly, discuss the relevance of this project to Counselling Psychology and my work as a provisional psychologist, reflect on methodological challenges, and provide suggestions for supporting emerging adults who may engage in sexting.

Definition, Prevalence, and Types of Sexting

‘Sexting’ represents a combination of the word 'sex' and 'texting.' Now, most researchers have broadened sexting beyond text-based messaging as social media platforms and image-based apps emerged. Despite the number of sexting studies over the last decade, there are still inconsistencies in the definition of sexting in the literature that make it difficult to aggregate the data. Beyond the mode of transmission, Barrense-Dias et al.'s (2017) review highlights how definitions also range in terms of media type (e.g. text message, photo, video), actions (e.g., sending, receiving), and sexual characteristics (e.g., nude, partially nude, sexually explicit).

Sexting prevalence among young people varies based on how sexting is defined. For instance, a review by Madigan et al. (2018) revealed that nearly 15% of adolescents have reported having sent a sext, and 27.4% reported having received a sext. The increased need for intimacy and romantic connection characteristic of emerging adulthood is reflected in even

higher rates of sexting among young adults ages 18-29, with over 38% percent reporting having

sent a sext, 41.5% having received a sext, and 47.7% having engaged in reciprocal sexting (Mori

et al., 2020). The lower rates of sending in comparison to receiving sext messages may reflect

the enhanced risk that comes with capturing and sharing sexually explicit content of oneself

(Barrense-Dias et al., 2017).

Sexting can also be differentiated based on who the sender is. Calvert (2009) labelled

sending a self-created image as primary sexting whereas sharing someone else's self-created

image as secondary sexting. Primary sending is typically driven by pleasure instead of pressure

(Lee & Crofts, 2015). However, secondary sending often occurs without the original sender's

consent (Walker & Sleath, 2017). Whereas some studies have found a low incidence of

secondary sexting (e.g., Reed et al., 2016), others have found rates as high as 25% (Strassberg et

al., 2013). Overall, distinguishing these criteria in research is recommended (Barrense-Dias et

al., 2017; Drouin et al., 2013) to acknowledge that there are distinctions under the umbrella

definition of sexting.

Demographics

Gender

Engagement in sexting varies based on gender. A meta-analysis examining the

prevalence of sexting pictures, video, and messages among emerging adults revealed that men

tend to send and receive sexts at a greater rate than women (Mori et al., 2020). However, young

women have reported more instances of having their sext forwarded without consent (Mori et al.,

2020) and pressure to sext (Reed et al., 2020; Van Ouytsel et al., 2020b). Given that studies

primarily focus on heterosexual participants, these findings corroborate research demonstrating

that men have reported being more likely to forward or post sexts without consent compared to

women (Garcia et al., 2016; Strassberg et al., 2017; Walker & Sleath, 2017). The risks of sexting

coupled with women's tendency to experience increased sexual stigma may explain why men

tend to engage in sexting more often (Mori et al., 2020). Whereas men tend to sext casual

partners or acquaintances, women tend to sext within the context of a committed relationship

(Drouin et al., 2017, Holmes et al., 2020), suggesting that women are comfortable sexting when

there are fewer perceived risks. Less is known about sexting among gender minorities. In the

first study to examine sexting among gender minority youth, Van Ouytsel et al. (2020a) did not

find any differences in sending or receiving sext prevalence but discovered that gender minority

adolescents reported more pressure to sext photos than cisgender youth.

Sexual Orientation

Dir et al. (2013) illustrated that expectations about sexting outcomes differ across

demographics, including sexual orientation. Some studies have found that non-heterosexual

people have reported sending and receiving sexts more than heterosexual people (Galovan et al.,

2017; Garcia et al., 2016; Rice et al., 2012; Van Ouytsel et al., 2020b). Like heterosexual women

in the study, Holmes et al. (2020) discovered that sexual minorities were more likely to report

having sent and received an explicit sext and were more likely to have sent an explicit sext to a

romantic partner than heterosexual people. Furthermore, sexual minorities were more likely to

report having their sext shared compared to heterosexual individuals. The prevalence of sharing

sexts doubled for non-heterosexual young men than non-heterosexual young women (Holmes et

al., 2020), which has also been similarly observed in adult sexual minority populations (e.g.,

Garcia et al., 2016). Sexual minority individuals also report experiencing pressure to sext at a

higher rate than heterosexual individuals (Van Ouytsel et al., 2020b). Non-heterosexual people

are more likely to receive a sext from an acquaintance (Holmes et al., 2020).

Individual Characteristics

Personality & Attitudes

Overall, people who engage in sexting differ in some personality traits and attitudes compared to people who do not participate. People who sext tend to score higher in impulsiveness and sensation seeking and engage in other risky behaviours (Gomez & Ayala, 2014; Champion & Pederson, 2015). Moreover, people who sext tend to score higher on extraversion and lower on other personality factors like conscientiousness and agreeableness (Crimmins & Seigfried-Spellar, 2017; Delevi & Weisskirch, 2013). Relatedly, results of a longitudinal study (Gámez-Guadix & Santisteban, 2018) revealed that higher scores on extraversion and lower scores on conscientiousness at one point in time predicted sexting among adolescents in the future.

Additionally, adolescents and emerging adults who sext are more likely to hold positive and liberal attitudes towards sexting than those that do not sext (Ferguson, 2011; Hudson & Fetro 2015; Samimi & Alderson 2014; Walrave et al., 2014). Moreover, expecting positive outcomes like enjoyment and admiration predicts participation in sexting (Brodie et al., 2019; Hudson & Marshall, 2015). In fact, perceptions of positive consequences resulting from sexting predict engagement in the activity compared to actual experienced positive consequences itself, which may explain participants' continuance to sext (Hudson & Marshall, 2015). Also, observing a friend engage in sexting is related to participation in sexting, suggesting that exposure to other's sexting behaviour may influence attitudes towards the activity to be a normal part of romantic relationships (Brodie et al., 2019).

Psychosocial Correlates

Given the risks of sexting, assessing psychosocial correlates related to sexting has been a critical research interest area. Compared to adolescents who do not sext, youths who sext are more likely to report increased risky behaviours like having multiple sexual partners, not using contraception, alcohol use, smoking, and delinquency (see Mori et al., 2019 for review). Similarly, sexting among adult populations is related to an increased likelihood of engaging in high-risk behaviours, such as substance abuse and unprotected sex (Benotsch et al., 2013; Trub & Starks, 2017). Among adolescents, sexting is related to increased anxiety and depression (Mori et al., 2019). For college women, actively sending sexts is related to increased global psychopathology and depression rates compared to women who do not sext (Gasso et al., 2020). Sexting among university students is associated with cyber victimization and, subsequently, depression, which was both related to suicidal ideation (Medrano et al., 2018). However, other studies have found no relationships between sexting and anxiety, depression, and self-esteem among adolescents or young adults (Gordon-Messer et al., 2013; Klettke et al., 2018).

Attachment

Compared to individuals with secure attachment, people with insecure attachment styles may be more likely to participate in sexting (Drouin & Landgraff, 2012; Trub & Starks, 2017). Individuals with anxious attachment styles are more likely to hold attitudes that sexting is normal and expected, that it can boost the relationship, and that their partners will expect them to engage in sexting (Brenick et al., 2020; Weisskirch & Delevi, 2011). Experiencing a high fear of negative evaluation from a dating partner, a form of relationship anxiety is positively related to sexting (Weisskirch et al., 2017). Moreover, young women who are anxiously-attached are more likely to engage in unwanted but consensual sexting as a way to avoid an argument (Drouin & Tobin, 2014). Researchers suggest that sexting may be a way for anxiously-attached individuals

to mitigate internal tension and maintain their relationship (Trub & Starks, 2017; Weisskirch & Delevi, 2011). Despite trying to protect the relationship, emerging adults are more likely to report experiencing regret due to sexting (Brenick et al., 2020). However, among married women who exhibit anxious attachment, sexting is related to increased relationship satisfaction (McDaniel & Drouin, 2015).

The relationship between avoidant attachment and sexting is less clear. Drouin and Landgraff (2012) found that both insecure attachment styles were related to sexting among college students in committed relationships, where anxious-attachment was related to sexting only text messages and avoidant-attachment was related to sexting both texts and pictures. However, other studies have not found a relationship between avoidant-attachment and engagement in sexting (Weisskirch & Delevi, 2011), or contrarily, found that low attachment avoidance predicted sexting (Weisskirch et al., 2017).

Relationship Characteristics

Studies have demonstrated that people in romantic or committed relationships are more likely to sext than single or casual relationships (Delevi & Weisskirch, 2013; Drouin et al., 2013; Perkins et al., 2014; Weisskirch & Delevi, 2011). In their study with young adults, Drouin et al. (2013) discovered that all forms of computer-mediated sexual communication examined (texts, pictures and videos, phone sex, live video) were more highly reported by participants engaging with committed partners compared to casual and cheating partners. The increased prevalence of sexting could reflect enhanced trust and comfort that typically come with committed relationships. Hudson and Fetro (2015) uncovered that one-quarter of people who have never sexted reported that they would participate with a trusted partner. Relationships may serve as a

safe space to sexually experiment with risky behaviours like sexting, even among participants who do not hold more positive attitudes towards the activity (Brodie et al., 2019).

Reasons (Motivations) for Sexting

Studies have demonstrated a wide range of reasons that young people report for sexting and tend to use the word "motivation" to describe such reasons even though there is no link to motivation theories. For example, Bianchi et al. (2016) proposed a three-factor model for sexting motivations, which can be used to review the literature. The first and most commonly reported reason for sexing is sexual purposes (Bianchi et al., 2016; 2017; 2019). Indeed, sexting for sexual purposes may be observed in adolescents' reports of sexting as a form of flirtation with a current or potential partner (Albury & Crawford, 2012; Reed et al., 2020; Ringrose et al., 2013) or to be a comfortable alternative to physical, sexual activity (Le et al., 2014). Among young adult populations, sexting often serves to initiate physical, sexual activities (Currin & Hubach, 2019; Drouin et al., 2013; Henderson, 2011). Drouin et al. (2013) discovered that sexting for reasons such as to flirt and initiate sex was common across all relationship types. Participants have reported that they sext for the excitement and enjoyment derived from the activity (Currin, Pascarella, & Hubach, 2020; Parker et al., 2013; Reed et al., 2020; Walker et al., 2013; Weisskirch & Delevi, 2011). Romantic partners may be using sexting as a way to strengthen their emotional bonds. In particular, those physically apart or in long-distance relationships have reported sexting in attempts to maintain or strengthen intimacy (Currin, Pascarella, & Hubach, 2020; Drouin et al., 2013; Renfrow & Rollo, 2014).

Another reason for sexting reported by adolescents and young adults is body reinforcement (Bianchi et al., 2016; 2017; 2019; Currin, Golden, & Hubach, 2020; Currin & Hubach, 2019). To a lesser extent compared to sexual purposes, participants sext to seek

feedback and social reinforcement regarding their sexual attractiveness or appearance, a behaviour that may be in line with body image concerns typical of these developmental stages (Bianchi et al., 2017; Burkett, 2015).

Lastly, instrumental/aggravated reasons for sexting consist of sexting in exchange for favours or money, to harm someone, and sexting victimization and perpetration (Bianchi et al., 2016; 2017; 2018; 2019). In line with this, other studies revealed that participants, often adolescent girls and young women, have reported experiencing pressure to sext and different negative experiences (Klettke et al., 2014; Reed et al., 2020). On the other hand, young people also consensually engage in sexting when they do not want to. Perhaps because of their motivations to maintain the relationship, unwanted but consensual sexting among young adults occurs at a concerning rate. Over half of the participants in a study by Drouin and Tobin (2014) reported sexting their committed partner when they did not want to. The authors describe how unwanted but consensual sexting, mainly to avoid an argument, can overlap with sexual coercion.

One form of sexting perpetration is sharing sexts without the sender's consent. Despite the potential legal ramifications, the dissemination of sexts is evident (see Walker & Sleath, 2017 for review). Emerging adults mainly report that they do not perceive disseminating sexts as a big deal or see it as a joke (Clancy et al., 2019). Overall, although sexting for reasons consistent with instrumental/aggravated reasons occurs to a lesser extent than consensually sexting for sexual purposes, the potential harm proposed warrants increased attention.

Outcomes

Participants that engage in sexting have reported a mix of both positive and negative experiences, but they mainly identify positive feelings (Currin, Ireland, & Cox et al., 2020; Del

Ray et al., 2019; Dir et al., 2013; Hudson & Marshall, 2017). One study (Currin, Ireland, & Cox et al., 2020) found that the main feeling reported by participants who sent or received sext messages was excited, which was paired with other emotions like feeling good, anxious, naughty, and wanted. Similarly, participants in a study by Hudson and Marshall (2017) reported more positive than negative outcomes. The most-reported positive outcome was enhancing sexual arousal, and the most reported negative consequence was becoming more self-conscious about their body (Hudson & Marshall, 2017). Nevertheless, the authors state that other negative consequences like self-harm, substance abuse, depression, and blackmail can be highly damaging to young adults (Hudson & Marshall, 2017).

Furthermore, support is documented for the association between sexting and enhanced relationship satisfaction among romantic partners (Brodie et al., 2019; Galovan et al., 2018; Hudson & Marshall, 2017; Parker et al., 2013; Stasko & Gellar, 2015). However, other studies have revealed mixed findings. Galovan et al. (2018) found that although sexting enhanced sexual satisfaction, this did not necessarily translate to relationship factors, as increased levels of sexting were related to enhanced relationship conflict, relationship ambivalence, and lower commitment levels.

Relationship benefits may also depend on particular characteristics, such as relationship type. For instance, Drouin et al. (2017) discovered that although participants of sexting report both sexual and emotional relationship benefits and detriments, people who were in committed relationships were much more likely to experience more positive consequences than people in casual relationships. Considering factors such as attachment may also yield different results. One study found an association between sexting and increased relationship satisfaction, particularly for participants who were high in avoidant attachment and sent texts and women who were high

in attachment anxiety and sexted pictures and videos (McDaniel & Drouin, 2015). Arguably, specifying motivations for sexting is also important to differentiate outcomes. For example, experiencing coercion and receiving unwanted sexts is associated with poorer mental health outcomes (Klettke et al., 2019).

Researcher Reflection and Positionality

As an activist against sexual violence and feminist provisional psychologist working primarily with adolescents and emerging adults, I am similarly concerned about the potential harm that sexting without volition and the distribution of non-consensual sexts may cause. Simultaneously, I recognize that there can be benefits for young people growing up with technology who willingly engage in the behaviour. Scenarios of sexting with a partner resulting in excitement and pressured sexting resulting in anxiety were mentioned by young women who shared their experiences of sexting as part of my Master's thesis. Wanting to build on that exploratory research, I sought to understand how varying motivations, from the pure enjoyment of intrinsic motivation to unenthusiastic obligation that is external motivation, positively or negatively impacted participants' personal and relationship well-being. Following researchers who have begun approaching sexting from a sex-positive paradigm that views sexting as a normative activity with potential benefits, especially in romantic relationships (Oriza et al., 2020; Parker et al., 2013; Stasko & Gellar, 2015), I take a balanced approach to examining motivations and outcomes. Through this research, I aim to continue promoting healthy relationships, prevent technology-facilitated violence, and equip other practitioners with increased understanding to better help young people who may engage in sexting.

While taking a motivation course, I was introduced to Self-determination theory (SDT), which outlined that more autonomous (or intrinsic) motivations lead to better outcomes, whereas

more controlled (or external) motivations diminish well-being. SDT presented to be a fitting model to guide this research not only because of theoretical underpinnings but in that it has and can be applied to nearly all motivational contexts, including sexual motivation.

Self-determination Theory

SDT is a psychological theory of human motivation and personality focused on the social conditions that support or forestall human flourishing (Ryan & Deci, 2000; Ryan & Deci, 2017). SDT contends that when certain individual and social factors like the facilitation of basic psychological needs and the internalization and integration of initially externally regulated actions are satisfied, it can promote positive well-being, or when thwarted, can undermine it (Ryan & Deci, 2000).

Basic Psychological Need Theory

One of the central premises of SDT is that inherent growth tendencies and psychological needs are at the basis of human motivation (Ryan & Deci, 2000). According to SDT, people will pursue actions, goals, and relationships that satisfy these needs. Although satisfying psychological needs may not be a conscious goal in the way physiological needs are, human beings will gravitate towards situations that support or fulfill them (Ryan & Deci, 2002). SDT outlines that optimal functioning and positive well-being are achieved by satisfying the three innate needs of competence, relatedness, and autonomy.

Competence refers to the need to feel a sense of effectiveness and mastery (Ryan & Deci, 2017). In important situations, people want to feel like they are capable and can contribute something of value. For instance, romantic partners who feel more skilled at communicating with one another are more likely to experience higher self-esteem and less likely to avoid in novel situations (Bouchey, 2007). Relatedness refers to feeling socially connected and a sense of

belonging (Ryan & Deci, 2017), feeling significant among others, and giving or contributing to others (Deci & Ryan, 2014). In relationships, it is not surprising that a sense of relatedness is vital to well-being, sometimes being the strongest predictor of relationship outcomes such as satisfaction and commitment after a disagreement (Patrick et al., 2007). Autonomy is the need to self-regulate or to have a voice in one's behaviours (Deci & Ryan, 1991; Ryan & Deci, 2017). People who act autonomously choose to do so at their own will and act per their interests and values. Partners who feel autonomous in their relationship are more likely to experience greater attachment security to their partner and relationship satisfaction (La Guardia et al., 2000). Individuals whose partners tend to support their autonomy report enhanced subjective well-being (Ratelle et al., 2012). According to SDT, people will pursue actions that support their psychological needs (Deci & Ryan, 2000). Thus, the quality of motivation, which impacts subsequent outcomes (Deci & Ryan, 2000; Vallerand, 2000) is important to consider.

Organismic Integration Theory

SDT contends that humans have a natural and innate tendency towards growth and integration to achieve a unified sense of self (Ryan & Deci, 2000; Ryan & Deci, 2002). When faced with external regulations, people will tend to internalize or take in values, beliefs, behaviours from these external sources and transform and integrate them to fit with who they are (Ryan & Deci, 2017). When internalization occurs, individuals can better have their basic psychological needs met (Ryan & Deci, 2017). As regulations become increasingly internalized and integrated, they also become more self-determined. However, internalization can also be disrupted and, as a result, remain external or only partially internalized (Deci & Ryan, 2000). This sub-theory illustrates an autonomy-control continuum outlining contextual factors that support or thwart the internalization and integration process, resulting in several different

regulations and quality of motivation (Ryan & Deci, 2000; Ryan & Deci, 2002; Ryan & Deci, 2017).

    Amotivation is at the least self-determined end of the continuum, representing someone who is not motivated to behave or lacks the intention to behave (Ryan & Deci, 2002; Ryan & Deci, 2017). *External regulation* represents someone who is purely motivated by something outside of themselves. *Introjected regulation* is a bit more internalized but still somewhat due to external factors, such as to avoid negative feelings like guilt and shame. *Identified regulation* remains external but involves a conscious valuing and acceptance of the behaviour as something meaningful to the individual. *Integrated regulation represents* the most self-determined or autonomous form of extrinsic motivation where a specific behaviour is evaluated as congruent with a person's sense of self. Finally, the most self-determined type of motivation is *intrinsic motivation,* which describes an inherent tendency to discover, perform, and learn. Together, external and introjected regulations represent controlled forms of motivation, whereas integrated, identified, and intrinsic regulations make up autonomous forms of motivation.

The Importance of Self-determination in Relationships

    According to theory, the importance of self-determined motivation in relationships can operate on three levels. Specifically, Vallerand (1997; 2000) operationalizes motivation from a trait or global level, contextual level, and situational level thereby representing three levels of generality in a hierarchical model of intrinsic and extrinsic motivation. Given that romantic connections are central in emerging adulthood, the fulfillment of psychological needs and the quality of motivation within the relationship are important to determining individual and relationship well-being at these three different levels.

Global Level

Theorists have discussed autonomous and controlled motivations as a general disposition or tendency towards a particular causality orientation. Someone who is generally autonomy-oriented looks for opportunities that promote choice and self-determination (Deci & Ryan, 1985). Hodgins et al. (1996) found that autonomous people experienced more disclosing, pleasant, and honest interactions, whereas controlled individuals reported greater discomfort with disclosure and less honest interactions (Hodgins et al., 1996). Given that disclosure is vital for intimacy, and intimacy contributes to relationship satisfaction (e.g., Laurenceau et al., 2005), it is evident how increased comfort sharing details with partners pays off in relationships.

Being autonomy-oriented is also crucial for relationship growth and protection after conflict. Knee et al. (2002) operationalized autonomy orientation as growth motivation, the tendency to work towards growth and improvement during challenging times in the relationship. The authors administered surveys to determine motivation orientations in adult couples and then videotaped them individually to investigate their relationship perspectives, followed by couple interviews where they were allowed to discuss and rectify differences in their responses. Those who were autonomous and growth-oriented experienced more relationship-maintaining coping strategies, less denial and avoidance strategies, fewer negative emotions and more positive interactions the discussion with their partner. Contrarily, those who were control-oriented exhibited more denial and fewer positive behaviours (Knee et al., 2002). Overall, autonomy-oriented people tend to have higher-quality relationships compared to those who are experiencing control or amotivation (Ryan & Deci, 2017).

Contextual Level

Autonomy and controlled motivation are also operationalized in terms of contextual domains, such as the relationship specifically. Autonomy in a relationship would mean fully

endorsing being in the relationship; whereas, controlled motivation in a relationship would mean feeling pressured by external forces (Knee et al., 2005). In a series of studies, Hadden et al. (2015) determined that individuals exhibiting more relationship autonomy demonstrated increased care and need-support for the partner, and less intrusiveness, which the authors suggest is reflective of increased attention to partner needs. Relationship autonomy is also influential in times of conflict. One study (Hadden et al., 2018) discovered that individuals who experienced more self-determination to be involved in the relationship were more likely to have pro-relationship responses such as forgiveness and accommodation when hurt by the partner. Moreover, Knee et al. (2005) revealed that both self and partner's relationship autonomy was related to more understanding and less defensiveness during times of conflict. These studies demonstrate the vital role of relationship autonomy for successful outcomes in the relationship.

Beyond relationship autonomy, self-determination can be examined in the context of sexual activity. Given that sexual activity is an integral part of many committed relationships, sexual autonomy impacts individual well-being and relationship satisfaction. Sexual autonomy describes feeling a sense of control and not being overwhelmed by external pressures within a sexual context (Sanchez et al., 2006). Research among college students has demonstrated that compared to young people who exhibited more controlled motivations, those who were sexually autonomous experienced more positive sexual interactions like increased satisfaction, more positive affect, and less negative affect like guilt and regret (Smith, 2007; Tóth-Király et al., 2019). Vrangalova (2015) did not find benefits for autonomous casual sex; however, the author demonstrated that controlled motivations in casual sex were related to lower well-being, including lower self-esteem, higher depression and anxiety, and more physical symptoms.

Beyond sexual activity, self-determination in several other relational activities is important in determining relationship well-being. Gaine and La Guardia (2009) demonstrated that not only is relationship autonomy and sexual autonomy beneficial, but increased autonomy for relational activities like self-disclosure, providing support, doing nice things for the partner, and supporting life aspirations were related to benefits in the form of increased commitment, satisfaction, intimacy, and vitality. In contrast, people who exhibited more controlled motivations in relational activities experienced poorer relationship functioning. Overall, these studies demonstrate the advantage of autonomous motivation and impairments of controlled motivation at the contextual domain on individual and relationship quality among romantic couples.

Situational Level

Although examined to a lesser extent, autonomous motivation in relationships can also be operationalized at a situational level where motivation is explored in the "here and now" (Vallerand, 2000). Gravel et al. (2020) assessed daily variations in the quality of sexual motives and well-being among couples. The authors found that on days where individuals felt increased self-determination, they also reported higher sexual well-being in the form of higher sexual satisfaction, more positive sexual affect, and less negative sexual affect. However, on days individuals exhibited more controlled motivation, they reported less sexual satisfaction.

Interactions Between Levels

The model proposes that there can be interactions between the various levels, whether the motivation at the broad trait level impacts the lower level, or motivation at a lower level can over time have an impact on a higher level (Vallerand, 2000). For instance, one study demonstrated

that trait autonomy was related to relationship autonomy, which was related to better outcomes related to relationship quality (Knee et al., 2005).

Moreover, the model suggests that basic psychological needs impact motivation and outcomes at that particular level (Vallerand, 1997). Consistent with this theory, Patrick et al. (2007) found that increased need fulfillment was related to higher quality motivation, which was associated with responding more adaptively to disagreements. Gravel et al. (2020) also revealed that increased daily basic need satisfaction was related to increased sexual self-determination, and subsequently, sexual well-being. Other studies have found support for the quality of motivation impacting psychological needs. For instance, Wood et al. (2018) demonstrated that among people in consensually non-monogamous and monogamous relationships, self-determined sexual motivation was related to sexual need fulfilment, which was related to sexual satisfaction; however, the authors acknowledged that it is possible the order of needs to quality of motivation is switched. Similarly, Brunell and Webster (2013) demonstrated that increased autonomy during sex was related to sexual need satisfaction, which was related to psychological and relationship well-being. Overall, the research reveals that increased self-determination at all levels in a relationship predicts positive outcomes for the individual and the relationship, whereas a lack of self-determination threatens it.

Overview of the Study and Results

Based on the review above, there are linkages in how the quality of motivation and well-being function in intimate relationships. However, the sexting literature rarely considers how varying theory-based motivations for sexting impact subsequent outcomes. Considering its evolving role in relationships, I propose that examining sexting from an SDT lens is appropriate to understand sexting motivations and its impact on individual and relationship well-being.

Towards this end, I offer a research question and hypothesis: How does the quality of motivation for sexting impact subjective well-being and relationship quality among emerging adults in committed relationships? In the study, I examined how autonomous and controlled motivations for sexting would impact individual well-being and relationship quality. Specifically, I tested my model using Structural Equation Modelling (SEM) on a sample of 267 emerging adults who responded to a survey regarding sexting with a committed partner. Overall, the results suggest that autonomous motivations for sexting are beneficial for two indicators of subjective well-being, pleasant affect and relationship quality, but not life satisfaction. In contrast, controlled motivations for sexting is harmful to all aspects of individual well-being and relationship quality.

Significance of the Problem and Relevance to Counselling Psychology

Counselling psychology involves the use of psychological principles to "enhance and promote the positive growth, well-being, and mental health of individuals, families, groups, and the broader community" (CPA, 2009). As new apps and online tools continue to develop and emerge, ways of expression and forming and maintaining relationships will shift alongside it, further complicating how sexting, and communication technology in general, impacts the lives of young people. It is therefore essential that counselling psychologists be informed about these topics to assist their clients better.

Gelso et al. (2014) assert that there are five values in the profession of counselling psychology: a) focusing on strengths, b) focusing on the whole person, c) engaging in advocacy and social justice, d) providing counselling that is brief, educational, and preventative, and e) being a science-practitioner. Of this list, my research demonstrates the two values of

emphasizing a holistic perspective of the individual and commitment to the science-practitioner model.

The value of focusing on the whole person particularly stresses the areas of lifespan development and vocational growth. As Gelso (2014) reviews, the unique needs, changes, and transitions across the lifespan are a part of the holistic person and are vital to counselling psychologists' work. Although this study does not pertain to vocational growth, it does acknowledge the critical developmental stage of emerging adulthood. Emerging adults have grown up with communication technologies, which they accessibly use to fulfill their developmental needs of expression and connection. Whether or not counselling clients present issues related to sexting, young people who are often literally "attached" to their digital devices (i.e., phone in hand) are using their devices to connect with others, and sexting is a viable and increasingly normal way of achieving that. Thus, studying sexting and well-being is necessary to fully see and understand emerging adults who are regular technology consumers.

Next, the science-practitioner model contends that counselling psychologists should embody being scientists and practitioners in their various roles, such as using science to inform practice (Gelso et al., 2014). This study achieves the commitment to the science-practitioner model because it examined how self-determined motivations for sexting impacted individual and well-being and relationship quality, which are relevant and important outcomes observed in clients. One example of how to practice with the science-practitioner model in mind is to be aware of unfounded judgements (Myers, 2007). Some practitioners who do not know much about sexting may likely assume that sharing intimate photos and videos is usually related to adverse outcomes. However, my study results can help inform counselling psychologists that sexting has benefits if engaged autonomously in committed relationships. In contrast, controlled

motivations are related to negative consequences. This example demonstrates how my study

(science) can inform counselling psychologists' work in the therapy room (practice). In the

general discussion, I return to the relevance of this study to counselling psychology by situating

the results in the roles of the profession.

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CHAPTER TWO: THE IMPACT OF AUTONOMOUS AND CONTROLLED

SEXTING MOTIVATIONS ON SUBJECTIVE WELL-BEING AND

RELATIONSHIP QUALITY

Whether they are sexy 'selfies', 'nudes,' or texts - the practice of sexting has become commonplace among young people. Although many definitions exist, sexting is broadly defined as the sharing of sexually explicit texts, images, and videos through electronic devices. A recent meta-analysis found that 15% of adolescents report sending sexts, and 28% report receiving them (Mori et al., 2020). The number jumps dramatically for emerging adults (age 18-29), 38% of whom report sending sexts and 42% report receiving them (Mori et al., 2020). Emerging adulthood is characterized by independence, risk behavior and increased connection-seeking in terms of emotional and physical intimacy (Arnett, 2000) which, when coupled with the ubiquity and normality of communication technologies, does not make sexting rates surprising. However, these rates reveal little about the reasons behind sexting particularly when young people are well aware of risks like having their images or videos shared without their consent (Dir & Cyders, 2015; Lim et al., 2016; Van Ouytsel et al., 2017). Moreover, of the studies describing reasons for sexting among young people, few capitalize on the guidance afforded by motivation theories. In this study, we used Self-determination theory (Ryan & Deci, 2017) as a framework to guide our examination of how motivations for sexting are associated with subjective well-being and relationship quality among emerging adults in committed relationships.

Self-determination Theory

Self-determination theory (SDT) is a psychological theory that focuses on how biological, social, and cultural conditions positively or negatively impact human functioning (Ryan & Deci, 2017). SDT also contends that the extent of self-determined motivation matters

for growth and well-being (Ryan & Deci, 2017). Numerous research areas, including close

relationships, have employed SDT as a motivation framework, and its theoretical rigour may

offer a structure from which existing research on the outcomes of sexting related to the

individual or the relationship may be interpreted.

Autonomous and Controlled Motivation

SDT outlines an autonomy-control continuum that ranges in the extent of internalization

(Ryan & Deci, 2000; Ryan & Deci, 2002; Ryan & Deci, 2017). Internalization describes how

activities usually maintained through external regulations can be integrated to be consistent with

the individual's values. In doing so, the behaviour becomes self-determined (Ryan & Deci,

2002). Lesser internalization represents controlled motivation and less self-determined behaviour

whereas greater internalization represents more autonomous motivation and self-determined

behaviour (Ryan & Deci, 2002). As actions become less self-determined, they become controlled

motivation, characterized by internal and external pressures.

There are two types of controlled motivation. External regulation represents the least self-

determined form of motivation, describing behaviour that is purely motivated by reinforcements

outside the individual, such as rewards and punishments. Introjected regulation describes

behaviour that may occur to avoid negative feelings like guilt and shame. As motivations

become more self-determined, they shift into three types of autonomous motivations. Identified

regulation involves a conscious valuing and sense that the behaviour is personally meaningful

even if it is not entirely congruent with a person's beliefs and values. Integrated regulation

describes behaviour congruent with the person's existing values, goals, and needs. Intrinsic

motivation is the most self-determined regulatory style, where an individual engages in

behaviour for the inherent satisfaction, interest, and enjoyment derived from it. Finally, at the

least self-determined end of the continuum is amotivation which is neither autonomous nor controlled. Amotivation describes a lack of motivation or intention to behave (Ryan & Deci, 2017)**.** Since we only focus on autonomous and controlled motivations in this study, we do not examine amotivation.

Autonomous and Controlled Motivation in Romantic Relationships

SDT suggests that behaviours function along this continuum at global, contextual, and situational levels (Vallerand 1997; 2000). The broadest level is global motivation, which describes a trait or tendency to act in autonomous or controlled ways (Vallerand, 2000). For instance, people who tend to regulate their behaviour based on autonomy experience more positive interactions and less negative emotions (Knee et al., 2002). They also experience more relationship-maintaining coping strategies, greater satisfaction, and more adaptive responses when faced with conflict or disagreement with their partner than others who tend to be more control-oriented (Knee et al., 2005). The narrowest level is situational motivation, which refers to motivation towards a specific behaviour at a particular point in time. For example, Gravel et al. (2020) found that participants reported greater autonomy and less control on days where they experienced higher sexual satisfaction, more positive sexual affect, and less negative sexual affect.

In the middle, contextual motivation describes regulatory styles in various life domains, such as interpersonal relationships (Vallerand, 2000). Researchers have demonstrated that participants who report more self-determined reasons for being in the relationship experience more adaptive behaviours that predict increased feelings of happiness (Blais et al., 1990), more support and less intrusiveness (Hadden et al., 2015), and are more forgiving towards a partners' transgressions (Hadden et al., 2018). The contextual domain can be further differentiated into

relational activities (e.g., sexual motivation) and, in the current research, sexting motivations. Gaine and La Guardia (2009) found that those who felt more autonomous in relationship activities such as sexual and physical intimacy, self-disclosure, and social support experienced greater commitment, satisfaction, intimacy, and vitality. In a series of studies with undergraduate dating couples, Brunell and Webster (2013) discovered that self-determined sexual motivation predicted sexual need satisfaction, resulting in higher psychological well-being indicators like positive affect, vitality, life satisfaction, relational quality indicators like satisfaction and commitment in the relationship. Similarly, Wood et al. (2018) uncovered that self-determined sexual motivation predicted sexual need fulfillment, which resulted in greater relationship and sexual satisfaction among their sample of monogamous and consensual non-monogamous couples. In a study of mainly young adults by Tóth-Király et al. (2019), participants who experienced greater sexual autonomy experienced increased sexual satisfaction, more positive affect, and less negative affect during sex than those who exhibited more controlled motivation. Young adults who were sexually self-determined also experienced more positive affect in their life in general (Tóth-Király et al., 2019). Although the associations between self-determined motivation and components of intimate relationships at the contextual domain have been well established, sexting specifically has not been examined from this theoretical lens.

Reasons for Sexting

Many studies have examined the reasons why young people engage in sexting. Although none of this work adhered to an SDT framework, the results may still be interpreted according to the continuum. For example, some reported reasons for sexting, such as joking around with friends (Albury & Crawford, 2012) or alleviating boredom (Drouin et al., 2013; Kopecký, 2012), could be classified as amotivation from an SDT perspective. In contrast, sexting for the sheer

fun, excitement, and enjoyment derived from the activity (Currin, Pascarella, & Hubach., 2020; Parker et al., 2013; Reed et al., 2020; Walker et al., 2013; Weisskirch & Delevi, 2011) reflect intrinsic motivations for sexting. Reports of sending self-created images and videos as self-expression (Henderson, 2011) demonstrate integrated reasons for sexting. Most commonly, participants engage in sexting with a potential or current partner for sexual purposes (Bianchi et al., 2016; 2017; 2019), which may illustrate identified motivations. Examples of sexting for sexual purposes may be to attract attention, flirt, or hook up among casual partners (Bianchi et al., 2016, 2017; 2019; Drouin et al., 2013; Henderson, 2011; Reed et al., 2020; Van Ouytsel et al., 2017), as a form of sexual experimentation among adolescents (Burkett, 2015), or as a way to potentially further sexual activity and increase intimacy in the relationship (Bianchi et al., 2016; 2017; 2019; Currin & Hubach, 2019; Drouin et al., 2013; Drouin & Tobin, 2014; Henderson et al., 2011). Most often, young people sext within the context of a committed relationship (Drouin et al., 2015; Stasko & Gellar, 2015). Romantic partners report sexting for identified reasons like maintaining intimacy if they are physically apart or in a long-distance relationship (Burkett, 2015; Currin, Golden, & Hubach, 2020; Drouin et al., 2013).

Alternatively, participants also sext for reasons that can be categorized as controlled motivations from an SDT lens. When young people report sexting as a gift for their partner (Reed et al., 2020; Van Ouytsel et al., 2017) or to elicit feedback and reinforcement about their sexual attractiveness or appearance (Bianchi et al., 2017; Burkett, 2015) they may demonstrate introjected motivations. Participants who sext in hopes that they may receive sexts from the other person (Perkins et al., 2014), and sexting when the other person requests it (Englander, 2012; Drouin et al., 2013; Renfrow & Rollo, 2014; Van Ouytsel et al., 2017) may have external motivations. As an external motivation source, some individuals report experiencing pressure to

sext from friends (Brodie et al., 2019; Kopecký, 2012) or romantic partners. Drouin et al. (2015) established that 20% of participants reported experiencing sexting coercion from their romantic partner. Like physical and sexual coercion, romantic partners used tactics such as making the other person feel obligated to sext and repeatedly asking them to participate despite knowing that they do not want to (Drouin et al., 2015). Finally, young people may consensually sext even if they do not fully desire to do so. This behaviour can be viewed as a type of sexual compliance similar to unwanted but consensual sex (e.g., Impett & Peplau, 2003; O'Sullivan & Allgeier, 1998; Quinn-Nilas et al., 2018; Vannier & O'Sullivan, 2010) that occurs when a partner willingly agrees to engage in sexual activity that is not wanted or desired and thus is a form of external regulation. Nearly half of the participants in one study (Drouin & Tobin, 2014) reported engaging in unwanted but consensual sexting with their partners. In other words, people in romantic relationships may engage in sexting when they do not fully want to sext, but they do want to maintain or enhance the relationship by fostering intimacy, meeting their partner's needs, or making their partner happy (Burkett, 2015; Drouin & Tobin, 2014; Renfrow & Rollo, 2014).

Outcomes Related to Sexting

SDT proposes that the quality of motivation along the continuum is associated with different outcomes. The one place where the effect of quality of motivation for sexting may be most obvious for the individual and their relationship is through studies of unwanted but consensual sexting – which we have labeled as an external motivation to sext. The literature has demonstrated that unwanted but consensual sexting consistently predicts poor mental health outcomes, such as depression, anxiety, stress, and low self-esteem (Drouin et al., 2015; Klettke et al., 2019). The adverse effects of this type of sexting may persist much after the event, as young women have expressed ambivalence and disappointment in themselves, reflecting upon their

decisions to sext without desire in efforts to keep their partners happy (Renfrow & Rollo, 2014). However, because SDT has not been used to conceptualize reasons for sexting such associations are hard to extract from the existing literature and instead a mix of outcomes is regularly noted for both the individual and the relationship (e.g., Drouin et al., 2017; Hudson & Marshall, 2015).

Individual Outcomes

According to the hedonic tradition of subjective well-being, people are in pursuit of pleasure, happiness, and the good life. Diener et al. (1985) proposed that the presence of positive affect, the absence of negative affect, and cognitive evaluation of life satisfaction define subjective-wellbeing. Approximately half of the young people in a study by Drouin et al. (2017) reported that sexting positively impacted their emotional and sexual relationships while also describing regret and worry, not feeling comfortable sexting, and experiencing a traumatic experience sexting (Drouin et al., 2017). Qualitative studies of women's sexting experiences have revealed that they report positive feelings such as being happy, empowered, and finding sexting enjoyable and exciting while also acknowledging vulnerabilities and risks (Amundsen, 2019; Le, 2016). Even when examining expectancies for how sexting would make them feel (Dir et al., 2013), undergraduate students endorsed both positive items (e.g., feel attractive, sexy, excited, intimate) and negative items (e.g., lowers self-esteem, feel guilty, embarrassed, ashamed, vulnerable). One study with adolescents found that sexting was related to activating emotions like energetic, satisfied, and determined, but not negative feelings like guilt, fear, or annoyance (Del Ray et al., 2019). It is quite possible that had these "reasons for sexting" been better defined along the continuum of self-determined motivation clearer results may have emerged for the impact on indicators of subjective well-being.

Relationship Outcomes

The ubiquity of sexting within romantic relationships has shifted the narrative around sexting to be a normative part of modern relationships (Döring & Mohseni, 2018). Thus, the impact of sexting on the quality of the relationship deserves attention. According to Fletcher et al. (2000), relationship quality consists of satisfaction, trust, intimacy, passion, commitment, and love. Individual domains and combinations of these domains under different terms have been examined alongside sexting. Some studies have found relationship benefits as a result of sexting. For example, sexting is related to enhanced relationship satisfaction among romantic partners (Parker et al., 2013) and people with increased attachment anxiety (McDaniel & Drouin, 2015; Weisskirch & Delevi, 2011). Moreover, Hudson and Marshall (2017) discovered that emerging adults reported significantly more positive than problematic outcomes to sexting, with 37% feeling emotionally closer to their partner and nearly half feeling like their relationship was enhanced. Several studies have demonstrated that sexting is related to enhanced passion (Van Ouytsel et al., 2019) and sexual satisfaction (Brodie et al., 2019; Galovan et al., 2018; Stasko & Gellar, 2015; Oriza et al., 2020). In contrast, other researchers have not discovered that sexting is related to enhanced relationship satisfaction (Jeanfreau et al., 2019) but may be related to more issues such as increased conflict, ambivalence, and poorer commitment levels (Galovan et al., 2018; McDaniel & Drouin, 2015; Van Ouytsel et al., 2019). Again, perhaps one reason for the opposing results on relationship quality is that researchers tend to treat sexting as a dichotomous activity (yes or no) rather than a more nuanced activity emanating from different motivations. From this dichotomous perspective, it may not be surprising that outcomes can be either compromised or enhanced by sexting.

Current Study

In the complex social exchanges that make up romantic relationships, sexting motivations range from fully endorsed autonomous excitement to reluctant externally motivated compliance. Research has illustrated how self-determined motivation in romantic relationships at a global, contextual, and situational level impacts subjective well-being and relationship quality. Although several studies have examined sexual motivation from an SDT perspective (e.g., Brunell & Webster, 2013; Gravel et al, 2020), no research has focused on sexting from this lens. Sexting is a unique relational activity that can be sexually motivated without requiring individuals to be physically together and is thus distinct from physical sexual activity. Moreover, differentiating the extent of self-determined motivations for sexting is needed to provide a more precise picture of the impact on subjective well-being and relationship quality. Thus, the purpose of this study was to examine the relationship between motivations for sexting, subjective well-being, and relationship quality among emerging adults in committed relationships.

Through the current study, we sought to advance the literature in two ways. First, we expand the sexting literature by employing a motivational framework to situate the impact of sexting motivations on well-being, particularly subjective well-being and relationship quality in committed relationships. Second, we add to the SDT literature by focusing on the contextual domain of sexting because it has become a regular part of romantic and sexual relationships but has not been included in the sexual motivation research. Through these two advancements, we will contribute a better understanding of how sexting occurs within committed relationships that can inform helping professionals working with these populations and researchers in the field of sexual motivation and sexting. Our research question is: How does the quality of motivation for sexting impact subjective well-being and relationship quality among emerging adults in committed relationships? Based on SDT and previous research, we hypothesize that sexting for

autonomous motivations will positively predict subjective well-being (positive affect, negative

affect, satisfaction with life) and relationship quality (satisfaction, trust, intimacy, passion,

commitment, love), whereas, negative associations will emerge for emerging adults who sext for

controlled motivations. Figure 1 outlines the proposed model.

Research Methods

Participants

The participant flow diagram is outlined in Figure 2. Eight-hundred thirty-seven

participants consented and began the survey. Of these participants, we deleted responses for two

people who did not provide their gender, 24 people who did not meet the age requirements, 31

people who did not respond to relevant questions or entire measures, and 403 people who clicked

the consent button but did not submit the survey. Due to low sample size for participants who

identified as non-binary ($n = 5$), these individuals were excluded from the main analyses. We

also removed participants in a cheating relationship (sexting with a person they have cheated

with outside of a committed relationship; $n = 5$) and a casual relationship (sexting with a person

they have a casual fling or hook up with, such as a romantic interest or a dating app match; $n =$

100) due to low sample size. As a result, we had 267 participants who responded based on

sexting a committed partner for our analyses. A minimum of 200 individuals is a common rule

for sample size in Structural Equation Modelling (SEM; Kline, 2016).

We analyzed data from 267 participants (age: $M = 21.62$, $SD = 2.37$; gender: 27% men,

73% women) who indicated they were in a committed relationship defined as an intimate

relationship, such as a serious partner, boyfriend, girlfriend, husband, or wife. Participants

reported being in the relationship between zero to six months (21%), six to eleven months (18%),

one to two years (34%), three to four years (18%), and five years or greater (9%). Sixty-five

percent of the sample identified as heterosexual, 27% bisexual, 6% other (pansexual, asexual, bi-curious, questioning), <1% gay/lesbian, and <1% preferred not to disclose or did not respond. Moreover, 66% identified as White, 10% East Asian, 7% South Asian, 5% Hispanic/Latinx, 4% mixed ethnicity, 2% Native American/Metis, 2% Black/African American, 1% Middle Eastern, and 3% provided unclear or no response. The demographics questions and measures included in the survey are listed in the appendix.

Measures

Motivations for Sexting

The Sexual Motivation Scale (SexMS; Gravel et al., 2016) is a 24-item measure of the quality of motivation outlined by SDT in the context of sexual relationships. In the present study, we modified the items to specify motivations for sexting and excluded amotivation items that were not in the scope of this study. The examined subscales consist of five types of motivational regulatory styles: intrinsic (e.g., because sexting with this person is fun), integrated (e.g., because sexting brings so much to my life), identified (e.g., because I feel it's important to be open to new experiences), introjected (e.g., to prove to myself that I have sex-appeal), and external (e.g., to avoid conflicts with this person). Participants responded using a Likert scale ranging from 1 (does not correspond at all) to 7 (corresponds completely). In a pilot study, we tested the revised SexMS specific to individuals' sexting behaviours and found good internal consistency for the subscales (.74 - .92). Thus, the same subscales were maintained in this study, where the internal consistency reliability coefficients ranged from .54 to .88. The internal consistency for the overall scales were .87 for autonomous motivation and .78 for controlled motivation. Table 1 outlines the Cronbach *alpha* coefficients for all the measures used.

Subjective Well-being

We administered three scales as indicators of subjective well-being. The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) consists of two mood scales: positive and negative affect. Each scale includes 10 words that describe different feelings and emotions (e.g., "enthusiastic," "scared"). Participants responded based on how they have felt in the past month using a Likert-scale ranging from 1 (not at all) to 5 (extremely). The internal consistency reliability estimate in the present sample was .86 for positive affect and .88 for negative affect. To simplify the discussion in this paper, we herein use the terms pleasant and unpleasant affect to describe the synonymous terms positive and negative affect, respectively (Watson et al., 1988).

The final indicator of subjective well-being was measured using the Satisfaction with Life Scale (SWLS; Diener et al., 1985). The SWLS is a five-item measure that examines a person's perception of their overall satisfaction with life (e.g., "In most ways my life is close to ideal"). Participants rated their agreement with each item using a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The internal reliability estimate was calculated as .88. Because the PANAS positive, PANAS negative, and SWLS were not intended to be combined into one latent variable, we examine each measure as a separate indicator of subjective well-being in the structural model.

Relationship Quality

The Measure of Perceived Relationship Quality Components (PRQC) Inventory (Fletcher et al., 2000) is an 18-item measure that accesses perceived relationship quality. The PRQC consists of six subscales: satisfaction, trust, intimacy, passion, love, and commitment. Participants rated their partner and relationship (e.g. "How happy are you with your relationship?," "How connected are you to your partner?") using a Likert scale ranging from 1

(not at all) to 7 (extremely). The internal consistency reliability coefficients for the subscales in this sample ranged from .77 to .94. The internal consistency reliability coefficient for the overall scale was .89.

Procedure

Upon receiving ethics approval, we posted recruitment messages and posters to several venues, including social media, Reddit, a university listserv, and around a physical university campus. Participants completed an online survey that was hosted by REDCap, a secure web-based application. No identifying information was collected to protect participants' confidentiality and anonymity, thereby encouraging honest responses to this sensitive topic (Schroder et al., 2003). We instructed participants to choose one partner they had sexted in the last three months and consider this particular relationship and partner while responding to the survey questions. Upon completion of the survey, participants had the option to select from one of two organizations listed promoting positive sexual and mental health where the researchers donated $1.

We imposed four criteria to be included in the analyses (Drouin et al., 2013). First, we included people who sent sexts instead of receiving or third-party forwarding because it involves an active component. Second, we required sexts of visual content like images and videos because they contain a higher element of risk than text messages. Third, participants must have sexted their romantic partner within the last three months to enhance memory recall and ensure that these sexting experiences be closely related to current perceptions of subjective well-being and relationship quality. Lastly, we restricted the age to 18 to 25 to focus on emerging adults, because sexting is highly reported among this age group, sometimes with the highest frequency than in other ages (e.g., Samimi & Alderson, 2014). Although the study was open to participants

in casual, cheating, and committed relationships, we narrowed in on committed relationships during the analyses.

Data Analysis

We conducted our analyses in three steps. First, we analyzed the distribution of the data to assess for normality and calculated the Cronbach alpha coefficients and zero-order correlations for the variables. Second, we examined the measurement models using Confirmatory Factor Analysis (CFA) and made post-hoc modifications consistent with theory. Lastly, we used SEM to test the predicted model. We expected that autonomous motivations for sexting would positively predict subjective well-being indicators, pleasant affect and life satisfaction, and negatively predict unpleasant affect, whereas controlled motivations for sexting would negatively predict pleasant affect and life satisfaction and positively predict unpleasant affect. We also anticipated that the quality of motivation would predict relationship quality, with autonomous motivation showing positive associations and controlled motivation showing negative associations. Maximum likelihood estimations were calculated using Analysis of Moment Structures (AMOS 23.0). The criteria used to evaluate acceptable model fit were Comparison of Fit Index (CFI) ≥ 0.90 (Kline, 2016; McDonald & Ho, 2002) and Root Mean Square Error of Approximation (RMSEA) < 0.06 (Hu & Bentler, 1999; McDonald & Ho, 2002).

<div align="center">

Results

</div>

Descriptive Statistics and Correlations

The variables met normality requirements based on the current sample size (Kim, 2013) except for the PRQC, which demonstrated a negative skew and positive kurtosis. However, we anticipated non-normal data for relationship quality, given that we instructed participants to base their responses on sexting with their partner. Those in a current committed relationship who

participated in the study likely experience average higher levels of relationship quality than

participants in casual or cheating relationships, which has been demonstrated in previous studies

(e.g., Drouin et al., 2017). Table 1 depicts the descriptive statistics, Pearson correlation

coefficients, and internal consistency reliability estimates (i.e., Cronbach alpha) for all variables

calculated. Several findings were consistent with our predictions. For example, autonomous

motivations for sexting were positively related to pleasant affect and satisfaction with life, and

controlled motivations for sexting was positively correlated with unpleasant affect and

negatively correlated with relationship quality. Also, the mean level of autonomous motivations

for sexting was much greater than controlled motivations. There were a few unexpected

correlations. For example, autonomous motivations for sexting were positively correlated with

controlled motivations and unpleasant affect. Moreover, we anticipated that pleasant affect and

unpleasant affect would have a significant inverse relationship. However, this relationship was

not significant.

Measurement Model

We conducted a CFA. We tested autonomous motivation as a second-order factor

comprised of three independent first-order factors representing intrinsic, integrated, and

identified motivation. Controlled motivation was also a second-order factor comprised of two

independent first-order factors representing introjected and external motivation. Relationship

quality was a second-order factor comprised of six independent first-order factors representing

satisfaction, trust, intimacy, passion, love, and commitment. The remaining three factors used to

measure subjective well-being were first-order factors: pleasant affect (10 items), negative affect

(10 items), satisfaction with life (5 items). Our model had 60 manifest items. The measurement

model demonstrated a poor fit of the data ($\chi^2 = 3247.24$, $df = 1864$, $p < 0.01$, CFI = .85, RMSEA

= .05). In our post-hoc analysis, we eliminated three items from the SexMS ("because sexting is

a normal and important aspect of human development," "because I think it's important to learn to

know my body better," "because I should reciprocate the sext my partner sends me,") and the

latent variable passion (PRQC) that cross-loaded on other variables. We also removed "hostile"

and "alert" (PANAS) and "how intimate is your relationship?" (PRQC), items with low

correlation in comparison to other items under the same factor. We added four error terms

between PANAS items that were closely related ("ashamed" and "guilty," "scared" and "afraid,"

"upset" and "irritable," and PRQC items ("I feel close with this person" and "I love this

person"). After these modifications, the measurement model demonstrated an acceptable fit of

the data (χ^2= 2107.54, df = 1348, p < 0.01, CFI = .91; RMSEA = .05). The items satisfactorily

predicted the latent variables at both the first and second-order, with standardized estimates

ranging from .41 to .94.

Structural Equation Modelling

SEM was used to test our hypothesized model. All maximum likelihood estimates were

computed using AMOS 23.0. Based on significant correlational data, we controlled for gender on

external regulation (r = -.26, p < 0.01) and relationship length on intimacy (r = .12, p < 0.01).

Our model was fully recursive with all variables early on in the model predicting later variables.

The final model demonstrated an acceptable fit (χ^2= 2316.88, df = 1462; CFI = .90; RMSEA =

.05). The structural model and standardized coefficients are outlined in Figure 3. As

hypothesized, autonomous motivations for sexting positively predicted pleasant affect (β = .41, p

< 0.001) and relationship quality (β = .17, p < 0.05). Unexpectedly, autonomous motivations for

sexting positively predicted unpleasant affect (β = .16, p < 0.05). There was no significant

relationship between autonomous motivations for sexting and satisfaction with life. Also, as

anticipated, controlled motivations for sexting positively predicted unpleasant affect ($\beta = .46, p < 0.01$), and negatively predicted pleasant affect ($\beta = -.65, p < 0.01$), satisfaction with life ($\beta = -.80, p < 0.01$), and relationship quality ($\beta = -.22, p < 0.05$).

Discussion

The purpose of this study was to examine the relationship between motivations for sexting, subjective well-being, and relationship quality among emerging adults in committed relationships guided by Self-determination Theory. This study contextualizes sexting experiences by investigating the association between the quality of motivation for sexting on three indicators of subjective well-being and relationship quality among emerging adults in committed relationships. We will focus on four particularly relevant findings. First, participants reported higher levels of autonomous motivations for sexting as opposed to controlled motivations for sexting, but these two motivations were correlated. Second, autonomous motivations for sexting predicted pleasant and unpleasant affect. Third, controlled motivations for sexting were harmful to all indicators of subjective well-being. Fourth, the extent of self-determined sexting motivation impacted relationship quality. Lastly, we turn our attention to implications and recommendations for helping professionals and educators working with emerging adults and discuss limitations and directions for future research.

Sexting More for Autonomous Reasons, but Still Also for Controlled Reasons

This is the first study to differentiate between autonomous and controlled motivations for sexting. Examining the mean levels of the quality of motivation revealed that participants were more than twice as likely to report autonomous motivations for sexting than controlled motivations. Given the benefits to self-determination and the detriments to a lack thereof outlined by SDT and echoed in most of our estimates, learning that participants largely sext from

a place of self-determination is encouraging. However, participants still reported controlled

motivations for sexting. Notably, autonomous and controlled motivations for sexting were

positively correlated. This result demonstrates that motivations to sext are not mutually exclusive

but can be multifaceted. Someone who sexts for the sheer enjoyment in what they see as a

regular part of their sexuality can also sext because they do not want to encounter conflict with

their partner who may be wanting to receive a sext. Although SDT discusses distinct regulatory

styles of motivation on a continuum, our results are a reminder that motivations can be complex,

especially in committed romantic relationships where there is another person and relationship as

a whole that must often be considered.

This association may be represented in SDT, which describes that people can either

integrate external pressures into the self and thereby act in a way that is consistent with their

values, or be introjected and controlled by them (Ryan & Deci, 2017). Thus, autonomy is not

about a lack of external influences but about the extent to which they are integrated by the

individual (Ryan & Deci, 2017). For example, someone experiencing the influence of a partner

asking for a sext may unenthusiastically comply thereby sexting from a place of controlled

motivation. Contrarily, they may happily sext to please their partner because doing so fits their

idea about what constitutes a good relationship, thereby acting from a place of internalized

motivation. Our study, however, does not distinguish situational factors in controlled motivations

for sexting, such as whether coercion occurred, the level of want or desire to sext, and the extent

to which someone internalizes external influences to further explain these results is thus an

important avenue for future research.

Autonomous Motivation Increased Both Pleasant and Unpleasant Affect

We found that autonomous motivation for sexting was associated with increased pleasant affect. In other words, sexting for reasons such as pleasure, fulfillment, and openness to new experiences predicted positive feelings in one's life, such as excitement, enthusiasm, and determinedness. This finding is consistent with sexual motivation studies demonstrating that increased sexual autonomy among young adults leads to individual benefits like enhanced sexual satisfaction and positive feelings in sexual activity and overall life (Brunell & Webster, 2013; Gravel et al., 2018, Tóth-Király et al., 2019). In past sexting studies, participants have reported positive emotions and experiences related to sexting (Amundsen, 2019; Le, 2016), with excitement being the most frequently cited (Currin et al., 2020). However, our results are novel because they reveal that autonomous motivations for sexting, in particular, predicted pleasant affect. These results posit that the impact of self-determined sexual motivation on individual well-being may also be broadened to include sexting. This finding for only one type of motivated sexting may explain some of the conflicting results in the existing literature in which sexting would have been treated as originating from an omnibus motivation.

Interestingly, emerging adults who were autonomously motivated to sext were also more likely to experience increased unpleasant affect. While it may seem that someone who experiences increased pleasant emotions should experience decreased unpleasant emotions, like in the case of self-determined sex (Toth Kiraly, 2019), there are unique complexities related to sexting that may clarify these mixed feelings. For instance, young people consider risks such as having their sext shared without their consent and worrying about the potential consequences if this were to happen. To combat these concerns, young adults have disclosed taking precautions such as limiting explicitness and concealing identifying features, even in the context of a trusted relationship (Burkett, 2015; Renfrow & Rollo, 2015, Le, 2016). Others have expressed anxiety

about body-image and worries about how their partner would respond (Currin et al., 2020). In particular, young women have reported enjoying sexting while, at the same time, grappling with perceived sexual stigma (Le, 2016; Setty, 2019; Watson, 2018). This cognitive fatigue may manifest as unpleasant feelings like nervousness, distress, and guilt. Certainly, even young people sexting in committed relationships who have reported mostly positive experiences with sexting have also expressed feelings of regret, worry, discomfort, and trauma experiences (Drouin et al., 2017). It is important to note that the magnitude of the association with unpleasant affect was 2.5 times smaller than with pleasant affect, implying that the autonomous motivation is considerably more associated with pleasant than unpleasant affect. Taken together, the nature and risks involved in sexting itself may elicit unpleasant emotions regardless of how good the sexting experience or relationship is.

Lastly, we did not find support that autonomous motivation was related to satisfaction with life. Participants may have experienced sexting as a fun and normal activity within the context of their committed relationship, but it neither enhanced nor hindered their overall satisfaction with life.

Controlled Motivations for Sexting is Bad for Subjective Well-Being

Although autonomous motivation for sexting only predicted pleasant affect, the impact of controlled motivation was unanimous: sexting for reasons such as proving sex appeal or avoiding criticism was related to poorer outcomes on all indicators of subjective well-being. Namely, people that sexted for controlled reasons were unhappier compared to those that sexted for autonomous reasons. Similarly, past research has demonstrated that controlled motivations for sex negatively impacted well-being outcomes such as experiencing fewer positive emotions, more negative emotions, depression and anxiety, and lower self-esteem and life satisfaction

(Toth Kiraly, 2019, Vrangalova, 2015). Moreover, unlike autonomous motivation, the impact of controlled motivations was extended to life satisfaction, suggesting a broader negative association for controlled motivations for sexting. Indeed, existing literature on sexual compliance, which represents an externally regulated motivation among young adults in committed relationships, is related to poorer outcomes such as physiological stress (Hartmann & Crockett, 2016), emotional discomfort (O'Sullivan & Allgeier, 1998), and less satisfaction (Kats & Tirone, 2009). Our results may be detecting a similar negative impact on subjective well-being for sexting compliance or other controlled motivations for sexting.

Quality of Motivation for Sexting Matters for Relationship Quality

Although it was a small effect, we found that autonomous motivations for sexting was positively associated with relationship quality operationalized in terms of satisfaction, trust, intimacy, love, and commitment, whereas, controlled motivations for sexting was negatively associated. When participants engaged in sexting for reasons that reflected their individual beliefs and values, there was a favourable translation to their perception of the general partnership. Our findings are consistent with the sexual motivation literature, outlining that participants who engaged in contextual activities like sexual activity out of their own volition experienced enhanced relationship outcomes (Brunell & Webster, 2013; Gaine & La Guardia, 2009; Wood et al., 2018). Our findings also underline research by Stasko (2015) who demonstrated that committed partners experienced higher relationship satisfaction when they both wanted to engage in sexting. However, Stasko also found that participants who reported a higher frequency of sexting motives like self-affirmation, partner approval, and intimacy and engaged in unwanted but consensual sexting experienced decreased relationship satisfaction. Our results offer an alternative perspective in that the discrete motives listed by Stasko may all

represent forms of controlled motivations for sexting, which we, too, found was negatively associated with relationship quality. Evidence of insecurities or a lack of needs associated with controlled motivations is found in research depicting that individuals with anxious-attachment are more likely to sext to gain reassurance from a partner (Weisskirch & Delevi, 2011), to accept sexting expectations in relationships (Brenick et al., 2020), and to engage in unwanted sexting to avoid an argument (Drouin & Tobin, 2014). Because we used correlational data, we cannot make causal or directional claims. Thus, decreased relationship quality may already exist for participants who experience insecurities or dissatisfaction with the relationship, leading to controlled motivations for sexting.

Altogether, given its ease and normality, taking a sexy-selfie and texting a partner could seem like a quick and easy boost for self-esteem and partner gratification. However, when lacking self-determination, sexting may not only fail to enhance relationship quality for the sender, but impair it. The harmful impact of controlled motivations for sexting is an important outcome given the frequency in which young adults report reasons for sexting that are consistent with controlled motivations (Bianchi et al., 2019; Drouin & Tobin, 2014).

Implications & Recommendations

The adverse outcomes of sexting have dominated research in recent years. Our findings that autonomous motivations for sexting positively predicted pleasant affect and relationship quality is exciting because it adds to a growing body of literature contending that there is a space where sexting can be beneficial to those who participate (Currin et al., 2020; Hudson & Marshall, 2017; Parker et al., 2013; Stasko, 2015). As such, mental health counsellors, educators, and other practitioners working with emerging adults that sext should acknowledge potential benefits. Recognizing that autonomous motivations for sexting is related to experiencing more

pleasant feelings and higher quality relationships may prevent practitioners from displaying

condemning reactions that hinder positive sexual expression or exacerbate shame, which young

people, often young women, experience. Indeed, young people have expressed feeling like

professionals such as teachers and physicians are ill-equipped to lead conversations related to sex

(Fuzzel et al., 2016; Pound et al., 2016) – nevermind sexting. Additionally, sexual problems are

one of the most commonly cited issues but least disclosed to therapists due to shame among

people that are depressed (Hook & Andrews, 2005). It is therefore crucial for practitioners to

cultivate a space for open, non-judgmental conversations. Professionals can also help emerging

adults understand the benefits of autonomous motivations for sexting, and at the same time,

address and normalize negative feelings related to sexting as a responsible safety precaution.

Additionally, relationship counsellors may discuss how autonomous motivations for sexting can

be an activity for couples seeking new ways to connect. As sex is often the goal of sexting,

introducing sexting as a precursor, if both partners are interested, can be a less intimidating step

in building or enhancing sexual intimacy among emerging adult couples.

Likewise, practitioners need to be aware of the negative impact of controlled motivations

for sexting. Our study adds to existing research demonstrating that sexual motivation, or sexting

motivation in our case, at the contextual level of romantic relationships can also impact

individuals at a global well-being level (Brunell & Webster, 2013; Gravel et al., 2016; 2018).

The power of sending sexually explicit images and videos to a partner when the sender feels

compelled to do so is pronounced. Even though we did not examine outcomes at a closer level to

sexting, such as sexual satisfaction, SDT contends that these relationships would be even

stronger (Vallerand, 1997). Thus, the magnitude that controlled motivations for sexting on the

sender's subjective well-being should not be taken lightly. Mental health professionals working

with individuals who engage in controlled motivations for sexting can help them gain insight into their goals for sexting and how it may relate to unmet needs. These young people could benefit from learning how lack of self-determination contributes to decreased subjective well-being instead of bolstering it and exploring healthier avenues for achieving self-esteem and relationship maintenance that do not involve sexting out of external pressure.

Moreover, given that people in romantic relationships have perceived sexting as consensual despite the presence of coercion (Cornelius et al., 2020), practitioners can provide education on the crucial concepts of consent and coercion and how it applies even within a committed relationship. Discussing these topics is vital as sexting coercion is related to other forms of intimate partner aggression (Cornelius et al., 2020; Drouin et al., 2015; Ross et al., 2019) and sometimes perceived as even more traumatic than sexual coercion (Drouin & Tobin, 2015). Furthermore, unlike engaging in unwanted sex in a relationship, unwanted sexting carries additional worries related to the possibility of having sexual content shared without consent (Drouin et al., 2015). Thus, recognizing the negative impact on subjective well-being, practitioners should be equipped to support young people who disclose these experiences. Given the relationship between low sexual assertiveness and sexual compliance (Darden et al., 2019) and sexual victimization (Livingston et al., 2007), participants may benefit from practicing assertiveness skills. For partners putting on pressure to sext, it is imperative to discuss how this behaviour negatively impacts their partner and the relationship and help them communicate their needs and wants respectfully.

Lastly, our study has important implications for research on sexting and SDT as a theory. By teasing out autonomous and controlled motivations for sexting, we could situate our outcomes in a meaningful way relative to different motivations. Our study suggests that sexting

is not necessarily good or bad, but it depends on participants' perceptions of their autonomy in the act. From a theoretical perspective, this means that SDT can be applied to complex interpersonal activities, such as sexting. However, researchers using SDT for interpersonal relationships may need to consider that motivations and integration processes may fall anywhere along the continuum of self-determination and possibly occur simultaneously. The self-determination continuum rests on the assumption that adjacent motivations should be strongly and positively correlated compared to distant subscales that should be negative or not correlated, however, these categories may not be as distinct as theory suggests (e.g., Cokley, 2000). Similar to Tóth-Király et al. (2019) who found a range of sexual motivation profiles in which people endorsed several motivations simultaneously, our results illustrate intricacies in sexting relationships where both autonomous and controlled motivations can co-exist. Future research examining self-determination in sexting should investigate the processes by which external contingencies become integrated to understand further the complexity related to self-determined motivations in sexting within committed relationships. Moreover, examining sexting at various hierarchical levels of motivation, such as causality orientations at the global level or day-to-day experiences at the situational level related to sexting and well-being, would provide more insight into the motivational dynamics of sexting.

Limitations and Future Directions

The results of this study need to be interpreted in light of the following three limitations. First, finding participants to fully and honestly answer sexting questions in the context of their current relationship requires anonymity and confidentiality. Accounting for these sensitivities during recruitment, we took measures like conducting surveys online, not collecting identifying information, and posting in online spaces such as Reddit threads related to sex. However, we

may have gathered more liberal responses by employing these recruitment strategies than in the case of other research. Overall, future research needs to continue to attend to recruitment strategies, particularly if the aim is to build a large sample generalizable to the public.

Second, we collected only a limited amount of information about participants' characteristics and their committed relationships, which may have affected motivations for sexting and its impact on outcomes. Specific participant characteristics may have influenced subjective well-being and relationship quality in addition to their motivations for sexting. For instance, participants who experienced anxious attachment or felt that their needs for intimacy were unmet may have already experienced decreased subjective well-being and relationship quality that could be further reduced by controlled motivations for sexting. Since we focused only on sexting motivations, future research may consider how factors like attachment and need satisfaction influence specific sexting motivations and outcomes. For relationships, some participants identified being in a long-distance partnership in the comments section of the survey. As studies recognize the uniqueness of sexting in long distance-relationships (Currin et al., 2020), future research may focus on the association between motivations for sexting and outcomes in long-distance relationships, and also casual or cheating relationships.

Third, although we take a step beyond previous sexual motivation studies by teasing out autonomous and controlled motivation, we did not distinguish sexting that occurred out of coercion. We did not measure coercion because we focused on overall controlled reasons for sexting in the relationship as opposed to individual scenarios. Nonetheless, past research has illustrated that when coercion is accounted for, participants are more likely to engage in sexual compliance (Kats & Tirone, 2010; Willis et al., 2020) and experience higher depression, anxiety, stress, trauma, sexual problems, attachment dysfunction, and lower self-esteem (Drouin et al.,

2015; Klettke et al., 2019; Ross et al., 2019). Despite not knowing the frequency, some participants who reported controlled motivations for sexting may have engaged as a result of coercion, and these experiences may be especially damaging for outcomes. In the context of sexting where controlled motivations can range from unenthusiastically sending an image to explicit and repeated coercion, future research should attend closely to the specific nature of controlled motivations. As previous researchers have pointed out, considering the context, such as whether the experience was wanted (Van Ouytsel et al., 2020) and getting at nuanced accounts of sexual compliance through qualitative inquiry (Drouin & Tobin, 2014) is essential in understanding well-being outcomes.

Conclusion

This study revealed clear advantages in applying SDT to sexting in order to distinguish adaptive from maladaptive outcomes among emerging adults in committed relationships. Whereas autonomous motivations for sexting enhanced pleasant affect and relationship quality, controlled motivations predicted poorer outcomes on all indicators of subjective well-being and relationship quality. These results add to a growing knowledge base on the benefits and consequences of sexting by specifying the importance of accounting for self-determined motivation. We also found that motivations for sexting were related, reminding researchers and practitioners that sexting is a complex act that requires increased understanding. These results help inform counsellors, educators, and other professionals working with emerging adults that engage in sexting. As sexting is a commonplace activity among this population that will likely only be more pervasive as technology advances, we must learn about these motivations to maximize benefits and minimize risks of sexting.

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Table 1

Correlations, internal consistency reliability estimates, and descriptive statistics for the

variables in the analysis.

Variable	1	2	3	4	5	6
1. Autonomous Motivation						
2. Controlled Motivation	$.36^{**}$					
3. Pleasant Affect	$.23^{**}$	-.07				
4. Unpleasant Affect	$.15^{*}$	$.17^{**}$	-.09			
5. Satisfaction with Life	-.003	-.11	$.47^{**}$	$-.32^{**}$		
6. Relationship Quality	$.14^{*}$	$-.13^{*}$	$.20^{**}$	$-.14^{*}$	.11	
Cronbach's Alpha	.87	.78	.86	.88	.86	.89
Mean	52.78	21.67	34.66	25.28	23.93	38.82
Standard Deviation	12.38	8.54	7.01	8.34	5.93	3.81

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

Figure 1

Proposed Model
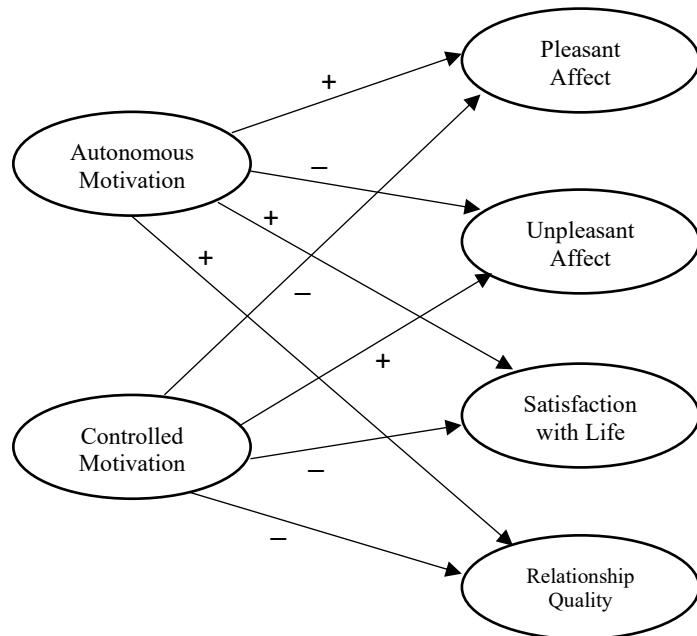
Figure 2

Participant Flow
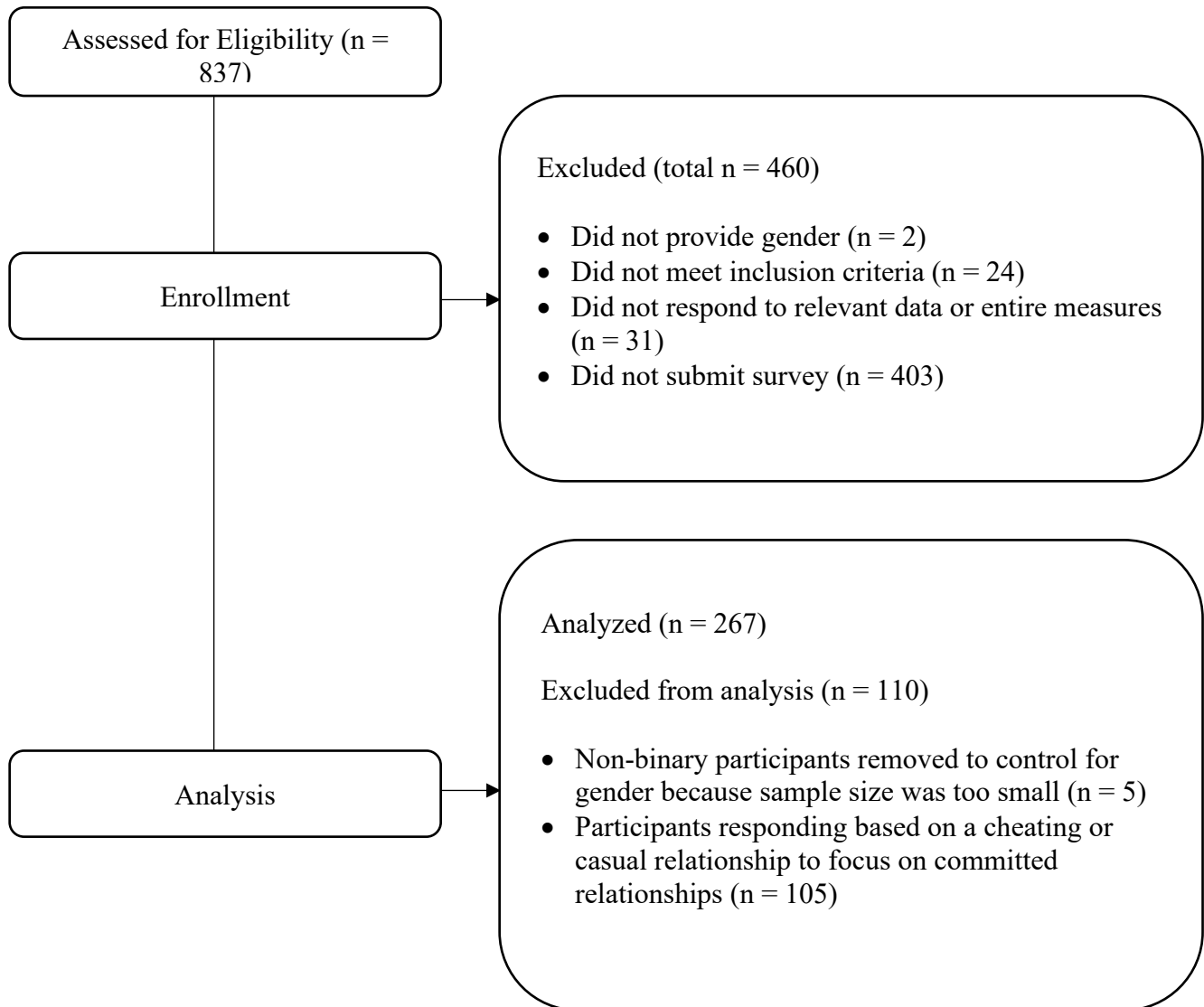
Figure 3

Results of the Structural Equation Model
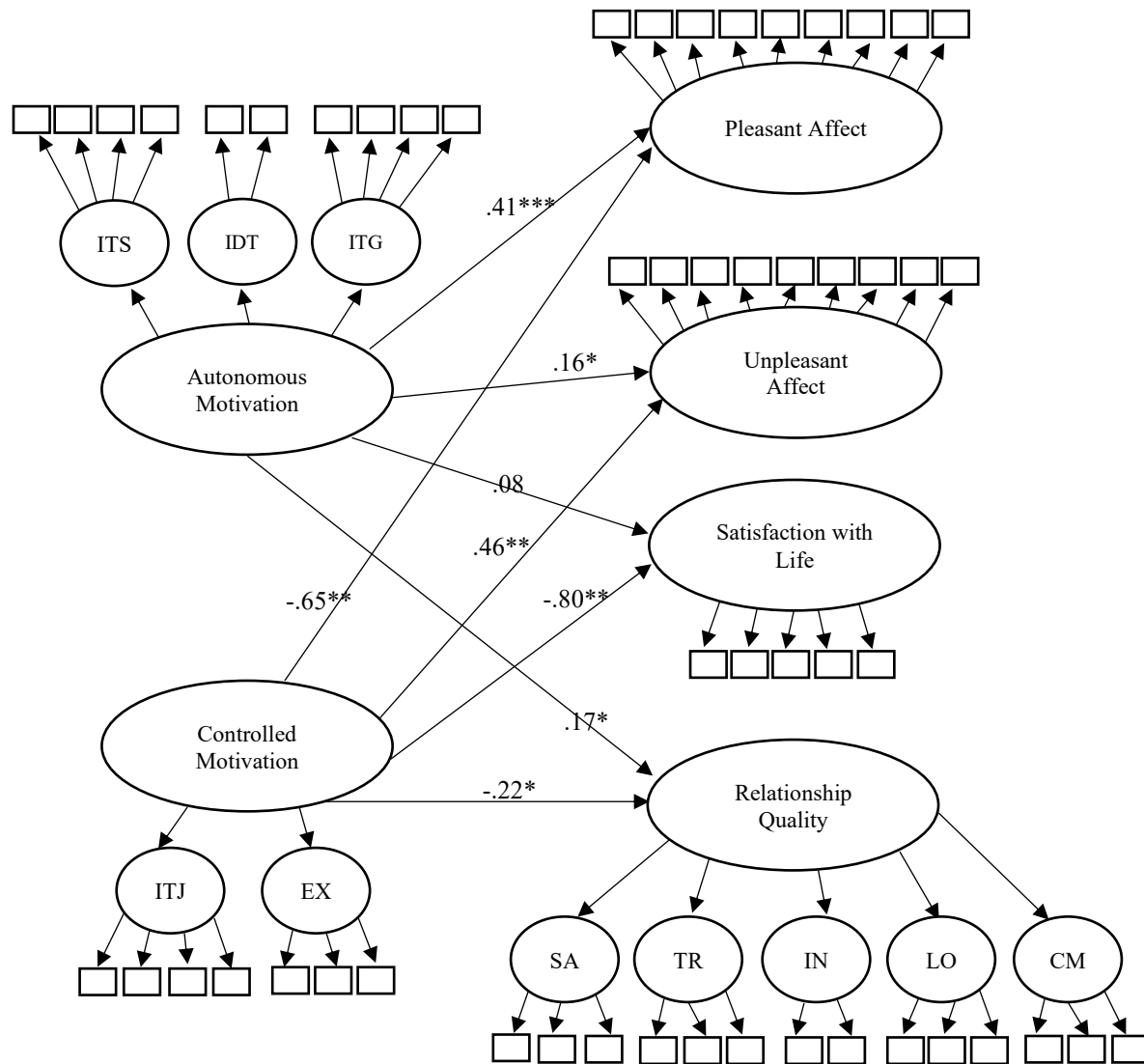
Standardized estimates are shown. * paths are significant at *p* < 0.05, ** paths are significant at *p* < 0.01, and *** paths are significant at <0.001. Control variables and covariances are not shown for simplicity. ITS = Intrinsic, IDT = Identified, ITG = Integrated, ITJ = Introjected, EX = External, SA = Satisfaction, TR = Trust, IM = IN = Intimacy, LO = Love, and CM = Commitment.

CHAPTER THREE: GENERAL DISCUSSION

The overall purpose of this research was to understand how the quality of motivations for electronically sending sexually explicit images and videos to a committed partner impacts individual and relationship well-being. In this general discussion, I extrapolate the study's findings to discuss the implications for counselling psychology. Next, I reflect on the methodological challenges I encountered and suggest directions for future research. Finally, I elaborate on my future research ideas that may deepen our understanding of how sexting impacts young people. In doing so, I draw not only on the results of my dissertation but complementary data collected from the participants.

Implications for Counselling Psychology

Counselling psychologists have three primary roles: remedial, preventive, and educative-developmental (Jordaan et al., 1968). The results from this study are discussed in terms of these aspects.

Remedial

In the remedial role, counselling psychologists help clients remedy their problems (Jordaan et al., 1968), such as providing individual, couples, or group therapy. As the results of this study demonstrate, controlled motivations for sexting are harmful to all indicators of subjective well-being and relationship quality. Despite potentially trying to improve their individual and relationship well-being, these young people may be worsening it by sexting for reasons not integrated with their sense of self. To concretize an example from the open-ended responses at the end of the survey that were not part of my dissertation analyses, one participant in a casual sexting relationship reported that by completing the survey they came to recognize how unhealthy their relationship was and that they needed to end the relationship. This person

also suggested that we (i.e., the researchers) create a non-research version of our sexting

questions to help people reflect on the role of sexting in relationships. Moreover, a few

participants commented that they had experiences with coercive and secondary sexting that

resulted in feelings such as shame and anxiety. Combined with our main results related to

controlled motivations for sexting, these qualitative comments solidify that emerging adults do

indeed experience issues related to sexting and their relationship, and some have even expressed

interest in educational resources from psychologists.

Consistent with remedial efforts, counselling psychologists who potentially see clients

that mirror the issues presented by some of our participants could help explore their needs,

motivations, and perspectives related to sexting in their relationship and how that may contribute

to their feelings of dissatisfaction with themselves and their partner. Gaining insight into their

motivations for sexting and seeing how controlled motivations, in particular, may contribute to

poorer outcomes may be a first step to alleviating the problem and improving well-being.

Beyond remediation efforts, it is essential to focus on prevention and development, which, when

satisfied, means that remediation may not even be as necessary (Gelso et al., 2014).

Preventive

Jordaan et al. (1968) describe that in the preventive role, counselling psychologists aim to

"anticipate, circumvent, and, if possible, forestall difficulties that may arise in the future" (p. 1).

The results of this study elicit a call to action to prevent controlled motivations for sexting. Some

prevention messages suggest abstaining from sexting as a solution to avoiding issues associated

with the activity. However, the rates of sexting among young people despite awareness of risks

(Dir & Cyders, 2015; Lim et al., 2016; Van Ouytsel et al., 2017) and lack of evidence for sex-

abstinence messaging among youth (e.g., Young & Penhollow, 2006), suggest that this approach

may not be effective. Another option is to take a safe sexting approach, which acknowledges young people's sexual autonomy while aiming to prevent issues by equipping them with information on minimizing risks (e.g., Patchin & Hinduja, 2020). My dissertation results showed that non-self-determined sexting threatens subjective well-being and relationship quality suggesting this would be a good inclusion to prevention messages. Counselling psychologists can engage in prevention by raising awareness and providing education on the topic. Modes of delivery could consist of speaking at high school sexual health classes, facilitating healthy relationship groups for post-secondary students, and using this study's results to inform counselling work with clients engaged in sexting. Considering the participant's suggestion to transform this survey into an educational resource, creating something informative and accessible like an online infographic to circulate at classes, workshops, groups, and clinics could help emerging adults reflect on current sexting practices and prevent potential issues.

Educative-developmental

Lastly, counselling psychologists go beyond prevention to "help individuals to plan, obtain and derive maximum benefits from the kinds of experiences which will enable them to discover and develop their potentialities" (Jordaan et al., 1968, p. 1). Although the preventive and educative-developmental roles are similar, the latter emphasizes enhancement (Gelso et al., 2014). This study revealed that self-determined motivations for sexting were related to feeling more positive emotions and higher-quality relationships. Enacting the educative-developmental role could look like supporting a client who enjoys and benefits from self-determined sexting, as a relational activity in couples counselling, and researching other potential benefits of sexting for self-determined reasons.

Research Challenges

Next, I reflect upon two research challenges while conducting this study: recruiting eligible participants and having participants complete the entire survey, and unexpected model revisions resulting from recruitment challenges.

Recruitment and Full Participation

Sensitive topics can have a form of intrusiveness on participants because they may ask participants for information past the bounds of what they are comfortable sharing. Additionally participants balance the threat of disclosure to others and the sanctions that may arise as a result, with pressure to respond in socially desirable ways (Touranganeau et al., 2000). Thus, research on sensitive topics may pose threats to recruitment and validity of results. Cognizant that sex-related research is a sensitive topic that requires thoughtful recruitment strategies, I took steps like recruiting and administering the survey online, not collecting identifying information, stressing the importance of confidentiality in the information letter, and ordering the questions so that they increase as opposed to decrease in sensitivity (Schroder et al., 2003; Touranganeau et al., 2000; Touranganeau & Yan, 2007). To my surprise, 837 people consented to participate in my study, which was much more than I expected. However, of this group, 403 did not submit the survey indicating a lack of full participation. How could nearly half of the initial participants be compelled enough to click consent to participate but not follow through to submit the survey?

Consistent with the notion that sex is a sensitive topic, it is possible that the questions indeed felt intrusive and posed a threat if disclosed, possibly leading people to change their minds during the survey. Alternatively, participants may have felt uncomfortable passing judgement towards their relationship, especially if the relationship was not going well. Like the participant who indicated that the survey helped them realize they need to stop seeing their

sexting partner, there may have been other participants who were unhappy with their

relationships but decided not to submit their responses.

Another explanation for the lack of full participation may be that people realized that they

did not meet the criteria until after consenting to participate in the survey. For instance,

participants who sext very casually with someone they do not consider a casual, committed, or

cheating partner (e.g., friend, acquaintance, an online person they have never met) may have

realized mid-way through the survey that sexting questions pertained to a romantic partner.

Indeed, one participant stated in the comments section that they mostly sext their friends and that

there was no space to respond based on that type of relationship. Unlike this person who

submitted their responses despite not sexting a casual, committed, or cheated partner like the

instructions outlined, other people may have decided not to submit their responses. Given that

some respondents submitted their survey when they were not in the eligible age range further

indicates that eligibility criteria and information about the study can be confusing or overlooked.

Considering both these possibilities as explanations for the high number of uncompleted

surveys, I suggest attending to these challenges in future sexting studies. One recommendation is

to set participants up to respond to sensitive questions by providing forgiving instructions that

normalize the sensitive behaviour in question (Touranganeau & Yan, 2007). Including a

statement like "Sexting is a common activity among emerging adults " before asking participants'

about their sexting experiences can help normalize the behaviour and encourage responding.

Another suggestion that combats potential confusion about eligibility requirements is to

limit exclusion criteria, if possible. In trying to follow past researchers' recommendations who

stressed the importance of distinguishing between types of sexting, I may have been too

restrictive by limiting the sexting definition to images and videos and the types of relationships.

Given that some people submitted the study despite not being eligible, it is evident that participants do not always carefully read or understand eligibility requirements before providing consent. Therefore, limiting the restrictions and instructions may make it more transparent for participants who are more likely to participate fully.

The Evolution of a Research Project

One of the things I have learned during my graduate training is that research changes more along the way than manuscripts might suggest. Initially, I had planned to test a model that included a latent variable for basic psychological needs (competence, relatedness, autonomy) in the relationship as a predictor of autonomous and controlled motivations for sexting, and all the outcomes of subjective well-being and relationship quality. Before reading about Vallerand's (1997) model, I recognized that relationship needs and relationship quality were variables that were more closely related at the relationship level and an association that has been documented in the literature, whereas sexting was a niche activity within the relationship. However, discussing needs satisfaction related to sexting specifically seemed too narrow to be a plausible variable. In other words, I could see how people have basic psychological needs that can be satisfied or thwarted in their relationship, but I could not make a similar argument for sexting. Because I was mainly focused on motivations for sexting, I intentionally gathered data regarding basic psychological needs and relationship quality at the general relationship level, while assessing motivations in the narrower level of sexting. When I attempted to fit a model with both needs and motivations, psychological need satisfaction for the relationship as a whole overpowered the specific associations for sexting. After learning that SDT predicts variables in the same domain to indeed be more strongly related to one another (Vallerand, 1997), and

reflecting on the purpose of my dissertation to examine sexting, I decided to exclude the basic psychological needs variables from the model.

I recruited participants who sexted in casual, cheating, or committed relationships, with the intention to look for differences between sexting in committed, casual, and cheating relationships. Despite what would be considered a highly successful recruitment process, I only secured enough responses from those who sext with a committed partner to run SEM. As such, I chose to focus on committed relationships in order to meet the requirements for SEM. The SEM model largely showed beneficial outcomes for self-determined sexting and negative ones for controlled sexting, however, I realize that because the model was based only on committed relationships that are likely mostly good because the connections are current, these associations may be more easily detected. Future research should explore the connections between psychological needs, quality of motivation, and individual and relationship well-being, perhaps through qualitative means. Gathering interview data may provide a clearer understanding of how these variables relate to one another, given that past research on sexual motivation has found support for psychological needs predicting quality of motivation and vice versa. Taking a qualitative approach may be an excellent option to decipher how needs and quality of motivation are related or even intertwined in various types of relationships.

Directions for Future Research

Sexting research in its infancy often stemmed from a deviance framework where sexting was depicted as risky, and the potential benefits of sexting were rarely considered (Döring, 2014). Like other helping professionals working with young people, counselling psychologists are rightly concerned, especially when the state of well-being engaging in relatively novel activities like sexting may not be well-understood. The emphasis on problems characteristic of

the remedial role means that research on difficulties will always occur. So, future research should consider the benefits of examining the often-overlooked areas of prevention and development, which can significantly inform practice with young people who sext and even young people who do not sext but could engage in the future.

Related to prevention, researchers can study topics such as predictors of secondary sexting. Certainly, some researchers have begun this research and found relationships between the unauthorized dissemination of sexts and factors like having received a disseminated sext and finding disseminated sexts to be funny (Clancy et al., 2019). Continuing to learn more about the perpetrators of secondary sexting can inform interventions to prevent these individuals from sharing sexts in the future and thus prevent consequences faced by the primary sender who may require remedial support. Building on this example, researchers can examine the effectiveness of prevention efforts of secondary sexting or other approaches like safe sexting. Asking young people about their perceptions and level of familiarity with these messages and how this content may or may not impact their attitudes and sexting practices can point practitioners, educators, and law enforcement officials in a direction that may consist of more effective prevention content and strategies.

Future research should also explore the potential benefits of sexting in greater depth that can be used to enhance well-being. Indeed, some researchers have taken a more balanced approach, sometimes adopting a sex-positive framework that acknowledges potential benefits in addition to risks related to sexting (Holmes et al., 2020; Hudson & Marshall, 2017; Oriza et al., 2020; Stasko & Gellar, 2015). There has been evidence for sexting benefitting relationship aspects like relationship and sexual satisfaction (Brodie et al., 2019; Galovan et al., 2018; Hudson & Marshall, 2017) however, only one published study (Parker et al., 2013) to which I am

aware has examined sexting as an intervention among couples. Less has been examined about possible individual benefits of sexting, however the results of this study suggest that exploring factors like positive emotions may be promising. Learning more about both individual and relationship benefits of sexting and its implementation as an enhancement tool would advance the field.

Lastly, future research should consider drawing from more theory to guide research questions and interpretations. Perhaps because sexting is a contemporary topic, describing data related to prevalence, predictors, and outcomes may seem enough to paint a picture of the phenomenon. Moreover, relating established theory to a contemporary topic means venturing into new terrains which like my study process suggests, can be messy. However, using theory to guide research allows for more sound interpretations that can be rooted back to the existing theoretical literature. Although SDT has not been applied to sexting, the results of this study suggest that even motivation in modern-day activities can be explained by a motivational framework that has since now, only been examined in other contexts. As connecting through electronic devices is likely only going to be more frequent going forward, employing theory in future research will allow researchers to make meaningful conclusions that illustrate a more accurate and comprehensive picture of sexting.

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Appendix

Relationship Questions

Which description BEST reflects the context/status of your sexting in the last 3 months?

I sext in a COMMITTED relationship: this would be a person you share an intimate relationship (e.g. serious partner/boyfriend/girlfriend/husband/wife)

I sext in a CASUAL relationship: this would be a person you have a casual fling or hook up with (e.g. romantic interest, dating app match)

I sext in a CHEATING relationship: this would be a person you have cheated with outside of your committed romantic (e.g. mister/mistress, the other person)

Approximately how long have you been in a committed/casual/cheating relationship with this person?

0 to 6 months
6 to 11 months
1 to 2 years
3 to 4 years
5+ year

Sexual Motivation Scale (SMS)

There are many reasons why people sext in relationships. Indicate to what extent each of the statements below corresponds to your motives for sexting with this person by marking the appropriate number.

1 = does not correspond at all
2
3
4 = corresponds moderately
5
6
7 = corresponds completely

Because sexting is fun
Because I enjoy sexting
For the pleasure I feel when my partner sexts me
Because sexting is exciting
Because sexting brings so much to my life
Because sexting is a key part of who I am
Because sexting is a meaningful part of my life
Because sexting fulfills an essential aspect of my life
Because sexting is a normal and important aspect of human development
Because I feel it's important to experiment sexually
Because I think it's important to learn to know my body better
Because I feel it's important to be open to new experiences
To prove to myself that I am sexually attractive
To show myself that I am sexually competent
To prove to myself that I am a good lover
To prove to myself that I have sex-appeal
To avoid conflicts with my partner
Because I don't want to be criticized by my partner
Because my partner wants me to
Because I should reciprocate the sext my partner sent me

Perceived Relationship Quality Component (PRQC)

Rate this person and relationship on each item using the following scale.

1 = not at all
2
3
4
5
6
7 = extremely

How satisfied are you in the relationship with this person you sext with?
How committed are you to this person you sext with?
How intimate are you with this person you sext with?
How much do you trust this person you sext with?
How passionate are you with this person you sext with?
How much do you love this person you sext with?
How content are you with in your relationship with this person you sext with?
How dedicated are you to this person you sext with?
How close are you with this person you sext with?
How much can you count on this person you sext with?
How lustful is your relationship with this person you sext with?
How much do you adore this person you sext with?
How happy are you in your relationship with this person you sext with?
How devoted are you to this person you sext with?
How connected are you to this person you sext with?
How dependable is this person you sext with?
How sexually intense is your relationship with this person you sext with?
How much do you cherish this person you sext with?

The Satisfaction with Life Scale (SWLS)

Below are statements about your life. Using the scale, indicate your agreement with each item.

1 = strongly disagree
2 = disagree
3 = slightly disagree
4 = neither agree nor disagree
5 = slightly agree
6 = agree
7 = strongly agree

In most ways my life is close to my ideal
The conditions of my life are excellent
I am satisfied with my life
So far I have gotten the important things I want in life
If I could live my life over, I would change almost nothing

The Positive and Negative Affect Schedule (PANAS)

This scale consists of a number of words that describe different feelings and emotions. Indicate the extent to which you have felt this way over the past month. Use the following scale to record your answers.

1 = very slightly or not at all
2 = a little
3 = moderately
4 = quite a bit
5 = extremely

Interested
Distressed
Excited
Upset
Strong
Guilty
Scared
Hostile
Enthusiastic
Proud
Irritable
Alert
Ashamed
Inspired
Nervous
Determined
Attentive
Jittery
Active
Afraid

Demographics

What is your age in years? _____

How do you currently identify your gender identity?

Man
Woman
Non binary
Prefer not to disclose
Prefer to self-describe

If you prefer to self-describe your gender identity, please specify: _____

How do you describe your sexual identity?

Heterosexual
Gay or lesbian
Bisexual
Asexual
Prefer not to disclose
Prefer to self-describe

If you prefer to self-describe your sexual identity, please specify: _____

Please describe your ethnic origin _____

What country do you currently live in? _____

If you have any comments regarding your perspectives or experience of sexting, you are welcome to let us know by typing in the space below

_____