

The Cognitive-Affective Model of Sexual Consent Communication

by

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Author's Declaration

This thesis consists of material all of which I authored or co-authored: see *Statement of Contributions* included in the thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Statement of Contributions

Jessica Edwards was the sole author of Study 2, Study 3, and the General Discussion, which were written under the supervision of Dr. Uzma Rehman and were not written for publication.

This thesis consists in part of one manuscript written for publication. Exceptions to sole authorship of material are as follows:

General Introduction and Study 1:

The General Introduction was originally written for submission with the Study 1 manuscript. Study 1 was conducted at the University of Waterloo by Jessica Edwards under the supervision of Dr. Uzma Rehman. Jessica Edwards contributed to the development of the research questions and hypotheses with the support of Dr. Uzma Rehman. Jessica Edwards was responsible for data collection, creating the data analytic plan, completing the data analyses, and drafting the full manuscript which was co-authored by Dr. Uzma Rehman and Dr. Elizabeth Nilsen. All co-authors contributed ideas, feedback, and revisions.

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Abstract

Sexual consent communication involves direct, unambiguous communication about willingness to participate in sexual encounters; promoting this form of communication is important to reducing sexual coercion and promoting the quality of sexual relationships. The present studies introduce and evaluate the Cognitive-Affective Model of Sexual Consent Communication, which is proposed to identify intrapersonal precursors (i.e., attachment insecurity) and mechanisms (i.e., perspective-taking, emotion dysregulation, experiential avoidance) that influence how adequately people communicate sexual consent. The model also indicates that these factors predict sexual consent *motivations*, an important precursor to the decision to enact affirmative consent behaviours.

In Study 1 ($N = 153$), I examined the associations between core constructs of the model for people in current sexual relationships, finding that attachment, perspective-taking skill, and emotion regulation skill are associated with consent motivations and consent communication behaviours in existing sexual relationships. Study 2 included the piloting of a novel, vignette-based measure of sexual consent communication behaviour (Study 2a; $N = 97$), and testing of the key mediational pathways in a sample of single adults with this measure (Study 2b; $N = 173$). Results indicated support for the cognitive pathway of the model, but did not support the role of experiential avoidance in predicting consent motivations/behaviour. Finally, Study 3 ($N = 212$) tested the effects of a brief psychoeducational perspective-taking intervention on participants' sexual consent motivations and behaviours. Outcome variables were assessed using the same vignette measure as Study 2, but participant responses were audio-recorded to extract more information about the emotional tone of consent communication. The intervention did not produce changes in consent communication behaviour relative to control, but sexual consent

motivations were higher following the intervention for the subset of participants who reported low attachment avoidance. Taken together, the results of these studies illustrate the importance of moving beyond skills instruction to incorporate psychological traits and skills in consent education. Furthermore, the current research sheds light on the potential benefits of reducing perceived emotional threat in consent communication while enhancing perceptions of consent as rewarding and beneficial.

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¹ In software engineering, “rubber ducking” refers to the practice of explaining a problem aloud, step by step, to another person or even an inanimate object (such as the eponymous rubber duck) in order to identify errors or gaps in reasoning.

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General Introduction

Sexual consent has been defined several ways; at its core, it reflects agreement to participate in sexual activity and is a legal requirement for sexual contact (that is, any sexual activity without sexual consent is sexual assault; Criminal Code of Canada, 1985, s. 273.1(1)). Whereas people have commonly communicated consent through not resisting a sexual initiation (Hickman & Muehlenhard, 1999), there is increasing recognition of the importance of treating consent as an *active communicative process* (Pineau, 1989). *Affirmative sexual consent communication*, or a clear, unambiguous, and voluntary agreement to engage in sexual activity (Craig & McKinley, 2015), is therefore increasingly being promoted through education and public health efforts, particularly at the postsecondary level (Shumlich & Fisher, 2019).

The shift toward affirmative sexual consent communication is important for several reasons. First, viewing consent simply as the lack of resistance places disproportionate responsibility on the victims of sexual assault, rather than perpetrators, and can therefore facilitate victim blaming (Abarbanel, 1986; Pineau, 1989); relatedly, many sexual assault victims experience a “freeze response” that prevents them from resisting even if they wish to (Schiewe, 2019). This means that the expectation to resist unwanted sexual contact is unrealistic and likely damaging to victims. In contrast, affirmative consent communication places more responsibility on both partners to ensure that the other person is truly willing to initiate or continue with sexual activity. Further, affirmative consent is increasingly being implemented within legal and administrative standards (Shumlich & Fisher, 2019).

Research on the adoption of affirmative consent suggests a shift in attitudes such that laypeople increasingly recognize the value of consent (e.g., Curtis & Burnett, 2017). However, behavioural change has not always followed these attitudinal shifts. Consent continues to be

practiced primarily through nonresistance (Jozkowski et al., 2013). This is true even when individuals report that they value or would even prefer more direct sexual consent communication in their sexual relationships. For example, Curtis and Burnett (2017) conducted interviews with student leaders (e.g., student government leaders, club leaders, athletes) to better understand conceptions of consent within student populations. Student leaders were recruited because they were more likely to have undergone training on affirmative consent than the average student, and would therefore presumably be able to provide insight on how this training compares to real-life sexual experiences among college students. Although the participants believed affirmative consent was important and expressed a desire to integrate it into their own relationships, they believed it to be an unrealistic expectation for students and did not practice it in their sexual interactions. Similarly, Shumlich and Fisher (2020) noted that participants saw affirmative consent as an ideal way to communicate willingness to participate in sex, but also as a practice that was incompatible with their current sexual relationships and/or expectations. My dissertation work aimed to understand some of the reasons behind this disconnect.

Aims of the Dissertation

The overarching goal of my dissertation was to develop and test a model of sexual consent communication that can be used to understand the factors that inhibit vs. facilitate sexual consent communication. In order to do so, I reviewed the available literature on sexual consent communication and other health behaviours and identified individual difference factors that appeared likely to play a key role in decisions around consent. Then, in a series of three studies, I empirically tested the proposed model and refined it based on the results. Here, I first describe the literature that guided the formation of the proposed model, then present the model and its key pathways.

The Information-Motivation-Behavioural Skills Model

Fisher and colleagues' (2003) Information-Motivation-Behavioural Skills model (IMB Model) provides a theoretical framework for understanding how people make decisions about engaging in health behaviours. In brief, the model suggests that when people have *sufficient information* about a health behaviour, are *motivated* to act (i.e., by perceiving that the activity has high benefits and low costs), and have the *required skills* to enact said behaviour, they are more likely to engage in that behaviour. This model has been applied to predict a variety of health risk behaviours, such as adherence to antiretroviral therapy in people with HIV (Dubov et al., 2018; Fisher et al., 2006; Prakot et al., 2024), effective management of premenstrual syndrome (Abay & Kaplan, 2021), and condom use in a variety of populations (e.g., Bryan et al., 2000; Robertson et al., 2006; Scott-Sheldon et al., 2010).

Shumlich and Fisher (2019) used the IMB Model to present a theoretical overview of factors that might inhibit or motivate affirmative consent communication. With regard to sexual consent *information*, Shumlich and Fisher suggested that sexual consent communication is more likely when the individual is aware of laws and regulations relating to consent and understands the behaviours that are required to unambiguously express or interpret consent. Sexual consent *motivation* is comprised of two primary categories: personal motivations (i.e., individual beliefs about the outcomes associated with affirmative consent, and the extent to which they wish to achieve those outcomes) and social motivations (i.e., beliefs about how others will perceive and react to affirmative consent behaviour). Sexual consent *behavioural skills* refer to an individual's ability to communicate sexual consent, assuming that sufficient information and motivation are present. A follow-up study by Shumlich and Fisher (2020) used quantitative measures and focus groups to better elucidate the information, motivational factors, and behavioural skills that are

relevant to consent. Their results suggested that perception of outcomes (i.e., personal and social motivations) was particularly influential toward individuals' willingness to practice sexual consent communication. Whereas some participants believed affirmative consent would disrupt the sexual experience or cause their partner to view them in a negative light, others also suggested that when consent is successfully integrated into a couple's sexual script, it can minimize communication difficulties and demonstrate respect for one's partner, among other perceived benefits.

The IMB Model is useful for thinking broadly about the types of factors that might influence sexual consent communication, and particularly for considering the motivational factors that individuals weigh when they decide to either avoid or engage in consent communication with partners. However, the IMB Model is primarily descriptive rather than explanatory: Although the model identifies specific factors that may be relevant to affirmative consent behaviour, additional work is required to understand when and how each of these factors influence the actual choice to engage in affirmative consent behaviour. For example, perceptions of peer pressure to avoid affirmative consent could be more relevant for adolescents than adults (e.g., Gardner & Steinberg, 2005) or may apply more to casual relationships than committed relationships. Additionally, the existing literature suggests that many different *types* of motivational factors exist that likely come from different sources (e.g., media messaging, relationship factors, social/cultural norms). Integrating the IMB Model with other theoretical perspectives allowed for the development a more nuanced framework to inform specific, concrete interventions for promoting affirmative consent.

Contributions of the Emotional Avoidance Literature

The theoretical writing of Metts and Cupach (1989) helps to explain why certain sexual consent motivations may inhibit effective consent communication. This work suggests that sexual communication, more broadly, may be avoided because people expect it to trigger uncomfortable feelings (e.g., embarrassment, shame, guilt, or anxiety). Generally speaking, avoidance of potentially upsetting or distressing experiences has been well-established as detrimental to individual well-being, and overcoming avoidance of painful situations and emotions is a core target of several psychotherapies (e.g., exposure therapy, Acceptance and Commitment Therapy, Emotion-Focused Therapy; Chawla & Ostafin, 2007). Further, emotional avoidance (i.e., avoidance of dealing with emotions themselves) has been associated with poorer psychological well-being and greater symptom severity for various psychiatric disorders (Forbes et al., 2020; Kahn & Garrison, 2009; Lind et al., 2014). Metts and Cupach (1989) also theorized that people may fear the impact of sexual communication on their relationship and on their partners. For instance, someone may fear that revealing a sexual incompatibility could cause relationship tension, rejection, or anger in one's partner. In contrast, indirect/passive communication can allow for face-saving and minimize the possibility of sexual rejection or conflict that might produce these negative emotions (Metts et al., 1992).

Extending this literature to an empirical context, Rehman et al. (2019) conducted investigations of the types of emotional threat that arise in sexual and nonsexual conflict discussions. They identified three primary types of threat: threats to self (e.g., believing the discussion will cause oneself to feel worthless, abnormal, or like a failure), threats to partner (e.g., believing that the discussion will cause one's partner to feel embarrassed, guilty, or incompetent), and threats to the relationship (e.g., believing the discussion will bring up past

relationship issues, reveal core differences between partners, or cause an argument). All three types of threats were associated with lower relationship and sexual satisfaction.

For my Masters' thesis, I conducted a preliminary exploration of the barriers and rewards that people perceive to consent communication (Edwards et al., 2022). In an open-ended online survey, participants ($N = 291$) shared their perceptions of the most challenging and rewarding aspects of consent communication. Though some challenges emerged relating to communication skill (e.g., not knowing how to interpret a partner's signals or resolve miscommunications), the most common barriers centered on avoiding unpleasant emotions such as guilt, shame, or fear. Participants wrote that broaching the topic of consent directly could cause themselves or their partners to experience such emotions, and could also contribute to negative relational experiences, such as revealing that partners are not compatible with one another or producing feelings of distrust between partners. By contrast, the most common rewards of consent communication included enhancing trust, security, and sexual quality in participants' relationships. The results of this study suggest that when it comes to consent, perceived challenges extend beyond merely the effectiveness of communication and also include the impacts of said communication on both individual emotions and the relational context.

The emotional avoidance literature provides additional insight into a few types of motivational factors that could be relevant to consent, building on the more general categorization offered by the IMB Model. A possible critique of this work is that it does not explain the types of people for whom emotional avoidance would be particularly salient. That is, what individual differences predict stronger perceptions of emotional threat (and therefore weaker motivation) related to affirmative consent? Conversely, what individual differences predict the perception of sexual consent as rewarding and valuable, thereby increasing

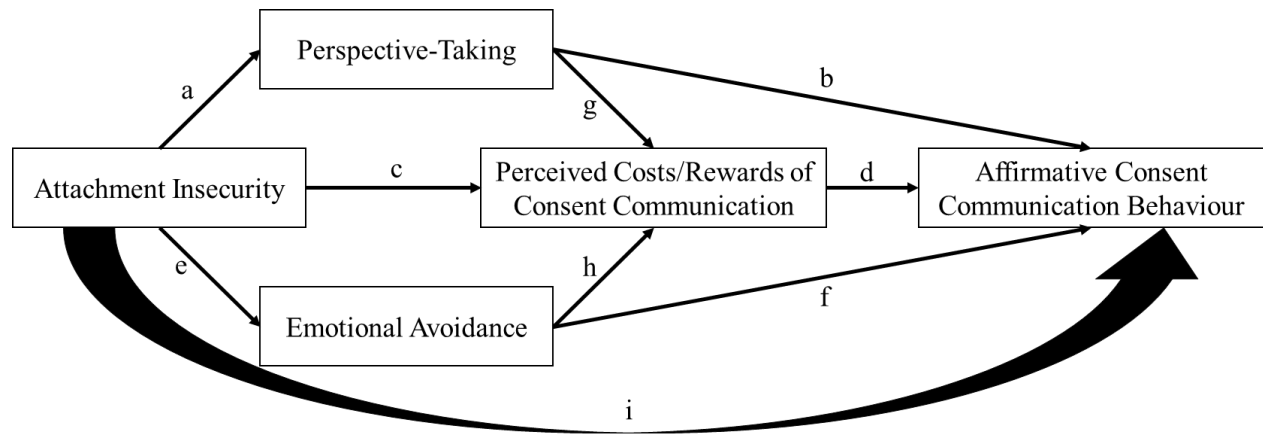
motivation to communicate sexual consent? Understanding who is most at-risk for avoiding effective consent communication is important as it will allow the design of sexual consent educations (e.g., in education and public health) which target the populations that are most in need of such intervention and that will address the most salient/influential concerns causing people to avoid practicing affirmative consent. Certain personality variables, such as attachment orientation, have been identified as risk factors for sexual coercion victimization, suggesting that it is important to understand the connection between these factors and sexual consent communication (Karantzas et al., 2016).

The Integrative Cognitive-Affective Model of Sexual Consent Communication

In my dissertation, I proposed an integrative model of sexual consent communication that is based on four areas of research, all of which have been separately used to study sexual consent and which provide unique contributions to understanding the complexities of consent communication: the IMB model, the emotional avoidance literature, the mentalization literature, and attachment theory. The proposed model, the *Integrative Cognitive-Affective Model of Sexual Consent Communication* (Figure 1), is described in detail in the next section and was used to determine: (a) why sexual consent communication is difficult; (b) for whom it is the most difficult; and (c) the processes that create sexual consent communication difficulties. The proposed dissertation studies tested both of the major pathways of this model, with an emphasis on testing cognitive factors that were hypothesized to influence sexual consent communication.

Figure 1

Proposed Integrative Cognitive-Affective Model of Sexual Consent Communication



First, I discuss the key constructs of the model, beginning with attachment insecurity. This is followed by a discussion of the two key pathways to sexual consent communication proposed within the model. Attachment refers to the expectations humans have about whether close others will be available and responsive to their needs (Mikulincer & Shaver, 2016). Attachment develops starting in infancy: When primary caregivers are responsive to an infant's needs, they experience attachment security (i.e., the belief that others will be available and responsive when they are threatened or distressed; Mikulincer & Shaver, 2016). According to attachment theory, children whose parents are inconsistently responsive grow up and experience difficulties forming intimate emotional bonds with others. These difficulties are often referred to as attachment insecurity, which consists of two primary dimensions: *attachment anxiety*, or persistent concern that others will abandon or reject oneself, and *attachment avoidance*, or difficulty trusting and relying on others for emotional intimacy and support (Brennan et al., 1998). As humans grow up and enter adulthood, their attachment style drives several core processes in romantic/sexual relationships, as the primary attachment figure for an adult is most

often their romantic partner (Fraley, 2019). Birnbaum (2016) explains that though the attachment and sexual motivational systems are separate, they can operate jointly: The biological drive to reproduce and the desire for affective bonding/intimacy are distinct motivations for sex, but sexual activity can fulfill both objectives.

Attachment insecurity has been studied in the context of sexual behaviours that are relevant to sexual consent. For instance, Gentzler and Kerns (2004) found that both avoidant and anxious attachment styles were related to more frequent engagement in unwanted-yet-consensual sex (that is, agreeing to a partner's request for sex despite not wanting to have sex in that moment). Research from Impett and Peplau (2002) sheds light on the reasons that insecurely-attached individuals might consent to sex that they do not want. The researchers examined women's responses to a hypothetical sexual scenario in which they were told to imagine their partner initiating sex when the participant themselves was not "in the mood" for sex. Anxiously and avoidantly attached women were both more likely than securely attached women to say that they would consent to sex even though it was unwanted, but their reasons for doing so varied. Anxiously attached women endorsed reasons such as worrying their partner would lose interest in them or fear that the relationship might end. Avoidantly attached women, on the other hand, cited reasons such as fulfilling relationship obligations (Impett & Peplau, 2002). Less is known about how attachment insecurity might relate to consent communication strategies and behaviours; however, attachment insecurity is known to predict inhibited sexual communication (Davis et al., 2006).

Mentalization is a construct related to attachment that may help to explain why attachment insecurities would influence sexual communication and sexual consent communication, more specifically. Mentalization refers, broadly, to the ability to understand

one's own and others' mental states, as well as how those mental states influence the behaviour of both self and others (Fonagy & Luyten, 2018). These abilities are theorized to develop in a similar context to early attachment relationships: In a secure attachment relationship, caregivers engage in affective mirroring and emotional co-regulation that helps infants to develop self-control and an understanding of others' mental states (Fonagy & Luyten, 2018). When these processes are consistently interrupted or missing, both attachment security and development of mentalization skills is impaired (Fonagy & Luyten, 2018). Mentalizing is related to several capacities that are relevant to sexual consent, such as authentic communication about one's own and other's actions, modifying behaviour based on the interpersonal context, the ability to take another's perspective, and the ability to self-regulate emotions (Fonagy & Luyten, 2018). Additionally, mentalizing capacity can be diminished during periods of high emotional arousal and/or depending on the interpersonal context (Fonagy & Luyten, 2018), both of which are relevant to sexual consent communication. My dissertation focused on perspective-taking as an indicator of mentalizing skill and emotional avoidance as a secondary predictor; as such, the proposed model in Figure 1 contains a cognitive pathway (based on perspective-taking) and an affective pathway (based on emotional avoidance) to affirmative consent motivations and behaviour. The proposed studies focused primarily on the cognitive pathway of the model.

Cognitive Pathway to Sexual Consent Communication

Perspective-taking refers to imagining how another person is thinking/feeling (Batson et al., 1997) and is often characterized as a component of empathy (e.g., Batson et al., 1997; Lamm et al., 2007; Péloquin & Lafontaine, 2010). In previous work, perspective-taking has been used as a proxy for cognitive affects of mentalization (e.g., Baczkowski & Cierpialkowska, 2015), with studies finding that attachment avoidance in specific relationships (e.g., parental, romantic

partner, friend) is associated with lower perspective-taking capacities within those relationships. Corcoran & Mallinckrodt (2000) also studied perspective taking in the context of attachment relationships: In a sample of married, parenting couples, secure attachment predicted the use of more constructive conflict resolution strategies within marital conflicts, and this relationship was mediated through higher perspective-taking abilities. Similarly, the cognitive pathway of the proposed model posits that higher perspective-taking could explain a positive relationship between attachment security and sexual consent communication: Those who are able to take their partner's perspective may be better able to identify what their partner may be thinking or feeling and have access to strategies that will help to clarify their partner's expectations about a given sexual situation, reducing the salience or magnitude of barriers to such communication. Conversely, those who have greater difficulty with perspective-taking may be less able to recognize ambiguous sexual situations which require clarification, and if they are able to recognize these situations, they may not have the tools to respond effectively (heightening their perception of barriers to effective consent communication). Further supporting this point is work from the broader literature on communication, including findings that situational and trait perspective-taking are associated with less frequent misunderstandings, more constructive correction of misunderstandings, and higher satisfaction with communication (Edwards et al., 2016). In my Masters' study, participants viewed correction of misunderstandings as one of the most common benefits of effective consent communication (Edwards et al., 2022); perspective-taking may create a stronger capacity for individuals to realize this benefit in their sexual relationships.

Affective Pathway to Sexual Consent Communication

The affective pathway operates primarily through individuals' ability to regulate the various emotions that may arise during, following, or in anticipation of consent communication. According to the Process Model of Emotion Regulation (Gross, 1998), people attempt to regulate distressing emotional experiences through a number of strategies, including changing the situation they are in, directing their attention to particular information (e.g., distracting, ruminating, or suppressing the emotional experience), changing cognitions/thoughts about a situation (e.g., cognitive reappraisal), or response modulation (e.g., suppressing expression of emotions, substance use, sleep). People with a more avoidant attachment style often regulate their emotions by *minimizing* (i.e., downplaying, suppressing, or masking) their feelings, though they still experience high physiological distress in response to emotional threats (Cassidy, 1994). Those with a more anxious attachment style typically regulate emotions by *heightening* their emotional experiences and expression (e.g., to solicit caregiving responses from their attachment figure; Cassidy, 1994; Mikulincer & Shaver, 2016). Both types of strategies have implications for relationship health and individual well-being: Roth and Assor (2012) surveyed college students and found that when participants perceived parental regard as hinging on either the suppression or expression of emotions, they also experienced a reduced capacity for emotional intimacy with their romantic partners and poorer emotion regulation. Emotional heightening strategies such as worry and rumination are associated with negative outcomes such as poorer sleep (Clancy et al., 2020), heart problems and elevated cortisol (Brosschot et al., 2006; Brosschot & Thayer, 2004), as well as decreased marital satisfaction and forgiveness within couple relationships (e.g., Chung, 2014). Additionally, Shahar et al. (2018) studied couples participating in videotaped interactions about relationship issues: They found that relative to

integration (taking a nonjudgmental, interested stance towards one's own emotions), minimizing either the experience of emotion (distancing) or its expression (expressive suppression) was associated with poorer engagement in communication, lower perceived discussion productivity, and higher partner physiological arousal during the discussion. These results suggest that effective (or ineffective) emotion regulation has implications not only for individuals, but also for the health of their intimate relationships. In the context of the affective pathway in the proposed model, difficulty regulating emotions, and particularly avoidance of emotional experience, may directly contribute to the perception of barriers to consent communication (i.e., those who have more difficulty engaging with discomfort or other negative emotions will be more apprehensive of consent communication). Although individuals may use strategies to minimize or heighten these emotions, the evidence from other bodies of work suggests that these maladaptive strategies are likely to decrease consent communication effectiveness.

Contributing Role of Sexual Consent Motivations

In addition to identifying barriers associated with sexual consent communication, the IMB Model suggests that it is also important to identify factors that could encourage or incentivize affirmative consent practices. For example, Shumlich and Fisher (2020) found that although participants perceived several barriers to sexual consent communication, they also found it valuable in terms of reducing uncertainty, showing respect for sexual partners, and facilitating discussion about other sexual topics (e.g., sexual likes and dislikes more broadly). My Masters' work echoed this finding, identifying similar rewards in a community sample along with other benefits such as improving sexual quality and ensuring safety/trust between partners (Edwards et al., 2022). Within the current dissertation, I predicted that people who are securely attached (i.e., low in both attachment anxiety and avoidance) would have stronger perspective-

taking skills and engage in less emotional avoidance, be more likely to perceive such benefits to consent communication, and therefore engage in more active, direct consent communication in their sexual relationships.

Research Goals

In my dissertation, I conducted three studies to test the *Integrative Cognitive-Affective Model of Sexual Consent Communication*, with a particular emphasis on the cognitive pathway. Study 1 was a proof-of-concept study, in which the goals were to examine whether: (1) all key constructs could be assessed in a reliable manner, and (2) the constructs were related to each other in the hypothesized directions. This study set the stage for refining pathways in the model and provided a rationale for conducting more elaborate testing (e.g., of the pathways in the model and of different measurement of the core constructs). Study 2 replicated and extended Study 1 by using behavioural measures of some of the key constructs, including the development of a new vignette-based measure of sexual consent communication and motivations. Study 2 also contained the first full test of all mediational pathways proposed in the model to identify which factors are the most important in predicting sexual consent communication. Building on this, Study 3 examined whether aspects of the cognitive pathway could be manipulated to improve consent communication outcomes: I designed and tested a perspective-taking intervention to determine whether brief psychoeducation on this concept could buffer the impact of attachment insecurity and perspective-taking deficits on consent communication. Study 3 also introduced additional protocols to improve the ecological validity of the study compared to Studies 1 and 2.

Study 1

Background

Study 1 was a proof-of-concept study in which I tested the associations between the constructs in the proposed model. Specifically, I tested whether attachment, perspective taking, emotion regulation¹, sexual consent barriers/rewards, and consent behaviour were associated with each other in the directions proposed by the Cognitive-Affective Model of Sexual Consent Communication.

I planned to test the following pathways:

1. First, I planned to test whether there was an association **between attachment insecurity and perceived rewards/costs of consent communication** (pathway *c*) in Figure 1. Attachment insecurity was expected to predict poorer consent motivations.
2. I also planned to test whether any associations between attachment insecurity and perceived rewards/costs would be reduced/become nonsignificant **once perspective-taking (pathways *a* and *g*) and emotional regulation (pathways *e* and *h*) were taken into account**. I expected that high perspective-taking and emotion regulation skills would predict consent motivations.
3. Then, I planned to test whether there were any associations **between attachment insecurity and affirmative consent communication behaviour** (pathway *i* in Figure 1). I expected that attachment insecurity would predict less affirmative consent behaviour.

¹ Note: Although the dissertation focuses on emotional avoidance, I initially planned to focus on the broader construct of emotion regulation and to look at the impact of specific emotion regulation strategies on consent motivations/behaviour in an exploratory manner. Therefore, the data in Study 1 used a general measure of emotion regulation. Some subscales of this measure correspond with emotional avoidance (e.g., the nonacceptance scale of the DERS-B), but the constructs do not completely overlap. In future studies, a measure of experiential avoidance was used for parsimony.

4. Finally, I planned to test whether any associations between attachment insecurity and consent behaviour would remain significant **once perspective-taking, emotion regulation, and perceived rewards/barriers of consent communication were taken into account** (pathways *b*, *d*, and *f* in Figure 1). I expected that high perspective-taking skills and emotion regulation, as well as high perceived rewards and low perceived barriers to consent communication, would be associated with more affirmative consent communication behaviour.

Method

Participants and Design

Participants ($N = 153$) were recruited through Amazon's TurkPrime service (Litman et al., 2017) to participate in an online survey. All participants were required to be at least 18 years of age, located in the United States, and in a current sexual relationship. Originally, 164 responses were collected. However, 4 responses were removed because the participants did not complete any measures of interest and 7 responses were removed because the participants failed to correctly answer at least one of the three attention check questionnaires embedded throughout the survey, leaving 153 participants for analysis.

Participants ranged in age from 21 to 71 years old ($M = 42.33$, $SD = 10.32$ years). The sample included 75 cisgender men (49.0%), 74 cisgender women (48.4%), and 2 nonbinary people (1.3%), as well as one person who preferred not to report their gender, and one person who did not complete the demographic portion of the survey. The majority of participants ($n = 135$; 88.2%) identified as straight or heterosexual with the remainder indicating that they were bisexual ($n = 10$; 6.5%), gay/lesbian ($n = 3$; 2.0%), asexual ($n = 1$; 0.7%), pansexual ($n = 1$; 0.7%), queer ($n = 1$; 0.7%), or "mostly straight" (a write-in response; $n = 1$; 0.7%). Participants

had the option to select one or more ethnicities; 8 participants indicated that they were multi-ethnic by selecting more than one of the available options. Most ($n = 133$; 86.9%) participants identified as white or Caucasian, with the remainder reporting that they were Black ($n = 9$; 5.9%), East and/or Southeast Asian ($n = 9$, 5.9%), Hispanic/Latino ($n = 6$; 3.9%); South Asian ($n = 2$; 1.3%), North American Indigenous ($n = 2$; 1.3%), or Latin/Central/South American ($n = 1$; 0.7%).

Consistent with the study requirements, all participants were in a current sexual/romantic relationship. Most participants ($n = 142$; 92.8%) classified their relationship as “committed and exclusive” with a small number stating that their relationship was “casual and exclusive” ($n = 9$; 5.9%) or “committed and nonexclusive” ($n = 2$; 1.3%). Relationship length varied considerably, ranging from 1 month to 47.5 years ($M = 14.04$ years; $SD = 10.12$ years).

Procedure

Following informed consent, participants completed a brief screening questionnaire to assess their eligibility (i.e., ensuring they were in a current romantic/sexual relationship). Participants who consented to the study and passed a captcha question completed questionnaires presented in a random order, with the exception of the demographics questionnaire which was always presented last.

Materials

Attachment Insecurity

The 9-item Experiences in Close Relationships Scale – Relationship Structures (ECR-RS; Fraley et al., 2011) asks participants to rate a series of statements on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*) in relation to their current partner. Items assess attachment-related anxiety (e.g., “I often worry that my partner doesn’t really care for me”) and avoidance (e.g., “I

don't feel comfortable opening up to my partner") in the participant's current relationship, with higher scores reflecting more attachment insecurity. Reliability was high for the full scale ($\alpha = .90$), anxiety subscale ($\alpha = .91$), and avoidance subscale ($\alpha = .91$). Analyses were conducted with the anxiety and avoidance subscales.

Perspective Taking

The Dyadic Perspective Taking Subscale of the Interpersonal Reactivity Index (DPT; Pélouquin & Lafontaine, 2010) assesses participants' inclination to take the perspective of their romantic partner through six items rated from 0 (*does not describe me well*) to 4 (*describes me very well*). Sample items include "I sometimes try to understand my partner better by imagining how things look from their perspective" and "Before criticizing my partner, I try to imagine how I would feel if I were in their place." Higher scores on this measure indicate stronger perspective-taking inclinations. Reliability for this scale was acceptable ($\alpha = .88$).

Emotion Regulation

The Difficulties in Emotion Regulation Scale – Brief (DERS-18; Victor & Klonsky, 2016) includes 18 items and measures participants' ability to regulate their own emotions and distress. For example, participants responded to items such as "I am confused about how I feel" and "When I am upset, I feel guilty for feeling that way." Items are rated in terms of how frequently the item applies to the participant, ranging from 1 (*almost never*) to 5 (*almost always*). The DERS-18 contains six subscales which measure: awareness of one's emotions (awareness), clarity about the nature of one's emotions (clarity), acceptance of one's own emotions (nonacceptance), access to effective emotion regulation strategies (strategies), ability to engage in goal-directed activities during negative emotions (goals), and ability to manage one's impulses during negative emotions (impulse). Higher scores represent greater difficulty in these areas.

Reliability for the full DERS-18 was high ($\alpha = .92$); reliability for each of the subscales was also good (α s = .88 to .97). For the current study, full scale scores were used for analysis.

Sexual Consent Motivations

Two scales were developed based on a previous qualitative study of sexual consent motivations (Edwards et al., 2022). A pool of items was generated based on the qualitative study and then piloted on a sample of 291 participants. Items were retained that maximized the psychometric properties of the scale while reducing the length and content overlap. The Sexual Consent Barriers Scale (SCBS; Edwards et al., in preparation) assesses the challenges that individuals perceive when they navigate consent in their current relationship; because sexual consent scripts become more fluid and entrenched over time, participants are asked to focus on the early stages of the relationship. Participants rated 36 items on a scale from 1 (*not at all true*) to 7 (*very much true*), with an option to indicate that the item was not applicable to them. Sample items include “Consent communication made me feel anxious”, “Consent communication caused tension in our relationship”, and “Consent communication ruined the mood of our sexual interactions.” Items on this scale comprise 7 subscales: (1) Conflict, (2) Relational and Partner Emotional Barriers, (3) Own Emotions, (4) Consent is Unnecessary, (5) Initiation, (6) Intoxication, (7) Sexual Quality. Reliability for the full scale was high ($\alpha = .96$) and reliability for the subscales was also within the acceptable range (α s = .82 to .92). Participants’ full-scale scores were used for analysis.

The Sexual Consent Rewards Scale (SCRS; Edwards et al., in preparation) complements the SCBS by assessing the positive motivations, or rewards, associated with sexual consent communication (also in their current relationships and focusing primarily on early stages of the relationship). Participants rated each item from 1 (*not at all true*) to 7 (*very true*), again with the

option to indicate that any given item is “not applicable.” Example items include “Consent communication improved our sexual relationship” and “Consent communication kept me safe in sexual interactions.” Reliability for this scale was high ($\alpha = .97$).

Sexual Consent Behaviour

The Process-Based Sexual Consent Scale (PBSCS; Glace et al., 2021) was used to measure consent behaviour or the extent to which participants engage in direct, affirmative consent. Items on this scale are rated from 1 (*strongly disagree*) to 7 (*strongly agree*). The PBSCS contains 3 subscales. The *ongoing consent* subscale reflects the extent to which one values consent as a process taking place throughout a sexual encounter ($\alpha = .87$); a sample item from this subscale is “If I am unclear about my partner’s body language, I make sure to verbally check in with them to be sure that they want to have sex.” The second subscale, *communicative sexuality* ($\alpha = .81$), measures the extent to which participants utilise explicit sexual communication (e.g., “I verbally tell my partner what I want sexually”). Finally, the *subtle coercion* subscale measures the extent to which the participant engages in pressuring or other coercive tactics to convince partners to engage in sex (e.g., “When my partner says that they do not want to be a part of sexual activity, I try to change their mind”). Reliability for this subscale was also good ($\alpha = .88$). Higher scores on the ongoing consent and communicative sexuality subscales reflect better sexual consent communication, whereas higher scores on subtle coercion reflect poor consent communication.

Results

Descriptive Statistics

Descriptive statistics and correlations for the variables of interest are included in Table 1. In general, the variables of interest were correlated in the directions that were predicted in the

model. For instance, attachment anxiety and avoidance were correlated negatively with perspective-taking and positively with emotion regulation difficulties; they were both also associated with lower consent motivations (i.e., greater perceived barriers and lower perceived rewards) and less affirmative consent behaviour. Better emotion regulation and perspective-taking were associated with stronger consent motivations and behaviors, and consent barriers were correlated with all three types of consent behaviour outcomes such that lower perception of barriers led to more engagement in affirmative consent behaviour. Of note, whereas sexual consent barriers were associated with all predictors and behavioural outcomes in the expected directions, perceived rewards were associated only with attachment avoidance and two of the sexual consent behaviour measures (i.e., the Ongoing Consent and Communicative Sexuality subscales of the PBSCS).

Predictors of Perceived Barriers/Rewards of Sexual Consent Communication

First, I tested whether there was an association between both types of attachment insecurity and perceptions of barriers and rewards of sexual consent communication (path *c* in Figure 1); I also planned to test whether any such associations would become nonsignificant after accounting for perspective-taking and emotion regulation (paths *g* and *h*).

Two hierarchical regression analyses were conducted to test these questions: one with consent barriers as an outcome (see Table 2), and another with consent rewards as an outcome (see Table 3). For both analyses, attachment anxiety and avoidance were entered in Step 1 and perspective-taking and emotion regulation were added to Step 2.

All analyses were conducted using the full range of scores reported by participants. Outlier analysis was conducted and identified 17 univariate outliers ($\pm 3SD$ from the mean).

When these outliers were Winsorized, the overall pattern of results remained the same. Any exceptions are described within the corresponding section.

Perceptions of Consent Barriers

The first model looked at predictors of consent barriers. Step 1 of the model explained 25% of the variance in consent barriers. Higher levels of attachment anxiety were associated with greater perceptions of barriers to consent communication, whereas attachment avoidance was not a significant predictor. This association remained significant when controlling for perspective-taking and emotion regulation in Step 2 ($\Delta R^2 = .07$); of the two added predictors, only emotion regulation predicted sexual consent barriers, such that individuals who reported more difficulties with emotion regulation were also more likely to report barriers to consent communication.

Perceptions of Consent Rewards

The second model examined the predictors of sexual consent rewards. In Step 1, which explained 5% of the variance in outcomes, consent rewards were predicted by attachment avoidance, but not anxiety. Those who reported higher attachment avoidance tended to perceive consent as less rewarding. Attachment avoidance continued to predict sexual consent rewards in Step 2 ($\Delta R^2 = .00$), and neither of the additional predictors (perspective-taking and emotion regulation) explained significant variation in perceptions of consent rewards. Analyses with the Winsorized variables changed one finding: Attachment avoidance was no longer significant in Step 2.

Table 1*Descriptive statistics and correlations for Study 1 variables of interest.*

Variable	Range	M	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Attachment anxiety (ECR-RS)	1.00-7.00	1.96	1.44	(.91)								
(2) Attachment avoidance (ECR-RS)	1.00-6.17	2.00	1.11	.48***	(.91)							
(3) Perspective-Taking (DPT)	1.17-4.00	3.15	0.72	-.24**	-.50***	(.88)						
(4) Emotion Regulation (DERS-18)	1.00-4.00	1.91	0.68	.57***	.28***	-.35**	(.92)					
(5) Consent Barriers (SCBS)	1.00-7.00	2.05	1.16	.49***	.31***	-.27***	.49***	(.96)				
(6) Consent Rewards (SCRS)	1.00-7.00	5.26	1.65	-.06	-.21**	.14	-.02	-.07	(.97)			
(7) Ongoing Consent (PBSCS-Ongoing)	1.60-7.00	5.95	1.13	-.26**	-.25**	.29**	-.22**	-.26**	.27***	(.87)		
(8) Communicative Sexuality (PBSCS-Communicative)	1.67-7.00	5.34	1.16	-.17*	-.47***	.48***	-.21*	-.25**	.40***	.34***	(.81)	
(9) Subtle Coercion (PBSCS-Coercion)	1.00-7.00	1.97	1.25	.43***	.24**	-.20*	.35***	.47***	.07	-.23**	-.12	(.88)

Note. Cronbach's alpha (α) appears on the diagonal of the correlation matrix.

Table 2

Hierarchical regression estimating effects of attachment, perspective-taking, and emotion regulation on consent barriers in Study 1.

DV: Consent Barriers									
Model	Predictors	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	<i>R</i> ²	adj. <i>R</i> ²	<i>F</i>
1	Intercept	1.13	0.18			<.001	.25	.24	<i>F</i> (2,148) = 24.85, <i>p</i> < .001
	Attachment anxiety	0.36	0.07	.45	5.54	<.001			
	Attachment avoidance	0.10	0.09	.10	1.23	.222			
2	Intercept	0.92	0.62		1.49	.139	.32	.30	<i>F</i> (4, 146) = 17.05, <i>p</i> < .001
	Attachment anxiety	0.23	0.07	.29	3.19	.002			
	Attachment avoidance	0.06	0.09	.06	0.66	.510			
	Perspective-taking (DPT)	-0.12	0.13	-.08	-0.93	.353			
	Emotion regulation (DERS-18)	0.48	0.15	.28	3.24	.001			

Table 3

Hierarchical regression estimating effects of attachment, perspective-taking, and emotion regulation on consent rewards in Study 1.

DV: Consent Rewards									
Model	Predictors	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2	adj. R^2	<i>F</i>
1	Intercept	5.85	0.29		20.46	<.001	.05	.03	$F(2,146) = 3.61$, $p = .029$
	Attachment anxiety	0.06	0.10	.05	0.57	.570			
	Attachment avoidance	-.035	0.14	-.24	2.58	.011			
2	Intercept	5.29	1.04		5.07	<.001	.05	.02	$F(4, 144) = 1.86$ $p < .120$
	Attachment anxiety	0.04	0.12	.03	0.30	.764			
	Attachment avoidance	-0.32	0.15	-.21	2.05	.042			
	Perspective-taking (DPT)	0.12	0.22	.05	0.52	.602			
	Emotion regulation (DERS-18)	0.09	0.25	.04	0.35	.731			

Predictors of Sexual Consent Behaviours

Three hierarchical regression analyses were conducted to examine each of the subscales of the consent behaviour measure (PBSCS). Each regression analysis included the same predictors at each step, but the three regressions varied by the specific consent behaviour that was modeled as the outcome. In the first step, the attachment insecurity variables were entered as predictors (path *i* in Figure 1). In the second step, perspective-taking and emotion regulation were added to the model to test whether any significant associations between attachment insecurity and sexual consent behaviours would remain significant controlling for perspective-taking and emotion regulation. In the third and final step, perceived barriers/rewards of sexual communication were entered as predictors, to test whether any significant associations between attachment, perspective-taking, or emotion regulation and sexual consent behaviour remained once perceived barriers/rewards of consent communication were taken into account. Tables 4, 5, and 6 show the results for these regression models.

Communicative Sexuality

In Step 1 (which explained 22% of the variance in communicative sexuality), attachment avoidance significantly predicted communicative sexuality, such that people who reported higher attachment avoidance were less likely to engage in communicative sexuality. This association held in Step 2 ($\Delta R^2 = .08$), where perspective-taking also predicted communicative sexuality (i.e., those who reported greater perspective-taking were also more likely to report engaging in communicative sexuality). Emotion regulation difficulties did not predict engagement in communicative sexuality. The introduction of consent barriers and rewards in Step 3 ($\Delta R^2 = .10$) did not alter the pattern of results obtained in Step 2; however, stronger perceptions of consent rewards emerged as an additional predictor of engagement in communicative sexuality.

Ongoing Consent

Greater attachment anxiety (but not avoidance) predicted decreased engagement in ongoing consent in Step 1 of the regression ($R^2 = .08$). This association was no longer significant in Step 2 ($\Delta R^2 = .04$), though there was a significant link between perspective-taking and ongoing consent, as participants who reported greater perspective-taking abilities also reported engaging in more ongoing consent behaviours. Emotion regulation was not a significant predictor of ongoing consent behaviour. When consent barriers and rewards were introduced in Step 3 ($\Delta R^2 = .07$), the relation between perspective-taking and ongoing consent became marginal ($p = .051$) and a significant relation between consent rewards and ongoing consent behaviour emerged, such that stronger perceptions of consent as rewarding predicted more engagement in ongoing consent. Using the Winsorized variables, attachment anxiety did not predict ongoing consent in Step 1 of the regression, though all other results remained the same.

Subtle Coercion

In Step 1 of this model ($R^2 = .18$), attachment anxiety predicted greater engagement in subtle coercion behaviours; attachment avoidance was not a significant predictor. This association held in Step 2 ($\Delta R^2 = .02$), and neither emotion regulation nor perspective-taking significantly predicted subtle coercion. When perceived consent barriers/rewards were added in Step 3, the model explained 32% of the variance in outcomes ($\Delta R^2 = .12$). The results from this step indicate that perceptions of consent barriers significantly predicted the use of more subtle coercion behaviours, whereas the association between attachment anxiety and subtle coercion was no longer significant. Using Winsorized variables, the pattern of results was the same except that attachment anxiety was still a significant predictor in Step 3.

Table 4

Hierarchical regression estimating effects of all predictors on communicative sexuality behaviour in Study 1.

DV: Communicative Sexuality									
Model	Predictors	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2	adj. R^2	<i>F</i>
1	Intercept	6.26	0.18		34.49	< .001	.22	.21	$F(2,146) = 20.81,$ $p < .001$
	Attachment anxiety	0.06	0.07	.08	0.98	.330			
	Attachment avoidance	-0.53	0.09	-.50	6.08	<.001			
2	Intercept	4.59	0.63		7.31	<.001	.30	.28	$F(4, 144) = 15.36,$ $p < .001$
	Attachment anxiety	0.09	0.07	.12	.125	.212			
	Attachment avoidance	-0.38	0.09	-.36	4.03	<.001			
	Perspective-taking (DPT)	0.48	0.14	.30	3.56	<.001			
	Emotion regulation (DERS-18)	-0.11	0.15	-.06	-.71	.481			
3	Intercept	3.56	0.64		5.54	<.001	.40	.37	$F(6, 142) = 15.47,$ $p < .001$
	Attachment anxiety	0.11	0.07	.14	1.56	.121			
	Attachment avoidance	-0.30	0.09	-.28	3.32	.001			
	Perspective-taking (DPT)	0.44	0.13	.27	3.48	<.001			
	Emotion regulation (DERS-18)	-0.07	0.15	-.04	0.46	.647			
	Consent barriers	-0.12	0.09	-.11	1.34	.182			
	Consent rewards	0.21	0.05	.30	4.53	<.001			

Table 5

Hierarchical regression estimating effects of all predictors on ongoing consent behaviour in Study 1.

DV: Ongoing Consent									
Model	Predictors	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2	adj. R^2	<i>F</i>
1	Intercept	6.55	0.20		33.67	<.001	.08	.07	$F(2,146) = 6.73$, $p = .002$
	Attachment anxiety	-0.14	0.07	-.18	2.03	.043			
	Attachment avoidance	-0.16	0.09	-.16	1.72	.088			
2	Intercept	5.45	0.70		7.83	<.001	.12	.10	$F(4, 144) = 4.97$, $p < .001$
	Attachment anxiety	-0.12	0.08	-.16	1.48	.141			
	Attachment avoidance	-0.06	0.10	-.06	0.56	.578			
	Perspective-taking (DPT)	0.32	0.15	.20	2.16	.032			
	Emotion regulation (DERS-18)	-0.08	0.17	-.05	0.51	.612			
3	Intercept	4.72	0.74		6.41	<.001	.19	.15	$F(6, 142) = 5.36$, $p < .001$
	Attachment anxiety	-0.09	0.08	-.12	1.10	.272			
	Attachment avoidance	0.01	0.10	.01	0.09	.932			
	Perspective-taking (DPT)	0.29	0.15	.18	1.97	.051			
	Emotion regulation (DERS-18)	-0.03	0.17	-.02	0.15	.878			
	Consent barriers	-0.15	0.10	-.14	1.48	.140			
	Consent rewards	0.16	0.05	.23	2.95	.004			

Table 6

Hierarchical regression estimating effects of all predictors on subtly coercive behaviours in Study 1.

DV: Subtle Coercion									
Model	Predictors (T1)	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	R^2	adj. R^2	<i>F</i>
1	Intercept	1.22	0.20		6.01	<.001	.18	.17	$F(2,146) = 15.73,$ $p < .001$
	Attachment anxiety	0.35	0.07	.40	4.71	<.001			
	Attachment avoidance	0.04	0.10	.04	0.44	.659			
2	Intercept	1.28	0.73		1.76	.081	.20	.17	$F(4, 144) = 8.77,$ $p < .001$
	Attachment anxiety	0.28	0.09	.33	3.27	.001			
	Attachment avoidance	0.01	0.11	.01	0.07	.945			
	Perspective-taking (DPT)	-0.11	0.16	-.06	0.70	.490			
	Emotion regulation (DERS-18)	0.25	0.17	.13	1.42	.158			
3	Intercept	0.43	0.74		0.58	.560	.32	.29	$F(6, 142) = 11.09,$ $p < .001$
	Attachment anxiety	0.16	0.08	.19	1.94	.054			
	Attachment avoidance	-0.02	0.10	-.02	0.16	.872			
	Perspective-taking (DPT)	-0.06	0.15	-.04	0.42	.674			
	Emotion regulation (DERS-18)	0.00	0.17	.00	0.02	.981			
	Consent barriers	0.49	0.10	.43	4.83	<.001			
	Consent rewards	0.09	0.05	.12	1.62	.108			

Study 1 Discussion

Existing models of consent communication tend to focus on the importance of socialization (e.g., through media, sexual health education, or peer norms), sociolegal contexts, and interpersonal factors in sexual consent behaviour (e.g., Shumlich & Fisher, 2019; Willis & Jozkowski, 2018). To date, it appears there has been no psychological model of consent that examines the intrapersonal factors that predict an individual's motivation to engage in consent communication and their subsequent communicative behaviour. The primary goal of Study 1 was to provide preliminary proof-of-concept data for the proposed integrative psychological model, which focuses on how an individual's working models of intimacy (attachment style) influence their consent attitudes and behaviour through two mechanisms: their ability to take their partner's perspective and their emotion regulation capacity. This area of research has the potential to improve our understanding of why certain individuals might find affirmative communication to be challenging and to outline ways in which such avoidance may be addressed/targeted in intervention programs.

Here, I review the key pathways of the model and summarize how the findings supported or failed to support those components. Then, I discuss the findings in the context of what is currently known within the literature. This is followed by a discussion of the model as a whole and how it may require modification.

A relatively underexplored construct that is core to the proposed model is the concept of *sexual consent motivations*. People have different reasons for choosing to engage (or not engage) in affirmative consent communication, and a better understanding of these motivations is likely to increase precision in identifying those who struggle most with sexual consent communication, as well as subsequently developing strategies to alleviate the perception of barriers while

enhancing the salience of rewards to consent communication. The present study conceptualized consent motivations across two categories. Sexual consent barriers are those factors that theoretically make it more challenging to engage in affirmative consent communication, and indeed this was suggested by the data, as people who perceived fewer barriers were less likely to report engagement in subtle forms of coercive consent communication (although perception of barriers did not predict engagement in more positive forms of communication when controlling for other variables). In contrast, perceptions of consent rewards were hypothesized to encourage more effective consent communication, and the results indicated that these perceptions were linked with increased engagement in effective consent practices that are consistent with the ideals of affirmative consent (i.e., treating consent as an ongoing process, engaging in more direct communication about sexuality with partners).

Attachment insecurity is a central construct in the model and is conceptualized as a key predictor of both motivations to engage in consent behaviour and consent behaviour itself. When predicting consent motivations, individuals who reported higher attachment anxiety perceived greater barriers to consent communication, but attachment anxiety did not predict perceived rewards to consent communication. In contrast, attachment avoidance predicted lower perceived rewards for consent communication, but did not predict perceptions of barriers to consent communication. When predicting *consent behaviour*, both attachment anxiety and avoidance predicted different types of consent behaviour.

The model further proposes that perspective-taking is one of two mechanisms that link an individual's attachment style to their motivations for consent communication, and in turn, their engagement in consent behaviour. The results of Study 1 showed that perspective-taking did not predict either perceptions of consent barriers or rewards. However, perspective-taking

significantly predicted two of the consent communication subscales in the expected direction, suggesting that perspective-taking may be less relevant to consent motivations but is related to consent behaviour. Of note, this relation did not render the relation between attachment and consent communication nonsignificant. A different pattern of results emerged for emotion regulation, the second mechanism predicted for our model. Individuals who reported difficulties with emotion regulation were more likely to endorse barriers (but not rewards) related to consent communication, but emotion regulation did not predict consent behaviour.

Key Takeaways from Study 1

Overall, the findings from Study 1 support that an individual's attachment insecurity (i.e., beliefs that others will not respond to one's needs or that one lacks worth/lovability) relates to both their motivations to engage in consent communication as well as the behaviours they use during consent communication. Further, the pattern of results differed for attachment anxiety and avoidance, suggesting that attending to each of these dimensions separately is important when examining consent communication. A substantive body of previous research suggests that attachment anxiety and avoidance exert different influences on relationship dynamics and sexual communication (e.g., Davis et al., 2006; Li & Chan, 2012; McNeil et al., 2018; Rehman et al., 2023). The design of the current study was cross-sectional and did not allow for mediational analyses. However, some of the findings pertaining to attachment anxiety suggest a potential pathway to consent behaviour through consent motivations: Attachment anxiety predicted greater perceptions of consent barriers, and perceptions of barriers predicted the use of subtly coercive consent strategies while controlling for the effects of anxiety. Additional empirical work is needed to directly test this pathway, but the results suggest that consent barriers may be

particularly salient (and worthy of consideration for understanding consent behaviour) in people with an anxious attachment style.

These preliminary findings suggest that perspective-taking may be more relevant when enacting consent behaviour and emotion regulation skills may be more relevant when predicting motivations for consent communication. It is possible that relative to perspective-taking, emotion regulation difficulties play a role earlier in the process of sexual consent communication by making the threat of consent communication more salient before even engaging in consent practices. However, emotion regulation has been demonstrated as a predictor of self-reported general sexual communication in clinical samples (e.g., Wang et al., 2023), so further work may be needed to understand its role in non-clinical samples and elucidate the causal chain from emotion regulation to communicative behaviour. In contrast, those with poor perspective taking abilities may be less able or willing to exert effort to understand and respond to their partner's cues during consent communication itself. Perspective-taking deficits can also be understood in terms of *overmentalizing* (i.e., reading too much into partner's behaviour without sufficient evidence) and *undermentalizing* (i.e., not sufficiently attending to or interpreting partner's behaviours; Sharp et al., 2011). Therefore, the motivational profiles of people with perspective-taking deficits may differ depending on the specific type of difficulties they experience. Further, our measure of perspective-taking may have captured undermentalizing (i.e., participants with low scores on the DPT), but the content of the items may not be useful for distinguishing between good mentalizers and overmentalizers. For example, consider the item, "*I sometimes try to understand my partner better by imagining how things look from his/her perspective.*" This item could be endorsed by an individual who is a good mentalizer as well as by someone who is an overmentalizer and additional contextual information would be needed to be able to

distinguish the two. In Study 2 I included a measure that would allow for differentiation between good versus weak perspective-taking (both under- and overmentalizing) as well as between baseline ability versus the application of these abilities within a relationship.

The models tested in Study 1 were better at predicting consent barriers (explaining up to 32% of variance) than rewards (explaining only 5% of the variance). This suggests that other factors, not captured by the proposed model, may be relevant for understanding individual differences in perceived rewards of consent communication. Additionally, whereas the current study examined emotion regulation using a broad measure of several different emotion regulation strategies, it is possible that particular forms of emotion regulation are more influential in predicting consent rewards in a way that this study did not capture. Isolating particular types of emotion regulation strategies, such as emotional avoidance, may yield a clearer picture of the role of emotion regulation in consent communication processes.

The link between attachment insecurity and consent motivations was significant even after taking emotion regulation and perspective-taking into account. There are a few possible ways to interpret this result. First, it is possible that there are other mechanisms that ought to be considered when predicting consent motivations. For example, at the individual level, social anxiety and attitudes towards traditional gender roles or sexual scripts may influence a person's disposition towards engaging in active consent practices (e.g., Hust et al., 2017). However, like all sexual (and non-sexual) communication, our understanding of sexual consent communication would be incomplete if focused solely on the individual level. Namely, beyond the role of individual factors in sexual consent communication, future iterations of the proposed model will need to integrate broader levels of analysis such as the dyadic context and wider social climate (e.g., Byers & Demmons, 1999; Shumlich & Fisher, 2019; Wasson, 2023).

Although some of the specific pathways differed from what we outlined in our model (see discussion above), the findings underscore that all of the key constructs that we have proposed play a role in either predicting consent motivations, behaviour, or both. Thus, the initial data are very promising in terms of the relevance of these psychological constructs to consent motivations and behaviours. However, the relationships between the constructs were at times different than hypothesized and, thus, gathering additional data will allow for clarifying and updating the model.

Limitations and Next Steps

Given that the proposed model involves explanatory mechanisms that mediate the link between attachment and sexual consent motivations/behaviours, an important next step was to collect data that adheres to the assumptions of mediation (Judd & Kenny, 1981) to conduct the relevant statistical tests. Additionally, for some of the proposed constructs, the range of scores was potentially restricted by ceiling or floor effects (e.g., relatively low attachment insecurity throughout the sample). This could be the result of the recruitment strategy, or a disadvantage of relying on self-report assessments. For skills such as perspective-taking and emotion regulation, participants also may not have had effective insight into their own abilities relative to those of the general population. Furthermore, their reports of consent behaviours (and perhaps other variables) may have been biased by concerns about social desirability, given that public perception of affirmative consent has dramatically improved in the last few decades (Malae, 2022) and there has been increasing recognition of the issue of sexual assault through social movements such as #MeToo (e.g., Alaggia & Wang, 2020). Therefore, in Study 2, I sought to incorporate (more) objective measures of constructs such as perspective-taking skill and consent behaviours. For example, the Movie for the Assessment of Social Cognition (Dziobek et al.,

2006) is an objective test of perspective-taking that may reduce the risk of self-report bias and provide a snapshot of a participant's perspective-taking abilities independent of their current relational context; physiological measures of emotional arousal could also complement self-report measures of emotion regulation to enhance our understanding of how emotions influence the course of consent communication. In terms of measurement of consent behaviour and motivations, alternative methods could include the use of vignettes or reporting of consent communication during individual sexual encounters, such as through a daily diary study.

Study 2

Background

Study 2 was intended to replicate the findings of Study 1 while (1) addressing methodological limitations and (2) testing the key mediational pathways proposed by the Cognitive-Affective Model. In Study 1, I examined the key associations proposed by the Cognitive-Affective Model, but could not test whether the relation between attachment insecurity and consent communication is serially mediated by perspective-taking capacities, emotion regulation, and sexual consent motivations, as a test of mediation requires temporal precedence of the independent variable before the mediator and dependent variable (Hayes, 2022), whereas the measures in Study 1 were presented in a random order. Additionally, I planned to test whether a more objective, task-based measurement of perspective-taking would be associated with consent motivations and behaviours in a similar way that the DPT was in Study 1. The perspective-taking task selected for Study 2 also measures both over- and undermentalizing (i.e., perspective-taking errors related to making too many assumptions about another person's mental state or not sufficiently attending to the other person's mental state, respectively), in contrast to the DPT which appears to emphasize concerns caused by undermentalizing.

The key outcome in the Cognitive-Affective Sexual Consent Model is consent communication. In Study 1, I assessed consent communication using Glace et al.'s (2021) self-report measure, in which participants explicitly rated their own consent behaviours. However, self-report measures in socially sensitive domains—particularly those related to sexuality—are prone to social desirability bias, even in anonymous surveys (King, 2022; Meston et al., 1998). For instance, participants may overreport socially acceptable behaviours (e.g., expressing affirmative consent) while underreporting behaviours that may be viewed negatively by others.

This could contribute to artificially inflated rates of affirmative consent communication and misrepresent the variability in real-world behaviours.

To address this issue, I developed a new task designed to minimize social desirability bias by incorporating open-ended responses and scenario-based assessments. This method allows participants to engage with realistic consent situations, providing a more ecologically valid measure of consent motivations and behaviour. As a first step, I created, piloted, and validated a series of sexual consent vignettes, as described in Study 2a. These vignettes were designed to range in difficulty and realism to capture diverse participant responses while avoiding ceiling and floor effects. A significant methodological contribution of Study 2 is the development and validation of these vignettes as an alternative to traditional self-report measures of consent communication.

Shifting From Emotion Regulation to Emotional Avoidance

The main focus of Study 2 is to examine the cognitive pathway of the proposed model. However, as a secondary goal, I also tested the affective pathway. Study 1 utilised a broader measure of emotion regulation to test the relations identified in the affective pathway. However, the proposed Cognitive-Affective Model identifies experiential avoidance (Hayes et al., 1996) as a specific component of emotion regulation that is relevant to consent motivations. Experiential avoidance refers to the general avoidance of uncomfortable internal sensations (e.g., emotions, somatic symptoms, unpleasant thoughts or memories; Hayes et al., 1996). Experiential avoidance can include strategies such as thought suppression, restriction of behaviour that may trigger negative internal experiences, and the use of emotional coping strategies that aim to reduce or eliminate unwanted emotions (Chawla & Ostafin, 2007).

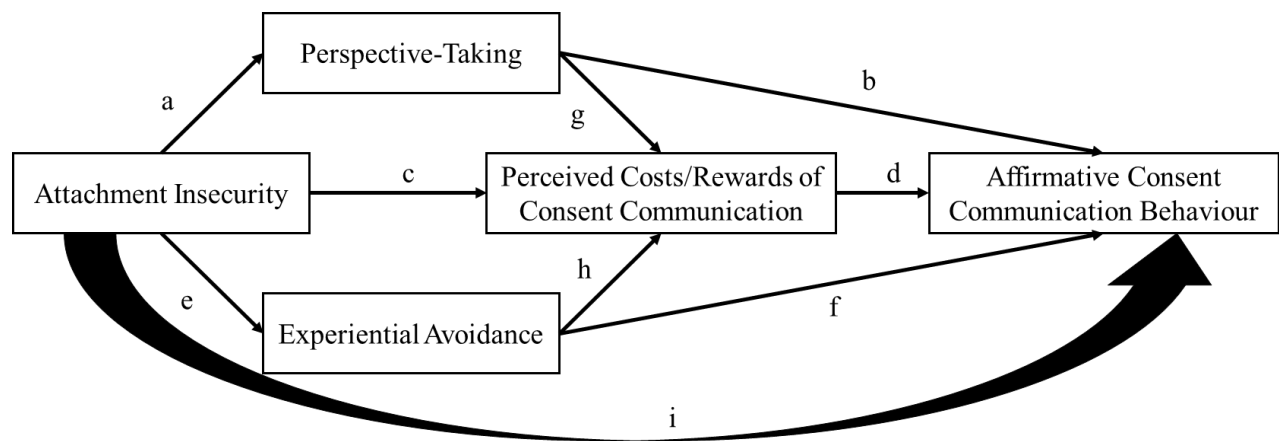
The experiential avoidance literature suggests that, rather than representing a single emotion regulation strategy among many, experiential avoidance *underlies* other maladaptive emotion regulation strategies and can explain why those strategies are ineffective at reducing emotional distress. For instance, Kashdan and colleagues (2006) found data suggesting that experiential avoidance mediated the effects of other emotion regulation strategies on daily negative and positive experiences. Their study also indicated that experiential avoidance was a more consistent predictor of anxiety and emotional distress than the use of any particular emotion regulation strategy. Kashdan and colleagues therefore argue that focusing on improving emotion regulation and coping, rather than challenging experiential avoidance directly, could increase the risk of distress long-term, as some strategies allow the opportunity to bypass uncomfortable emotions.

Paradoxically, experiential avoidance also appears to be linked with strategies that intensify emotional expression and experience; those high in experiential avoidance appear to be more sensitive to emotionally arousing stimuli (Sloan, 2004). Naragon-Gainey and colleagues (2017) point out that avoidance strategies can amplify unwanted experiences: They note that thought suppression tends to increase the frequency of unwanted thoughts (e.g., worry and rumination), and that rumination itself is an attempt to avoid negative emotions and thoughts in the future, despite its actual effect of increasing distress. John and Gross (2004) similarly highlight that emotional suppression tends to yield higher levels of distress. Given these findings, it appears that experiential avoidance may be a more central and parsimonious construct to examine with regards to consent communication, rather than isolating the individual effects of myriad emotion regulation strategies. Therefore, I planned to use a measure of experiential

avoidance to test paths *e*, *h*, and *f* of the model. Figure 2 shows an updated version of the model accounting for this conceptual change.

Figure 2

Updated Proposed Integrative Cognitive-Affective Model



In summary, the aim of Study 2 was to test the pathways of the Cognitive-Affective model using alternative measurements, with a particular emphasis on pathways related to cognitive skills (i.e., perspective-taking). Whereas all paths in Study 1 were tested using self-report, Likert-type measurement scales, I implemented a task-based measurement of perspective-taking, and a vignette-based measure of sexual consent motivations and sexual consent behaviour. The paths were planned to be tested as outlined in the following sections.

Key Associations in the Cognitive Pathway

The cognitive pathway comprises the relations between attachment, perspective-taking, and consent motivations and communication (paths *a*, *b*, and *g* of the model). I tested path *a* by examining the association between self-reported attachment and performance on the perspective-taking task; specifically, I examined whether attachment anxiety and avoidance were negatively

associated with performance on the task. Path *b* was tested by examining whether performance on the perspective-taking task was associated with more affirmative responses on the open-ended sexual consent vignette task. Path *g* was tested by examining the relation between performance on the perspective-taking task and self-reported consent motivations on the vignette task. Further, I tested whether the association between attachment and consent behaviours was mediated by perspective-taking, as well as whether perspective-taking mediated the relation between attachment insecurity and consent motivations.

Key Associations in the Affective Pathway

The affective pathway is illustrated by paths *e*, *h*, and *f*, which identify the relations between attachment, emotional avoidance, and consent motivations and communication. Path *e* was tested by examining the relation between self-reported attachment security and self-reported emotional *avoidance* (in contrast to the focus on emotion regulation in Study 1). Path *h* was tested by examining the association between self-reported emotional avoidance and consent motivations on the vignette task. Path *f* was tested by examining the relation between self-reported emotional avoidance and responses on the open-ended sexual consent vignette task. As with the cognitive pathway, I tested whether the link between attachment security and consent behaviour was mediated by emotional avoidance, and whether emotional avoidance explained the proposed link between attachment security and consent motivations.

Direct Effects of Attachment and Consent Motivations on Consent Communication

I also tested how attachment was associated with consent motivations and consent communication behaviour, and the direct association between consent motivations and consent behaviour (illustrated in paths *c*, *d*, and *i*). Path *c* was tested by examining the relation between self-reported attachment and self-reported consent motivations for each of the vignette scenarios.

Path *d* was tested by examining the relation between consent motivations for the vignette scenarios and responses on the open-ended vignette task. Path *i* was tested by examining whether greater attachment security was associated with more affirmative responses on the open-ended sexual consent vignette task. Finally, I tested whether consent motivations mediated the relation between attachment insecurity and consent communication behaviours.

In order to test the hypothesized direct and mediated paths, I first focused on developing a psychometrically sound method to assess consent motivations and communication using methods less susceptible to social desirability biases (Study 2a).

Study 2a: Vignette Development and Selection

Study 1 relied on a self-report, Likert-type measurement of consent behaviour, with items that inquire about how a person typically communicates consent in their sexual relationships. The items included in Glace et al.'s (2021) scale could invite potential social desirability bias, particularly in populations that are well-educated about current norms for sexual consent. Therefore, for Study 2, I developed vignettes to evaluate how participants would spontaneously respond to a variety of sexual consent scenarios.

Vignettes have often been used in sexual consent research. However, these studies often require participants to evaluate a situation between two third parties to determine whether the sexual activity described was consensual or not, the sexual appeal of the vignette, or whether consent has been communicated (e.g., Humphreys, 2007; Piemonte et al., 2022; Willis & Jozkowski, 2022). In other words, these types of studies do not ask about participants' own consent communication behaviour in the situation that is presented. When vignettes are used to assess how participants might respond in a given situation, the researchers typically ask questions such as how likely it is that the participant would be willing to engage in sex during a

particular scenario (Impett & Peplau, 2000). Therefore, within the extant literature on sexual consent behaviours, vignettes with open-ended response options have not previously been used to assess participants' own communicative behaviours in consent scenarios. To address this gap, I chose to develop my own series of vignettes to elicit participant responses about how they would communicate in a variety of sexual consent scenarios. First, I reviewed the literature to develop a series of sexual scenarios where consent communication would be relevant. Participants responded to these vignettes via an open-text form that asked how they would communicate in various consent-related situations. By asking participants to generate their own responses to consent scenarios in an open-ended format, this study allows for a more direct examination of consent communication strategies, providing richer, more ecologically valid insights into how individuals navigate these interactions.

Vignette Development

I planned to use 10 vignettes in Study 2b in order to assess consent communication and motivations in a variety of contexts while minimizing the burden to participants. Because I wanted to select vignettes with strong psychometric properties, I developed 20 scenarios for piloting, with the intention of using the pilot results to select 10 vignettes for subsequent work (selection criteria is described below). The scenarios were developed following a review of sexual consent vignette studies in the literature, and were designed to be comparable in length. I designed scenarios that included a mix of verbal and nonverbal communication, scenarios involving both sexual refusal and agreement to sex, and a range in terms of the level of ambiguity (e.g., some scenarios involved being unsure of how the partner/self was feeling, whereas others involved situations such as responding to an unambiguous boundary or being sure that one wanted to stop sexual activity). After drafting the initial scenarios, I sought

feedback from my supervisor and internal members of the dissertation committee, who provided insights on content clarity and ecological validity. Their feedback was incorporated into the final version of the pilot vignettes. Examples of changes to the vignettes included avoiding mental state language within the vignettes in order to avoid cueing participants to the mentalization demands of the scenario, and adapting the language of the vignettes to make them more realistic and understandable to participants.

Participants and Design

Data were collected using the Prolific platform. All participants were required to be at least 18 years of age and located in Canada or the United States and were told that they would be asked to share how they would respond to a number of sexual consent communication dilemmas and to answer other questions about each scenario. Originally, 107 responses were collected; 9 were removed because the participants did not provide ratings for the vignettes and 1 participant requested that we not analyze their data after completing the study, leaving 97 participants for analysis.

Participants' ages ranged from 20 to 66 years old ($M = 38.2$ years; $SD = 11.3$ years). The sample included 55 men (including 1 trans man), 40 women (including 2 trans women), and 1 nonbinary participant in addition to one participant who did not report their gender. With regard to sexual orientation, the majority of participants indicated they were heterosexual ($n = 77$), though the sample also included 1 asexual participant, 10 bisexual participants, 4 gay participants, 2 lesbian participants, 4 pansexual participants, 2 queer participants, 2 participants who were questioning/unsure of their identity, and 2 participants who preferred not to disclose their sexual orientation.² Two-thirds of participants ($n = 64$) identified as White. Other ethnicities

² Participants were able to indicate multiple sexual orientations; therefore, the total number is higher than the number of participants.

represented in the sample included Black or African American ($n = 17$), Hispanic or Latino ($n = 10$), South Asian ($n = 5$), East Asian ($n = 6$), Indigenous ($n = 1$), Middle Eastern ($n = 1$), Pacific Islander ($n = 1$), Southeast Asian ($n = 1$), and one participant who indicated they had mixed ancestry ($n = 1$).³

In this study, participants were not required to be in a current sexual/romantic relationship since the scenarios tested were specified to be hypothetical. Nevertheless, about half of the participants described themselves as being in a committed monogamous relationship ($n = 48$). Others classified themselves as being single ($n = 21$), in a casual, nonexclusive relationship ($n = 11$), a committed, non-exclusive relationship ($n = 5$), dating one person exclusively ($n = 10$). One participant explained that they are “married and in an open relationship, but not currently sleeping with anyone other than [their] partner.”

Procedure

Participants were told that they would be responding to a series of situations that might come up in a sexual relationship, and to assume that this was a relatively new sexual relationship. Participants were also instructed *not* to think of their current partner (if they had one) as they answered the vignettes.

To reduce participant fatigue, I created 2 versions of the survey. In each version, participants responded to 10 of the 20 generated vignettes (i.e., version 1 consisted of the ten odd-numbered vignettes, and version 2 consisted of the 10 even-numbered vignettes); see Appendix A for the full text of all vignettes. Participants were randomly assigned to receive either version 1 or version 2 of the vignettes; within each version, vignettes were presented in a randomized order. For every vignette, the participants were asked to describe what they would

³ As with sexual orientation, participants were able to select multiple ethnicities.

say or do in that situation. Instructions were as follows: “*Please describe exactly what you would say or do in this situation (e.g., the exact actions you would take, any statements you would make, questions you would ask, or other responses you might have).*”

After reading a given scenario and writing what they would do in response, participants rated their consent motivations for that situation using a shortened version of the Sexual Consent Barriers Scale (SCBS) and the Sexual Consent Rewards Scale (SCRS). The measures were combined and shortened into the Sexual Consent Motivations Scale (SCMS) so that they could be efficiently and repeatedly administered (i.e., capturing motivations for each vignette); the shorter measure was included in the pilot study to ensure their reliability prior to inclusion in Study 2b. This shortened version included one item for each of the themes identified in a previous qualitative study from my Masters’ work (Edwards et al., 2022), with the rewards items being reverse-coded. After the measure of consent motivations, the participants were asked to rate the scenario on several dimensions, including how *realistic* they thought the situation was (1 to 7), how *similar* it was to their experience or the experience of others in their life (1 to 7), how *challenging* the situation was (1 to 7), and the extent to which the scenario was viewed in our society as something *likely to happen to a man* and as something *likely to happen to a woman* (0-100 for both items). For all items, higher numbers reflected higher levels of the given characteristic (i.e., 7 being the most realistic, similar, or challenging; 100 representing the most likely to happen to a woman/man).

At the end of the study, participants reported their demographics and were given a chance to share feedback on the study experience, then they were thanked for their time and received a code for remuneration via Prolific.

Results and Vignette Selection

I selected 10 vignettes for the design of Study 2b, prioritizing those that were highest in realism and variable in challenge level. Table 7 summarizes the descriptive ratings for each vignette. Initially, I intended to only select vignettes that were not significantly different in terms of likeliness for men vs. women, to minimize the effects of gender on the results of Studies 2 and 3. However, only 7 of 20 vignettes met this requirement, with all others being viewed as significantly more likely to happen to women than men ($p < .05$). Therefore, I made efforts to choose vignettes whose mean ratings were at or near the midpoint (50%) for both genders, even if the ratings differed significantly.

Table 7*Descriptive statistics for vignette ratings in Study 2a.*

Vignette Number	Motivations (1-7)		Realism (1-7)		Similarity (1-7)		Difficulty (1-7)		Men (0-100)		Women (0-100)		Gender T-Test
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
1 ^a	3.08	1.03	5.86	1.71	5.47	1.70	4.08	1.84	47.75	30.44	74.97	23.82	***
2	3.11	1.07	5.46	1.64	4.50	2.06	3.85	1.77	28.96	24.13	82.48	19.47	***
3 ^a	2.65	1.15	5.61	1.34	4.61	1.99	3.20	1.70	57.67	27.59	68.31	25.89	n.s.
4 ^a	2.65	1.16	5.87	1.53	4.62	1.96	2.83	1.91	62.52	30.10	50.81	35.47	n.s.
5	3.11	1.06	5.43	1.62	4.86	1.81	3.73	1.75	44.29	24.80	75.38	21.33	***
6 ^b	2.92	1.22	5.58	1.51	4.42	2.05	3.54	1.97	52.75	27.80	70.50	24.20	**
7 ^a	2.83	1.14	5.63	1.33	4.63	1.81	3.78	1.67	61.58	25.08	58.08	28.54	n.s.
8	3.87	1.49	4.73	1.70	3.71	2.11	4.33	2.01	53.52	29.37	62.33	29.45	n.s.
9 ^a	3.05	1.19	5.53	1.45	4.78	1.92	3.55	1.83	49.94	26.44	68.60	21.48	**
10 ^a	2.00	1.14	5.98	1.30	5.40	1.67	2.25	1.54	62.21	26.20	67.96	24.50	n.s.
11 ^a	3.21	1.05	5.53	1.49	4.12	1.93	3.94	2.11	38.83	25.76	77.45	22.92	***
12 ^a	3.06	1.31	5.50	1.46	4.17	2.10	3.31	2.02	52.00	27.77	66.81	25.01	**
13	3.08	1.00	5.20	1.40	4.18	2.03	3.73	1.80	47.92	25.83	73.96	22.87	***
14	2.73	1.14	4.79	1.69	3.65	2.37	3.92	1.90	47.83	30.79	57.44	33.59	n.s.
15	2.76	1.12	5.31	1.36	4.49	1.95	3.31	1.76	52.35	25.03	66.92	25.81	*
16	3.36	1.38	5.02	1.59	4.17	1.12	3.77	1.91	55.02	27.82	60.42	26.54	n.s.
17	3.12	1.20	5.49	1.65	4.49	2.11	3.69	1.90	44.62	28.89	77.00	23.50	***
18 ^b	3.17	1.21	5.85	1.35	4.71	2.05	3.69	1.81	53.54	31.62	72.25	27.06	**
19	2.40	1.10	5.06	1.64	4.21	2.21	2.92	1.81	46.70	26.15	71.77	19.68	***
20	3.51	1.10	5.42	1.64	3.85	2.12	3.83	1.95	43.19	30.99	76.35	26.96	***

Note. ^a Vignette selected for inclusion in final study as a primary vignette. ^b Vignette selected for inclusion in final study as an exploratory vignette.

The vignettes were intended to be used as measures of both sexual consent motivations and consent behaviours. Participants reported consent motivations—perceived barriers and rewards—using a Likert-type scale, while consent behaviour was assessed via open-ended responses where participants described how they would respond in each situation. To minimize participant fatigue, the vignettes were split into two forms (A and B; 5 vignettes in each version) for Studies 2 and 3. Participants were randomly assigned to report their motivations for one form and their behavioural responses for the other. In other words, participants would respond to all vignettes, but would provide different information for each form. The forms were balanced such that independent-samples t-tests indicated that they did not significantly differ in terms of realism ($p = .393$), challenge ($p = .544$), similarity to own or close others' experiences ($p = .544$), or how likely they were believed to happen to a man ($p = .659$) or woman ($p = .365$). Each form contained one vignette (Vignette 6 in Form A and Vignette 18 in Form B) that was exploratory; that is, I did not intend to analyze them with the rest of the data but wished to see whether participants' responses to these situations differed considerably from their pattern of responding to the other vignettes.

Study 2b: Testing the Cognitive-Affective Consent Model Using a Vignette Methodology

Participants and Design

Monte Carlo power analysis for indirect effects (power = .80 and $\alpha = .05$, with correlations from Study 1 to determine expected effect size; Schoemann et al., 2017), suggested that about 150 participants would be needed to detect a serial mediation with two mediators; I aimed to sample more participants than this (i.e., approximately 200) to account for the additional predicted parallel mediation effect. I collected 189 responses in total using the Prolific platform. All participants were required to be at least 18 years of age, located in Canada or the

United States, and not in a current committed sexual relationship (e.g., married, engaged, or cohabiting). After data screening, 12 participants were removed because they did not complete any measures of interest; 2 participants were removed because they indicated they were in a committed relationship, despite the study requirements; one participant was removed because they indicated they could not play audio and were screened out of the study; and one participant was removed because they requested that we do not use their data during the validity checks at the end of the study. Finally, one participant was removed because on review of their qualitative responses, they were suspected of using artificial intelligence to generate answers rather than genuinely participating in the study. Ultimately, data from 173 participants was available to be used in analysis.

The sample included 100 men (including 1 trans man), 62 women (including 1 woman who also identified as gender-neutral), 5 nonbinary individuals, 1 additional gender-neutral individual, and 1 genderqueer individual. Participants ranged in age from 19 to 75 years old, with a mean age of 39.6 years ($SD = 13.0$ years). Nearly two-thirds of the sample were white ($n = 112$; 67.1%), and other ethnicities represented in the sample included Black or African American ($n = 27$; 16.2%), Hispanic or Latino ($n = 16$; 9.6%), East Asian ($n = 14$; 8.4%), South Asian ($n = 7$; 4.2%), Southeast Asian ($n = 2$; 1.2%), and Indigenous ($n = 1$; 0.6%). One participant wrote in that they were “mixed” without specifying further.

The majority of participants ($n = 132$; 79.0%) described their sexual orientation as straight/heterosexual, followed by bisexual ($n = 15$; 9.0%), asexual ($n = 8$; 4.8%), gay ($n = 8$; 4.8%), lesbian ($n = 3$; 1.8%), pansexual ($n = 3$; 1.8%), aromantic ($n = 2$; 1.2%), queer ($n = 2$; 1.2%), and questioning/unsure ($n = 1$; 0.6%). One participant preferred not to disclose their sexual orientation and two participants provided write-in responses (“demisexual” and “slightly bent”).

Most participants ($n = 136$; 81.4%) were currently single and not dating, though 26 participants indicated they were casually dating (and not exclusive), two participants reported that they were in a new/casual relationship with one person exclusively, one participant was dating one person exclusively, and two participants wrote in their own relationship status (“separated” and “widowed and not dating”).

Procedure

Participants were told they were participating in a study examining different factors that impact someone’s decision to engage in sexual consent communication. Following informed consent, they were asked about their relationship status and ability to play videos with sound on the device they were using (so that they could hear the interactions in the video-based perspective taking task). Because I planned to ask participants about how they would communicate consent in relatively new relationships, participants were required to not be in a committed relationship at the time of the study. Research indicates that relationship length and commitment alter the norms and expectations for sexual consent (Humphreys, 2007; Willis et al., 2021); therefore, it was likely that being in a current relationship would interfere with participants’ ability to respond to vignettes about a new partner. Those who indicated that they were in a current committed relationship or could not play sound either due to technology or their test-taking environment were screened out of the study.

Next, participants completed self-report measures of attachment security and experiential avoidance.⁴ Following this, they completed a video-based task to assess their perspective taking

⁴ Initially, I ran a version of Study 2 that did not contain a self-report measure of perspective-taking, given that I was primarily interested in performance on the task-based measure. 166 participants completed all the Study 2 measures in the same order, except for the PT-IRI and the MentS. However, the MASC did not correlate with any of the variables of interest and also demonstrated poor reliability ($\alpha = .55$). As such, I decided to run another version of the study, with self-report measures included, allowing me to (1) determine whether the low reliability replicated in a second sample and (2) directly compare the MASC to the self-report measures (i.e., in terms of whether they were associated with other variables in the ways predicted by the model).

skill, after which they completed two self-report measures of perspective taking. Then, they read the 10 sexual consent vignettes selected from Study 2a and completed a motivations scale for one of the forms and open-text behavioural responses for the other form (the two forms are described in more detail in the Study Materials below). Temporally, the study materials were presented in the order described, rather than being randomized or counter-balanced, to meet the assumptions of the planned mediation model test (i.e., that predictors temporally precede mediators, which then precede DVs; Hayes, 2018).

At the end of the study, participants completed demographic measures and quality checks, after which they received feedback about the study and were provided with remuneration.

Study Materials

Attachment Security

Attachment security was measured with the Experiences in Close Relationships-Revised (ECR-R; Fraley et al., 2000). This measure consists of 36 items rated from 1 (*strongly disagree*) to 7 (*strongly agree*). Participants rate the items based on how they “generally feel in emotionally intimate relationships, not just what is happening in a current relationship,” so that they can be answered regardless of relationship status. The ECR-R produces scores for two subscales, each comprising of 18 items, that reflect the dimensions of Attachment Anxiety (e.g., “I often worry that my partner doesn’t really love me”) and Attachment Avoidance (e.g., “I prefer not to show a partner how I feel deep down”). Items are summed to create each subscale score and higher scores reflect greater attachment insecurity on that dimension. Reliability for both subscales of the ECR-R was high ($\alpha = .96$ for both).

Experiential Avoidance

The Brief Experiential Avoidance Questionnaire (BEAQ; Gámez et al., 2014) was used to assess experiential avoidance. This is a 15-item questionnaire that asks participants to rate the extent to which they agree with each statement on a 6-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Example items include “The key to a good life is never feeling any pain” and “If I have any doubts about doing something, I just won’t do it.” One item is reverse-scored and then the items are summed to create a total score that ranges from 15 to 90, with higher scores reflecting greater experiential avoidance. Reliability for this scale was good ($\alpha = .91$).

Perspective Taking Task

I used the Movie for the Assessment of Social Cognition – Revised (MASC-R; Dziobek et al., 2006) to assess perspective-taking abilities. The MASC-R is a validated measure of social cognition difficulties related to perspective-taking in adults and adolescents. In this task, participants view a 15-minute video clip involving 4 characters meeting for a dinner party. The clip is periodically paused and participants are asked to indicate the mental state of various characters at the moment the movie is paused. Participants have 30 seconds to respond to each question before the survey advances to the next video. Each of the 44 items contains four multiple-choice options, and participants receive a score based on how many items they answer correctly. Higher scores indicate greater perspective-taking abilities.

The MASC-R includes three subscales that account for the nature of participants’ incorrect responses. These are the *hypermentalizing*, *hypomentalizing*, and *nonmentalizing* subscales. The *hypermentalizing* subscale refers to responses that reflect excessive mentalizing (e.g., making inferences that go beyond the information that is available). *Hypomentalizing*

reflects responses where the inferences make insufficient use of the information that is available but that still incorporate mental states. Finally, nonmentalizing responses are those that reflect non-mental state inferences, such as physical causation or overly literal interpretations. For example, in one clip, the character Sandra is on the phone with her friend Betty, inviting her to a gathering. Betty expresses some hesitation about attending. In response, Sandra says, “If you don’t show up next Saturday, you’re going to have to wait a hundred years before you even hear from me” using a joking tone, and participants are asked “Why does Sandra say this?” The correct response, reflecting appropriate mentalizing, is “to persuade Betty in an ironic way to come.” The hypermentalizing response is “to try to blackmail Betty into coming on Saturday,” given that there is no evidence of Sandra’s intent to “blackmail.” In contrast, the hypomentalizing response “because Betty has better things to do on Saturday” is partially correct that Betty would rather not attend the gathering, yet fails to recognize the joking tone that Sandra is using and the persuasive intent of her statement. Finally, “If Betty will not come, she will not speak to her anymore” is a literal interpretation of Sandra’s words that reflects concrete thinking or nonmentalizing. I did not make specific predictions about how these subscales of the MASC-R would relate to other variables but intended to use them for exploratory analysis. Theory suggests that attachment anxiety should be associated with greater hypermentalizing, and avoidance should be associated with greater hypomentalizing. Reliability for the MASC-R in the current sample was low ($\alpha = .64$), in contrast with the original study which reported an α of .84 for the original version of the task (Dziobek et al., 2006).

The MASC-R includes 5 attention checks embedded throughout the study and a final item asking about whether participants had difficulties understanding the test content. The majority of participants indicated that they had “no difficulties” ($n = 115$; 68.9%) or “only minor

difficulties” ($n = 49$; 29.3%) in understanding the videos and following the characters’ conversations. Three participants selected that they experienced “some difficulties” with understanding the videos, and none indicated that they had “great difficulty” with comprehending the videos. I initially intended to use the 5 attention checks to screen out inattentive participants; however, at the end of the study several participants noted that they answered the questions incorrectly because they were placed at suboptimal parts of the video task when the information had been forgotten or disregarded (e.g., a question asking about the timing of the dinner, which is mentioned in video 1, appears after the eighth video and was answered incorrectly by one-third of participants). Between 2.4% and 34.1% participants answered any of the given attention checks incorrectly, and the number of attention checks answered correctly did not correlate with any of the measures in the study except for a positive correlation with attachment anxiety ($r = .18, p = .02$). The number of attention checks passed also did not correlate with perceived difficulty of the MASC. Due to qualitative participant feedback in conjunction with high rates of incorrect responses, I opted not to use the attention checks administered during the MASC-R as exclusionary criteria.⁵

Participants were also asked to mark a checkbox if they experienced problems viewing any video to prevent technical difficulties from impacting the results. Only 6 participants indicated that they experienced any problems viewing videos, with 5 experiencing one issue and 1 experiencing two issues. The pattern of results is the same with those participants excluded.

Perspective-Taking Self Report

Participants completed the Mentalization Scale (MentS; Dimitrijević et al., 2018), a 28-item scale which measures participants’ mentalizing abilities across relationships (i.e., not

⁵ Failure rates for the attention checks were similar in the initial version of Study 2.

specific to their current partner). Participants rate statements such as “I often think about other people and their behaviour” or “I can easily describe what I feel” on a scale ranging from 1 (*completely incorrect*) to 5 (*completely correct*). The MentS contains three subscales: self-mentalization ($\alpha = .86$), other-mentalization ($\alpha = .86$), and motivation to mentalize ($\alpha = .80$). Reliability for the full scale was also high ($\alpha = .90$).

I also included the Perspective-Taking subscale of the Interpersonal Reactivity Index (PT-IRI; Davis, 1980). The IRI is a precursor to Pélouin and Lafontaine’s (2010) Dyadic Interpersonal Reactivity Index that was used in Study 1, and consists 7 items about general perspective-taking ability, such as “When I’m upset with someone, I usually try to ‘put myself in their shoes’ for a while” and “If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments” (reverse-coded). These items are rated on a 5-point scale from 1 (*does not describe me very well*) to 5 (*describes me very well*). A key difference from Pélouin and Lafontaine’s Dyadic Perspective-Taking subscale is that the PT-IRI does not specify a relationship context, making it more appropriate for the participants in Study 2b who were not in committed relationship. Reliability PT-IRI in this study was good ($\alpha = .89$).

Sexual Consent Motivations and Behaviour

Participants saw both Forms A and B developed from Study 2a. Half of the participants completed the motivational scale for Form A, then entered behavioural responses to Form B (Condition 1); the other half completed the motivational scale for Form B and then entered behavioural responses for Form A (Condition 2). Vignettes within each form were presented in a random order, but the “exploratory” vignettes were always presented at the end of a given form to avoid influencing responses to the primary vignettes of interest. The items were the same as the motivational scale and open-ended behavioural response items from Study 2a. Reliability for

the motivational scales was good for each vignette, ranging from .83 to .91. Therefore, to compute a single motivational score, I averaged all the items from the 4 non-exploratory vignettes within each form.

Coding of Sexual Consent Communication Behaviour

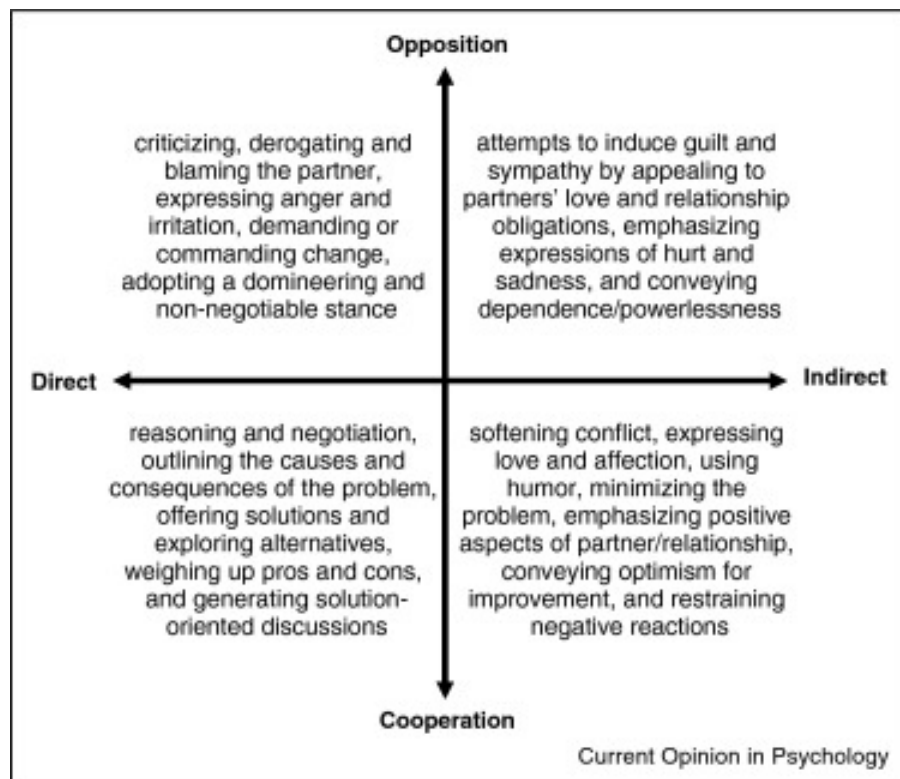
Theoretical Basis of the Coding Scheme

To code the open-ended responses to sexual consent scenarios, I used the dimensions of conflict communication outlined by Overall and McNulty (2017) as the basis for my coding scheme. Overall and McNulty propose that couples' conflict communication can be categorized according to the dimensions of opposition versus cooperation and direct versus indirect communication (see Figure 3).

This model was chosen as the basis for the coding scheme because it accounts for a wide variety of potential responses across different scenarios and distinguishes between communication that may facilitate relational repair (i.e., "cooperative") versus those that may (intentionally or otherwise) damage the relationship (i.e., "oppositional" responses), regardless of whether the communication is direct or indirect. Overall and McNulty specify that no dimension or quadrant of their model is consistently superior to others (i.e., there may be situations where an oppositional response is warranted, or where direct communication may be less likely to yield the desired outcome despite often being viewed as superior). The dimensions proposed by Overall and McNulty also align with the interpersonal circumplex model (Leary, 1957), an influential framework for understanding interpersonal dynamics which contains two orthogonal dimensions: agency (characterized by the degree of dominance or exertion of control vs. passivity or yielding control) and communion (characterized by interpersonal warmth vs. hostility; Fournier et al., 2011).

Figure 3

Overall and McNulty's Dimensions of Couple Conflict Communication



Note. Reprinted from “What type of communication during conflict is beneficial for intimate relationships?” by N. Overall and J. McNulty, 2017, *Current Opinion in Psychology*, 13 (<https://doi.org/10.1016/j.copsyc.2016.03.002>), with permission from Elsevier.

With regard to consent communication, I conceptualized direct responses as generally more effective, but expected that across vignettes, variability in valence was more likely to be effective. For instance, responding with positive emotion to a situation in which one’s partner knowingly violates their boundaries (e.g., trying to soothe the partner or behave as though one is enthusiastic to participate in an unwanted sexual activity) is likely to be less effective than expressing anger or disappointment; at the same time, using positive emotion to reassure a

partner who rejects one's sexual advance would generally be considered more effective/appropriate than responding with hostility or cold dismissal (assuming that one wishes to maintain the relationship).

Overall and McNulty's model and the interpersonal circumplex model provided the theoretical basis for the sexual consent behaviour coding scheme. Based on these models, I aimed to include a dimension of directness (ranging from 0 to 4, with lower categories reflecting less direct communication) and a second dimension related to valence of communication (also ranging from 0 to 4, with lower categories reflecting more negative emotion and higher categories reflecting more positive emotion). However, I altered the categories in the model to take the contextual nuance of a particular vignette into account. For instance, some of the vignettes asked participants how they would handle (1) a situation where their partner is not making eye contact or responding much during sex; (2) initiating a new sexual act; or (3) wanting to stop sexual activity due to feeling physically unwell. Since none of these scenarios inherently involve conflict, the coding scheme was modified to include examples of indirect and direct communication that was relevant to those situations, and to be contextually-sensitive. For example, consider Vignette 6 and Vignette 11, which both involve one's partner initiating an activity that the participant is not comfortable with. In Vignette 11, the partner is violating a boundary that the participant has explicitly communicated due to having "bad experiences" with this activity in the past. This presumably warrants a stronger response than in Vignette 6, where the partner initiates an activity and the participant has not yet shared their dislike of this activity. While both vignettes contain the same numerical codes for directness, the definitions are altered such that in Vignette 11, the most direct response is one where the participant "explicitly communicates [the] boundary violation" and may communicate a consequence, whereas in

Vignette 6, the highest scoring response involves “communicating disinterest...while providing insight into their process of reflection” *or* going along with the initiation with the intent of “having a more in-depth discussion” after sexual activity. These examples also demonstrate contextual nuance as in Vignette 6, going along with the sexual activity in the moment can still be coded as direct communication (if there is a plan to communicate in more depth at a later time), whereas in the more urgent situation of Vignette 11, such a response would be categorized as indirect communication. Thus, the coding scheme followed a similar template for each vignette, but the template was modified with vignette-specific instructions about the type of response that would fall into each category.

Communicative valence was also altered such that coders were instructed to code for the valence and intensity of emotional expression, rather than whether the behaviour was constructive vs. oppositional. This definition of emotional valence was generally consistent with Russell and Feldman-Barrett’s (1999) dimensional model of emotion. Therefore, there were two categories for negative emotions (i.e., low- and high-intensity), one category for neutral emotional expression, and two categories for positive emotions. For negative emotions, the low-intensity category tended to include emotions such as nervousness, guilt, or mild irritation, whereas the high-intensity category included expressions of anger, hostility, fear and/or panic. The low-intensity positive emotion category included attempts to calm the partner (e.g., soft tone of voice, calm/relaxed body language), whereas the high intensity emotion included expressions of excitement and enthusiasm (where appropriate) or strong attempts to reassure/soothe the partner.

The coding manual draft was checked against the pilot study responses to ensure that the majority of participant responses were represented within the coding scheme. The initial version

of the coding scheme was reviewed by my supervisor and a committee member, both of whom were provided the initial Overall and McNulty paper to review. After adapting their feedback, we updated the coding scheme and used this version to train the coders. Feedback on the coding scheme included clarifying language to avoid confusion or inconsistency among the coders, providing clearer examples for certain categories, and developing instructions for how coders should handle exceptional situations (e.g., when the participant provides multiple/contradictory behavioural responses to the same vignette). The coding scheme also underwent minor revisions based on feedback from research assistants as they went through the process of coding each vignette (e.g., to account for unexpected responses or inadvertent overlap in categorization). Table 8 summarizes each of the coding categories in the final coding scheme; see Appendix B for the full coding scheme.

Table 8

Overview of general principles of coding scheme used in Study 2b and Study 3.

Dimension	Code	Description
<i>Directness</i>	0	No descriptions of communication (or choice not to communicate) in participant response
	1	Highly indirect communication
	2	Slightly indirect communication
	3	Slightly direct communication
	4	Highly direct communication
<i>Valence</i>	0	Extremely negative/oppositional emotion expressed
	1	Slightly negative/defensive emotion expressed
	2	Neutral emotional expression
	3	Slightly positive/softening emotion expressed
	4	Extremely positive emotion expressed
<i>Uncodeable Responses</i>	1	Participant responded to wrong scenario or misinterpreted prompt (e.g., describes responding to partner's refusal when prompt asks how they would refuse their partner)
	2	Response is incomprehensible (e.g., gibberish, unclear language)
	3	Participant declines to answer the question or cannot imagine situation
	4	Uncodeable for another reason (specified by RAs)

Coding Process

Two research assistants were recruited to code the Study 2b open-ended responses. Both underwent an initial training session that explained the general purpose of the study, data security and confidentiality practices, and best practices for consistent and accurate coding.

Coders coded all responses for one vignette at a time and were instructed to code the dimensions of directness and valence separately (i.e., going through each response and coding directness, then hiding those codes and going back through the responses to code valence). This was done to ensure that the two dimensions were coded independently and that coders did not confuse the two dimensions while coding. Responses were deemed uncodeable if they were unintelligible, if the participant clearly misunderstood the situation (e.g., described how they would get consent from their partner when the vignette asked how they would provide consent, described communicating a sexual like when they were asked to communicate a sexual dislike), or if the participant refused to answer the question (e.g., by saying they would never be in such a situation or could not picture themselves in that situation). In total, 10 participants produced at least one uncodeable response and 4 of these participants produced multiple responses that were uncodeable.

For each vignette, a pre-coding meeting was held in which the research team reviewed the coding scheme for that vignette and discussed any anticipated challenges or unusual responses. Select responses from Study 2a were used for training purposes and we coded them together to address any misunderstandings or areas of confusion. Each RA then coded approximately 50 responses which were randomly assigned by a random number generator; 10-15 responses per vignette were also assigned to both RAs to monitor consistency in their coding and identify potential discrepancies in their understanding of the coding system. These

discrepancies, and any questions/concerns highlighted by the RAs, were discussed and resolved at the next meeting. Following this meeting, the RAs reviewed all their initial coding responses for that vignette, and made any changes as required by changes to the coding scheme or to their understanding of the coding categories. Once the second round of coding was completed, any continued discrepancies between RAs (for responses coded by both RAs) were identified. I consulted with my supervisor about these discrepancies and we decided final codes.

To estimate interrater reliability, percentage agreement was chosen over Cohen's kappa.⁶ In the first round of coding, the RAs disagreed on 45/144⁷ (31.3%) responses for directness (across all vignettes). After the second round of coding, there were 5/145 (3.4%) disagreements that needed to be resolved. For valence, the initial rate of disagreement was 36/144 (25.0%), which was reduced to 10/145 (6.9%) after the second round of coding. The frequencies of the final codes are displayed in Table 9, and average scores were computed for each participant to determine their average directness and valence across the vignettes. Using the final codes only, internal consistency reliability for directness was low ($\alpha = .56$ for Form A and $\alpha = .51$ for Form B), as was reliability for valence ($\alpha = .48$ for Form A and $\alpha = .36$ for Form B).

Results

Descriptive statistics for all variables are included in Table 10. Table 11 shows the correlations between the key variables of interest. Outlier analysis revealed 12 univariate outliers

⁶ Percent agreement was chosen over Cohen's kappa for two reasons. First, low sample size (15 codes per vignette) can contribute to an under-estimate of interrater reliability. Also, the second round of coding violated the assumption of independent raters, as the coding meetings involved each coder sharing their initial codes (and rationale for their codes) and attempting to reach a consensus. Using percentage agreement for both rounds allowed for ease of comparisons between the first and second round.

⁷ In total, coders were expected to code 15 responses for each of the 10 vignettes (totalling 150 codes). Responses that both coders identified as uncodeable ($n = 5$) are removed from these calculations. Further, one coder missed coding a response in the first round, but coded it in the second round, resulting in a change in denominator.

throughout the dataset; similar to Study 1, re-analysis with Winsorized variables did not change the pattern of results except where noted.

Form Differences

Independent-samples t-tests were conducted to ensure there were no differences between the two conditions of the consent communication measures (as noted above, these conditions varied by whether motivation and behavioural responses were completed on Form A or B). There was no difference between Conditions 1 (Form A motivations, Form B behaviour) and 2 (Form B motivations, Form A behaviour) for participants' ratings of communicative directness, $t(164) = -0.47, p = .637$, communicative valence, $t(164) = -0.89, p = .373$, or consent motivations, $t(166) = 1.23, p = .220$. With respect to the participants' self-report measures, there were no differences between conditions on attachment anxiety, $p = .117$, attachment avoidance, $p = .471$, experiential avoidance, $p = .481$, self-reported perspective-taking ($p = .445$) or any of the MASC-R measures ($ps = .411$ to $.898$).

Table 9

Frequencies of final qualitative codes (codeable responses only) in Study 2b.

Vignette #		Directness Codes					Valence Codes				
Form		0	1	2	3	4	0	1	2	3	4
A	1	1	20	6	11	43	1	2	35	21	22
	7	1	5	10	23	43	1	0	70	7	4
	10	6	2	10	60	5	0	3	68	12	0
	11	2	5	8	40	27	4	7	62	9	0
	6†	0	18	3	34	24	0	6	54	17	2
B	3	1	4	11	49	14	2	3	62	7	5
	4	1	0	3	53	26	4	8	55	13	3
	9	2	24	14	31	8	0	1	62	15	1
	12	0	9	6	16	49	1	3	55	9	12
	18†	5	13	5	37	22	0	0	64	17	1

Note. Vignette numbers are retained from their labelling in Study 2a to maintain consistency across studies. †Denotes exploratory vignettes not originally planned to use in analyses.

Table 10*Descriptive statistics for Study 2b.*

Variable	Range	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
ECR-R Avoidance	1.00-6.89	3.50	1.31	0.34	-0.42
ECR-R Anxiety	1.00-6.39	3.62	1.46	-0.23	-0.98
BEAQ	15.00-84.00	49.45	14.12	-0.12	-0.07
MASC-R – total	15.00-37.00	29.67	4.22	-0.88	0.64
MASC-R Hypermentalizing	0.00-12.00	4.39	2.09	0.54	0.71
MASC-R Hypomentalizing	0.00-13.00	3.34	2.34	1.04	1.32
MASC-R Nonmentalizing	0.00-12.00	3.08	2.31	1.12	1.40
MentS	2.00-5.00	3.76	0.54	-0.47	0.92
PT-IRI	1.00-5.00	3.78	0.79	-0.56	0.22
SCMS	1.00-5.14	2.84	1.03	0.09	-0.78
Directness	0.00-4.00	2.93	0.70	-1.25	2.86
Valence	1.00-3.50	2.21	0.41	0.36	0.89

Table 11*Bivariate correlations between variables in Study 2b.*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) ECR-R Avoidance	-										
(2) ECR-R Anxiety	.31***	-									
(3) BEAQ	.36***	.46***	-								
(4) MASC-R – total	.12	.10	.03	-							
(5) MASC-R Hypermentalizing	.05	.07	-.00	-.48***	-						
(6) MASC-R Hypomentalizing	-.14	-.16*	.02	-.74***	-.00	-					
(7) MASC-R Nonmentalizing	-.10	-.07	-.14	-.74***	.00	.48***	-				
(8) MentS	-.48***	-.30***	-.35***	-.00	-.03	.03	-.00	-			
(9) PT-IRI	-.19*	-.09	-.10	-.10	-.03	.10	.10	.48***	-		
(10) SCMS	.36***	.25***	.24**	-.05	.12	-.05	.02	-.35***	-.21***		
(11) Directness	-.12	-.04	-.03	.24**	-.17*	-.13	-.19**	.21**	.19*	-.30***	
(12) Valence	-.13	.02	-.09	.11	-.06	-.10	-.10	.18*	.14	-.06	.42***

Correlations between Predictor Variables

The predictors were generally associated with each other in the expected directions. Both types of attachment insecurity were associated with increased experiential avoidance; attachment avoidance was weakly associated and attachment anxiety was moderately associated with scores on the BEAQ. Regarding the perspective-taking measures, the MASC-R generally did not correlate with attachment or experiential avoidance, with the exception that the Hypomentalizing subscale of the MASC-R was weakly negatively associated with attachment anxiety (i.e., those with greater attachment anxiety made fewer hypomentalizing errors). The PT-IRI and MentS did not correlate with the MASC or its subscales; however, they were moderately positively correlated with each other.

Correlations with Consent Motivations

Higher scores on the SCMS (reflecting stronger perception of barriers to consent communication) were weakly positively associated with both forms of attachment insecurity, as well as with experiential avoidance. Higher SCMS scores were also weakly negatively associated with perspective-taking as measured by the PT-IRI and the MentS, though the SCMS was not correlated with the full scale or subscales of the MASC.

Correlations with Consent Behaviours

Communicative directness and valence were moderately positively associated with each other, such that participants whose responses were rated as more direct were more likely to express positive emotion in their responses. Directness and valence of responses were not associated with either attachment avoidance or anxiety on the ECR-R, nor did they have significant associations with experiential avoidance measured by the BEAQ. Higher average directness on the vignette task was weakly associated with higher total scores on the MASC

(reflecting better mentalizing skill) and with fewer hypermentalizing or nonmentalizing errors on the MASC but was not significantly associated with the number of hypomentalizing errors.

Valence on the vignette task was not associated with any aspect of performance on the MASC.

Directness was weakly positively associated with scores on the MentS and on the PT-IRI;

valence was weakly associated with the MentS but not associated with PT-IRI scores.

Perceptions of barriers to consent, as measured by higher SCMS scores, were weakly negatively associated with communicative directness, but were not associated with communicative valence.

Mediation Analyses

Because the MASC was not associated with most of the measures of interest, I conducted mediation analyses using the MentS as a measure of perspective-taking. The MentS was chosen over the PT-IRI since the MentS reflects different components of mentalizing (self-oriented, other-oriented, and motivation to mentalize). Communicative directness was the dependent variable. Analyses were conducted using Model 80 of the PROCESS Macro v 4.2 (Hayes, 2022), which tests for serial and parallel mediation in a manner consistent with the proposed Cognitive-Affective Model. Analyses were conducted separately for attachment anxiety and avoidance to maintain model parsimony and because the two types of attachment insecurity are highly correlated, which may have led to problems with multicollinearity. The mediation results are depicted in Figure 4.

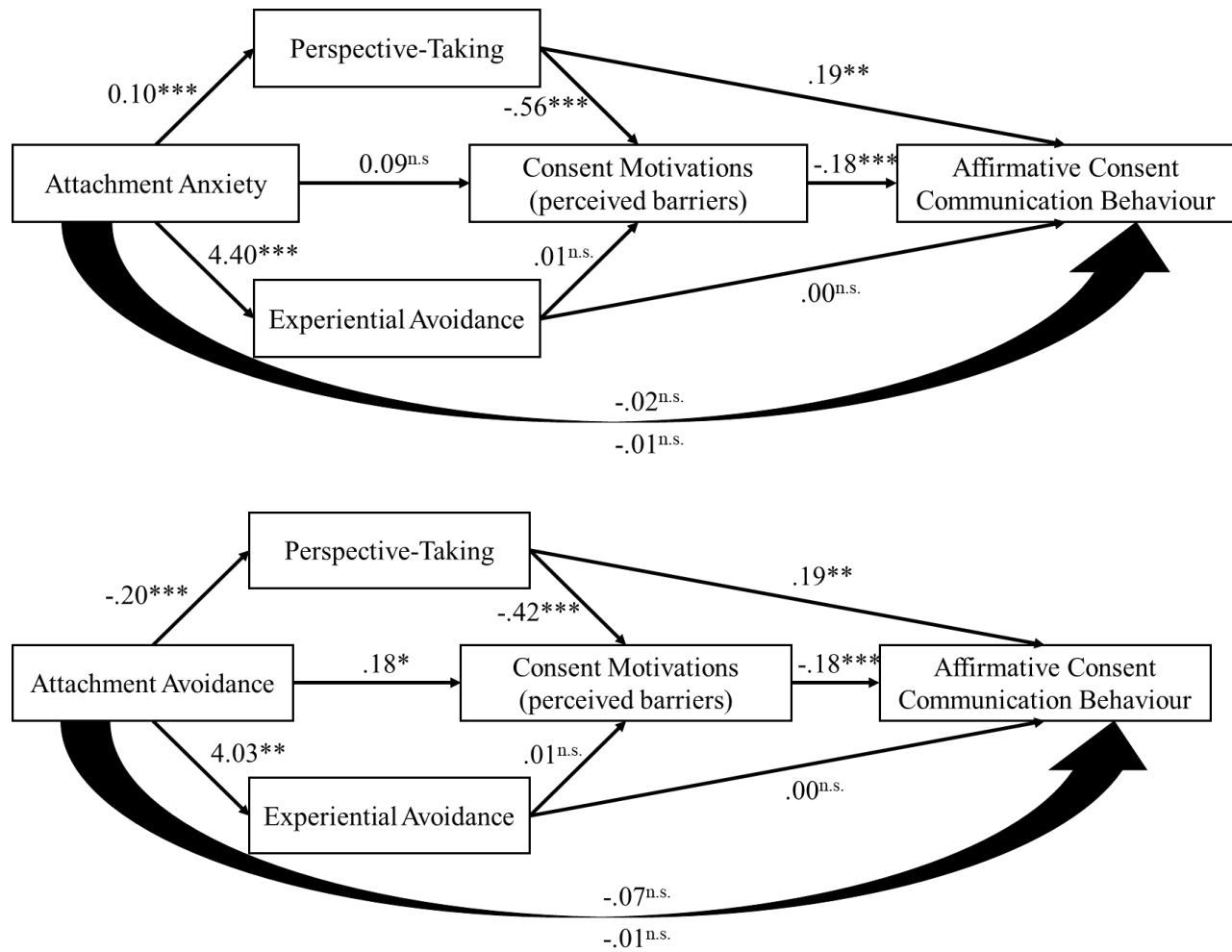
Attachment anxiety. Attachment anxiety had a significant direct effect on experiential avoidance and perspective-taking; higher anxiety was associated with increased experiential avoidance and poorer perspective-taking, but was not associated with perceptions of barriers to consent. Perspective-taking had a significant direct effect on consent motivations, such that stronger perspective-taking predicted weaker perception of barriers to consent, but there was no

direct effect of emotional avoidance on consent motivations. Perspective-taking and consent motivations showed significant direct effects on communicative directness, such that higher perspective-taking and perception of fewer barriers to consent both predicted more direct consent communication (though the direct effect of perspective-taking was nonsignificant when using Winsorized variables). In contrast, there were no direct effects of attachment anxiety or emotional avoidance on communication directness. Turning to indirect effects, the mediation analysis revealed a significant serial mediation from attachment anxiety to directness, through perspective-taking and consent motivations ($b = -.01$, $SE = .01$, $95\% CI = [-.02, -.00]$). No other indirect effects were significant.

Attachment avoidance. Direct effects for attachment avoidance were similar to those found for attachment anxiety (including the direct effect of perspective-taking, which was no longer significant when using the Winsorized variables). However, an additional direct effect was found such that higher attachment avoidance directly predicted increased perception of barriers to consent. Two significant indirect effects were found. First, consent motivations were found to mediate the relationship between attachment avoidance and communicative directness ($b = -.03$, $SE = .02$, $95\% CI = [-.07, -.01]$). Second, the same serial mediation found for attachment anxiety (from attachment to directness, through perspective-taking and consent motivations) was also found to be significant ($b = -.01$, $SE = -.01$, $95\% CI = [-.04, -.00]$).

Figure 4

Results of Mediation Analyses for Study 2b.



Note. Total effects are represented above the curved line connecting attachment to consent communication behaviour; direct effects appear below the line.

Study 2 Discussion

Study 2 provided evidence for the key mediational pathways in the proposed Cognitive-Affective model, and particularly the cognitive pathway, by demonstrating links between attachment and consent communication that were mediated by self-reported perspective-taking.

Emotional avoidance was also expected to be a mediator per the affective pathway, but was not significantly associated with consent motivations. This study replicated many of the core associations from Study 1 while addressing methodological concerns (e.g., social desirability bias in self-report measures, lack of temporal precedence for mediation).

Perspective-taking and consent motivations significantly mediated the relationship between attachment anxiety and directness in communication. A similar mediation pathway was identified for attachment avoidance, where perspective-taking mediated a link between attachment avoidance and communicative directness. However, an additional finding was that unlike attachment anxiety, attachment avoidance had a direct effect on consent motivations, such that people reporting higher attachment avoidance had a stronger perception of barriers to sexual consent (and a corresponding weaker perception of rewards). These findings suggest that avoidantly attached individuals perceive sexual consent communication as more threatening, independent of their perspective-taking abilities.

Study 2 also tested the affective pathway; contrary to predictions, emotional avoidance was not significantly associated with consent motivations nor was emotional avoidance associated with sexual consent communication. These findings suggest that avoidance of emotions may not play a central role in shaping consent communication in the way that perspective-taking appears to. However, Study 1 found that emotion regulation was significantly associated with consent motivations and behaviour. Thus, it is possible that other aspects of emotion regulation, such as impulse control or emotional clarity, are what mainly inhibit or facilitate sexual consent communication.

Comparison with Study 1 Results

The connection between attachment and consent motivations in Study 1 differed considerably from Study 2: In Study 1, attachment anxiety appeared to predict consent barriers (but not rewards) and the reverse was true for attachment avoidance. It is therefore somewhat surprising that in Study 2, only attachment avoidance was directly associated with consent motivations, especially considering that the consent motivations measure used in Study 2 was more heavily weighted to perception of barriers to consent communication. This may speak to differences in assessing motivations in a hypothetical vs. real-life context: For instance, it is possible that evaluating consent communication in one's real-life relationship (as in Study 1) activated fears of rejection for anxiously-attached participants that were not activated by the hypothetical scenarios in Study 2. Another possibility is that there are other pathways or mediators that would more fully explain the link between attachment avoidance and consent motivations.

The results of Study 2 indicate a relation between perspective-taking and consent motivations, whereas no such relation was found in Study 1. These findings suggest there may be nuances in how and why perspective-taking influences consent motivations. The measure of perspective-taking in Study 1 was specific to the participant's current relationship (the Dyadic Perspective-Taking Scale; Péloquin & Lafontaine, 2010), whereas the MentS is not relationship-specific, and also includes components related to mentalizing about oneself. These results suggest that the ability to self-mentalize (i.e., to understand the feelings and motivations behind one's own behaviour) may be uniquely important to understanding consent motivations. By extension, it may be important to consider the role of internal consent, or one's sense of arousal and wantedness within a sexual encounter, which has been characterized as an important

precursor to articulating one's desires during sexual consent communication (Walsh et al., 2019). Furthermore, items on the Dyadic Perspective-Taking Scale appear to be more conflict- or disagreement-focused than items on the MentS: Items on the DPT emphasize discrepancies in one's own point of view vs. one's partner's point of view, whereas items on the MentS focus more broadly on understanding one's own and others' feelings/desires and the reasons for their behaviour, as well as the motivation to engage in perspective-taking processes. Previous studies indicate that *avoidance* of conflict and disagreements is a core barrier for consent communication (e.g., Edwards et al., 2022); therefore, a perspective-taking measure focused on conflict may not capture the full range of perspective-taking skills that are relevant to sexual consent motivations.

Finally, Study 1 supported a link between emotion regulation and consent motivations, but a link between experiential avoidance and consent motivations was not identified in Study 2. This may be related to differences between the constructs of emotion regulation and experiential avoidance, as outlined above.

Theoretical Implications

The findings of Study 2 have key implications for the refinement of the proposed *Cognitive-Affective Model*. For example, they confirm the relevance of perspective-taking as a critical cognitive mechanism that links attachment insecurity to consent communication motivations and behaviours. Contrary to predictions, emotional avoidance did not significantly predict consent motivations or behaviour, suggesting that cognitive factors (as opposed to affective factors) may be especially relevant in predicting who is likely to avoid vs. engage in consent communication.

Additionally, the finding that attachment avoidance had a direct effect on consent motivations has key implications for who may benefit from intervention targeting consent motivations specifically. Previous research demonstrates that people with different forms of attachment insecurity respond differently to relationship interventions (e.g., Bernstein et al., 2015; Kilmann et al., 1999), so tailoring interventions to meet the needs of specific attachment styles will likely increase their efficacy. Returning to the topic of consent, the findings of Study 2 fit with findings from previous research suggesting that avoidantly and anxiously-attached individuals have different motivations for consenting to unwanted sex (Impett & Peplau, 2002). Avoidant individuals may view consent negotiations as inherently aversive, even when controlling for cognitive skills.

The findings of Study 2 also have broader implications for research examining the role of attachment in sexual consent communication. The two styles of attachment insecurity are rooted in different concerns: Attachment anxiety centres on fear of rejection whereas attachment avoidance is defined as discomfort with intimacy (Fraley et al., 2015). The current study demonstrates that these two concerns have separate effects on what barriers individuals perceive towards consent communication. The mediating effects of perspective-taking and consent motivations highlight the importance of cognitive processing in navigating consent discussions. Rather than simply overcoming emotional avoidance or developing a set of communicative skills specific to sexual consent, the development of cognitive skills like mentalization and perspective-taking may be required to facilitate more direct consent communication.

Methodological Contributions and Strengths

Unlike prior studies relying on self-report Likert-type measures, this study used open-ended vignettes, reducing social desirability bias and allowing for a more ecologically valid

assessment of consent communication. The vignette-based approach also provided a more nuanced view of verbal and nonverbal consent strategies, addressing previous measurement limitations in the field, and which I built on in the methods for Study 3. Additionally, the use of hypothetical vignettes allowed for the inclusion of participants regardless of their relationship status. Future research may build on this measure by increasing its reliability: Though I predicted variation in emotional valence given the content of the vignettes, the relatively low within-participant reliability for directness was unexpected. The vignettes were designed to vary on several dimensions including verbal/nonverbal, providing/obtaining consent, and others; it is possible that the variation within the vignettes reduced internal consistency. Furthermore, the number of vignettes completed by each participant and included in the analysis was relatively small, which can restrict alpha values.

Limitations

The sample obtained for Study 2 is more expansive with regard to age and education compared to many studies of sexual consent communication, which tend to utilise college student samples (see Anyadike-Danes et al., 2024; Hickman & Muchlenhard, 2016). However, the generalizability of this sample is still limited in several ways. First, participants were recruited primarily from Canada and the United States via Prolific. Emphasis on and conceptualizations of sexual consent communication differ by cultural context (Levand, 2020; Mukai et al., 2024), meaning the results are likely not generalizable to groups outside of the countries sampled. Furthermore, the sample was majority White which may have implications for generalizability within North America as well. Additionally, while the study included diverse gender identities and sexual orientations, sample sizes for certain groups were small, limiting the ability to detect group differences. Although Prolific uses measures to safeguard the integrity of

data and we used qualitative responses to evaluate whether participants were responding genuinely, the use of an online convenience sample poses concerns about participants' level of attention and genuineness in responding.

The low reliability of the directness and valence measures is a considerable limitation. Low internal consistency on these measures could be related to the restricted range of responses, particularly for valence, as well as the fact that only 4 items were used for each score. The items were also selected to intentionally represent consent communication in a variety of contexts; although this approach allows for a more comprehensive assessment of consent communication skills, an important trade-off is that the vignettes may be capturing different constructs (e.g., the requisite skills may differ for initiating sexual activity vs. responding to initiations). Relatedly, gender differences in the sexual script may have impacted the consistency of responses: For example, participants may have responded more directly in situations that were viewed as more typical for men (e.g., obtaining consent), and less directly in situations that are viewed as more typical for women (e.g., sexual refusal), consistent with the traditional sexual script that encourages men to take a more active role and women to communicate consent via passive means (Jozkowski & Peterson, 2013). Further refinement of the vignette measure to improve reliability will be important for future work.

The lack of significant findings related to emotional avoidance may also be a result of measurement limitations. For example, the vignette measurement used in this study explicitly examined consent communication in new relationships, where avoidance of emotions may be less central. Consent is communicated differently in longer-term relationships (Humphreys, 2007; Willis et al., 2021): Individuals establishing consent in new relationships may rely on broader social scripts related to consent in order to reduce ambiguity and negotiation (Rittenhour

& Sauder, 2024). Reliance on scripts may be less emotionally involved than dyad-level negotiation of preferences and boundaries that is likely to occur after couples have become emotionally committed. Future research could use alternative emotional avoidance measures, examine the role of other types of emotion regulation strategies, or examine consent in the context of long-term relationships (where experiential avoidance strategies may be more prominent or may have a more pronounced impact on sexual dynamics).

Finally, though a major goal of Study 2 was to determine whether the findings of Study 1 would be replicated with a behavioural, more objective measurement of perspective-taking, I was unable to use the MASC-R as a measure of perspective-taking in mediation analyses.

Unfortunately, the MASC-R did not correlate with most of the measures of interest, contrary to hypotheses. One possible explanation is that the low reliability of the MASC-R constrained the extent to which this measure could correlate with other variables. The lower reliability of the MASC in this study ($\alpha = .64$) compared to the original validation study for the MASC ($\alpha = .84$; Dziobek et al., 2006) suggests possible measurement error in the MASC-R. However, previous studies have found similarly low internal consistency for the original version of the MASC (e.g., Lenton-Brym et al., 2018; Schwarzer et al., 2021). Future studies could account for this by using alternative behavioural tasks or through further refinement of the MASC-R (e.g., item analysis).

There is also evidence that, in general, task-based measures of perspective-taking yield quite different information about cognitive processes than do self-report measures: Murphy and Lilienfeld (2019) conducted a meta-analysis of self-report versus behavioural measures of cognitive empathy (which shares significant conceptual overlap with perspective-taking) and found that self-report measures of this construct account for only 1% of the variance in behavioural scores, suggesting that self-report measures of perspective taking may measure a

different construct than test-based measures. These findings likely explain why scores on the MASC did not correlate with either self-report measure of perspective-taking; similar findings with other behavioural measures of perspective-taking might suggest that self-report and behavioural measures have different implications for consent motivations and behaviour. Additionally, Apperly (2012) suggests that deployment of mentalizing skills depends on additional factors such as motivation to mentalize and available cognitive resources; these factors may contribute differentially to one's perception of their perspective-taking skill vs. their performance on various perspective-taking tasks. As a result, Apperly advocates for a multidimensional assessment of mentalizing in research studies to better understand the contextual factors that motivate use of mentalizing skills. The simultaneous inclusion of reliable behavioural and self-report measures in future studies could allow for a richer assessment of perspective-taking and comparison of how participants' own perceptions of their perspective-taking abilities vs. their performance on a perspective-taking task are associated with communicative behaviours.

Next Steps and Directions for Future Research

The results of Study 2 indicate a need for future research in three key areas: exploring the link between sexual consent communication and emotional avoidance in different contexts, developing strategies for improving perspective-taking skills, and examining gender differences in sexual consent communication.

As discussed previously, the emphasis of the new vignette measure for consent communication was on new, less-established relationships. This is consistent with the majority of consent communication research and with sexual script theory (Gagnon, 1990), which suggests that consent scripts within a relationship become more idiosyncratic and nuanced over time,

making it difficult to evaluate consent communication behaviour in an established relationship (as what is considered skilful in one relationship may be unacceptable in another). However, recent research has begun to investigate consent communication in longer-term relationships, recognizing the role of such communication even in relationships where the sexual script is already established (e.g., Willis et al., 2021). This suggests the need for measurement tools that separately capture the experience of consent communication in long-term relationships. Furthermore, the role of experiential avoidance may differ between newly-established and long-term relationships: In newly-established relationships, people tend to rely more heavily on socially-prescribed sexual scripts, as these scripts generally ensure shared expectations for behaviour (Metts & Spitzberg, 1996). The process of re-negotiating these scripts according to partner preferences and desires is complex, and developing a mutually satisfying script requires self-disclosure and effective communication from both partners (Lawrance & Byers, 2005; Metts & Spitzberg, 1996). This suggests that greater emotional involvement is typical as relationships progress, which may motivate greater experiential avoidance. Future studies could therefore also test whether emotional avoidance is more influential in long-term relationships, where individuals have stronger relational histories and expectations about consent communication.

Study 2 emphasizes the central role of perspective-taking in influencing how participants communicate about sexual consent in their relationships. Given the importance of perspective-taking, it is likely that interventions aimed at enhancing mentalization and cognitive empathy would be useful for improving consent communication in insecurely-attached individuals. Experimentally-induced perspective-taking has been shown to have positive effects for people with insecure attachment: Studies show that brief perspective-taking manipulations can have positive effects on relationships, such as increasing partners' physiological attunement (Nelson et

al., 2016), decreasing blame (Arriaga & Rusbult, 1998), and promoting relationship-enhancing attributions for partner behaviour (Arriaga & Rusbult, 1998). Further, at least one study has shown that perspective-taking can buffer against the effects of insecure attachment (Henschel et al., 2020). Experimental studies would be helpful in examining whether training in perspective-taking improves directness in consent discussions.

Finally, future studies can more directly account for the role of gender in the proposed model. In Study 2a, several vignettes were perceived as significantly more likely to happen to women than men. Sexual consent communication is influenced by gender, as men and women communicate, interpret, and even define sexual consent differently (Edwards et al., 2024; Jozkowski et al., 2014) and because traditional sexual scripts have erroneously perpetuated several gendered expectations about who should communicate consent and how (Jozkowski & Peterson, 2013; Wiederman, 2005). Therefore, future studies may focus on identifying gender differences in consent communication behaviours; in the assessment of consent communication; or in the ways that attachment, perspective-taking, and emotional avoidance influence sexual consent communication.

Study 3

Background

The goal of Study 3 was to further develop the cognitive pathway of the model by testing whether a brief perspective-taking intervention could buffer the effects of attachment insecurity on sexual consent motivations and behaviours. Unlike the correlational approaches used in Studies 1 and 2, an experimental manipulation was implemented in Study 3 to test the cognitive pathway. An experimental design would also provide stronger evidence for the model's hypothesized causal pathways by directly manipulating one of the proposed mechanisms. Additionally, to address concerns about participants being able to reflect on and edit their responses to increase social desirability, I implemented a voice-recording method to obtain participants' responses to the sexual consent communication dilemmas. This method had the added potential advantage of providing richer information about communicative valence, as I was able to collect information on participants' tone of voice and expressed emotion when asked to speak as if they were addressing their partner directly.

Existing Perspective-Taking Interventions

A number of methods have been used to enhance perspective-taking: these include psychotherapy methods, educational training programs, and experimental inductions. Batson and colleagues (1997) developed one of the most commonly-used perspective-taking interventions, which consists of a brief prompt to “imagine how [the other person] feels about what has happened and how it has affected his or her life” (p. 753). This is often contrasted with instructions to focus on one's own perspective (self-focus) and a neutral perspective (objective-focus). A literature review by Todd and Galinsky (2014) found that perspective-taking prompts can positively shift intergroup relations by improving explicit evaluations of outgroup members

and contributing to more positive intergroup interactions. Perspective-taking prompts have also been shown to increase cooperation on a prisoner's dilemma task (Batson & Moran, 1999). One study by Leong and colleagues (2015) examined the use of the perspective-taking prompt in couples. One member of each couple was asked to submerge their hand in a bucket of ice water. Prior to this, if their partner was randomly assigned to receive a perspective-taking prompt, the partner receiving the prompt showed more empathy toward the partner submerging their hand, and the partner submerging their hand reported less pain when doing so. This had positive downstream effects on couple interactions (Leong et al., 2015). Arriaga and Rusbult (1998) also conducted vignette-based experiments showing that being asked to visualize scenarios from the partner's point of view (vs. self-focus) produced more positive affect, more benevolent interpretations of partner behaviour, and a stronger inclination towards accommodating or constructive conflict-resolution strategies.

Other brief perspective-taking inductions include telling participants that research demonstrates perspective-taking has a positive impact on negotiations (Trötschel et al., 2011), visuospatial manipulations in which the participant must mentally rotate an image to assume the other person's perspective (Erle & Topolinski, 2017; Kessler & Rutherford, 2010; Surtees et al., 2013), simulated social media interactions (Bowman-Smith et al., 2021), and virtual-reality simulation tasks (Gehlbach et al., 2015). These interventions have generally been shown to successfully increase perspective-taking in social contexts.

Educational programs to improve perspective-taking most often take the form of classes, courses, or workshops. One United States Army program involves a two-day, pre-deployment curriculum focused on teaching about heuristics, self-reflection on one's own biases, generating multiple hypotheses for another's thoughts or behaviour, and gathering information to test and

adapt these hypotheses (Gehlbach et al., 2012). The curriculum involves lectures, discussion, and video-based case examples, and was shown to improve bias detection and ability to generate and adapt hypotheses. Interestingly, this curriculum did not improve immediate perspective-taking accuracy, though it can be argued that this is not a primary objective of perspective-taking education, as the goal is not to become a “mind-reader” but to make reasoned guesses about others’ stances and flexibly adapt these guesses as more information is obtained. Further, the authors suggest that accuracy may be improved through experience applying the skills from the curriculum in the field, which was not assessed in the study.

Research on couple-specific interventions to improve perspective-taking has shown promising outcomes for relationships. Ramezani and colleagues (2020) delivered an 8-session, immersive, feedback-based training program focusing on developing skills such as eye tracking, intention tracking, joint attention, mindfulness and perspective-taking. They found that this program improved couples’ intimacy relative to a control group. Similarly, a 5-week empathy training⁸ program for couples was found to improve empathy, perception of one’s partner’s empathy, and relationship satisfaction at a 6-month follow up (Long et al., 1999). This program focused on providing psychoeducation about empathy, practicing self- and other-monitoring, and role-play or rehearsal of skills both in-session and between sessions. Block-Lerner and colleagues (2007) have suggested that mindfulness- and acceptance-based approaches may be an important adjunct to empathy training for couples. Longer-term approaches, such as mentalization-based couples’ therapy (Nyberg & Hertzmann, 2018) have also been developed to improve perspective-taking capacity between partners.

⁸ Although labelled an “empathy training program,” the authors explicitly state that they define empathy and perspective-taking as synonymous; the same is true of many of the experimental inductions reviewed in this section.

Feiring and Li (2025) developed a 3-minute intervention to teach LGBTQ+ emerging adults relationship-specific perspective-taking skills. This was a pilot intended to gauge interest in a longer-version of the intervention. The researchers created an animated video explaining the importance of perspective-taking and briefly explaining skills such as active listening, paraphrasing, and empathizing. Results showed that LGBTQ+ individuals had positive impressions of the video and viewed it as valuable; they also reported behavioural intentions to practice perspective-taking with their partners.

For the purposes of Study 3, I designed my own perspective-taking intervention in order to test the role of skills education (which might be expected to have a more enduring effect than a brief experimental induction) and to ensure that the content was tailored to couples' communication about sexual issues. The intervention was designed as a brief, social media-style educational module modeled after health promotion content typically found on platforms like Instagram. This format was chosen for its potential to reach wider and more diverse audiences beyond traditional university-based consent education programs, and because LGBTQ+ youth in particular have been shown to seek information about sexuality online (Nikkelen et al., 2020).

The intervention consisted of four core modules, each presenting an actionable perspective-taking skill relevant to sexual communication: (1) Create an Accepting Atmosphere (choosing the right setting for difficult conversations), (2) Ask, Don't Assume (asking clarifying questions rather than making assumptions about a partner's mental state), (3) Tune Into Their Feelings (attending to nonverbal and emotional cues), and (4) Understanding Doesn't Always Mean Agreeing (recognizing that partners can understand each other's perspective while still disagreeing). Drawing on social learning theory (Bandura, 1971), each module included an

example of a hypothetical couple, Joe and Samantha, demonstrating how to apply the skill to resolve a sexual frequency concern in their relationship.

To maximize engagement and facilitate application to participants' own relationships, the intervention incorporated several evidence-based strategies derived from Walton and Wilson's (2018) principles for psychologically wise interventions. These included: (a) framing perspective-taking as a developable skill rather than a fixed trait (growth mindset; Dweck, 2006), (b) prompting participants to actively reflect on times they had used (or could use) each skill in their own relationships, and (c) employing a saying-is-believing technique (Higgins & Rholes, 1978) by telling participants their examples might be used to educate future participants, thereby increasing ownership of the material.

The Role of Attachment in Perspective-Taking Interventions

Given the proposed Cognitive-Affective Model includes attachment as a central predictor, it was important to understand how attachment might impact a perspective-taking intervention. The harmful effects of attachment insecurity can be buffered by partner behaviours, such as expressing gratitude (Park et al., 2019) and using softening non-verbals (Overall et al., 2013). At the individual level, there is also evidence suggesting that mindfulness can reduce the impact of attachment anxiety (Dixon et al., 2022), though there does not appear to be research that tests this relationship experimentally. Attachment itself can also be temporarily primed via attachment-related words, images, mental imagery tasks, and writing tasks (see Rowe et al., 2020 for an in-depth review). In the current study, I was interested to see if enhancing participants' perspective-taking would reduce the impacts of attachment insecurity, specifically in the sexual consent communication context.

To date, there is limited research exploring the interplay between attachment and experimentally-induced perspective-taking or empathy. Henschel and colleagues (2020) examined physiological responses to a series of pictures evoking distress, comfort, or a neutral state, following a self-perspective-taking (asking participants to imagine how they would feel in the situation) or other-perspective-taking (asking participants to imagine how the people in the picture would feel in the situation) prompt; there was also a baseline condition with no prompts. Physiological reactivity to distressing and comforting images was higher for anxiously attached individuals following the self-perspective-taking prompt, compared to avoidantly attached or securely attached participants. The authors suggest that these findings illustrate anxiously attached individuals' hyperarousal in response to socially-relevant information (whether positive or negative), which they speculate may interfere with effective responding in interpersonal interactions. Additionally, this may suggest potential drawbacks of a self-perspective-taking approach. A second study by Bernstein and colleagues (2015) found that a perspective-taking induction prior to a conflict discussion buffered the effects of partner attachment avoidance on self-partner overlap, increasing perceptions of connectedness compared to control.

The evidence from Studies 1 and 2 suggest that it is particularly important to address perspective-taking for insecurely attached individuals in the context of consent communication. Thus, to address the paucity of research examining the link between attachment and experimentally-induced perspective-taking, I decided to include attachment measures in Study 3 to determine whether an intervention could buffer the impact of attachment style.

Predictions

I expected that the perspective-taking intervention would generally lead to enhanced sexual consent motivations and more direct consent communication behaviour. However, I also

predicted that this effect would be moderated by attachment security, such that high attachment anxiety and avoidance would predict a stronger response to the intervention. Given that Studies 1 and 2 established a link between attachment security and perspective-taking capacities, it is likely that people with high attachment security already possess effective perspective-taking capacities and strong consent motivation/behaviour. Therefore, they may benefit less from the intervention than those with insecurities that prevent or limit them from effectively assessing their partner's state.

Method

Participants

Participants were recruited on Prolific, with 212 remaining after data screening. All participants were required to be at least 18 years of age and located in Canada or the United States. In total, 235 responses were collected; however, 15 were removed as they did not complete any measures of interest, 3 did not complete the study because they indicated they could not record sound, and 3 participants revoked their consent following a debrief of the deception used in the study. Following coding of qualitative data, two additional responses were removed because they were suspected of being the same participant completing the study multiple times due to similarities in vocal tone and response content. Of note, only 185 participants were able to complete the audio recording portion of the study due to a technical error; the remaining 27 completed the text-based portions of the study and were included in any analyses that did not include audio response variables.

Participants included 73 men (including 1 trans man), 117 women, 2 nonbinary individuals, 2 two-spirit individuals, and 1 genderqueer individual. The mean age of participants was 38.32 years ($SD = 13.04$ years), with participants' ages ranging from 18 to 72 years. Most of

the sample was white ($n = 106$; 49.5%), and the sample also included participants who were Black ($n = 48$; 22.4%), East Asian ($n = 18$; 8.4%), South Asian ($n = 17$; 7.9%), Hispanic/Latino ($n = 8$; 3.7%), and First Nations ($n = 6$; 2.8%). Twelve participants indicated they were an ethnicity not listed on the questionnaire including Middle Eastern or Arab, North African, Southeast Asian, and mixed-race.

About half ($n = 102$; 47.7%) of participants were in a committed and exclusive relationship at the time of the study. Of the remainder, 38 participants indicated they were single and not dating, 22 were dating one person exclusively, 13 were in a committed relationship while also in a relationship with someone else, 12 were casually and nonexclusively dating, 3 were in a new and exclusive relationship, and 3 were in an open relationship. One person wrote in that they were separated. Regarding sexual orientation, the majority of participants ($n = 143$; 66.8%) identified as heterosexual. Thirty-two participants indicated that they were bisexual, 9 were pansexual, 9 were asexual, 4 were aromantic, 4 were gay, 4 were lesbian, 3 were queer, 2 were questioning/unsure, and 2 preferred not to disclose their sexual orientation.

Participants also reported their highest level of education. Fifty-one participants reported that they had completed a high school diploma (23.8%); 31 had completed a college diploma (14.5%); 75 had completed a Bachelor's degree (35.0%), 31 had completed a Masters degree (14.5%), and 5 had completed a doctoral degree (2.3%). One participant indicated that they had completed some college but did not earn a diploma.

Intervention Design and Development

Development Procedure

Based on a review of other perspective-taking interventions and principles which are outlined below, I drafted the text of the intervention, which was reviewed by my supervisor and

edited for increased clarity, message impact, and believability. After adding illustrations and other visuals, I solicited feedback on the intervention from graduate and undergraduate students in my lab. Their feedback was also incorporated to create the final version of the intervention that was shown to participants. Examples of lab feedback included suggestions for modifying the language to sound more casual and accessible to a general population audience, as well as the addition of interactive components to increase participants' ability to reflect on the material and consider how they might apply it to their own lives. It was also suggested to include wording that normalized the experience of having difficulty with perspective-taking and sexual communication, and to include examples of slight communication errors or misunderstandings to reduce the possibility that participants might view the content as too idealized.

Key Intervention Messages

The perspective-taking intervention was designed based on findings from the perspective-taking literature as well as principles from other perspective-taking and relationship education interventions that have been used in research (e.g., Batson et al., 1997; Davila et al., 2021; Gehlbach et al., 2012; Long et al., 1999). These included a focus on choosing the right setting for conversations, asking clarifying questions to better understand the partner's mental state, attending to nonverbal emotional cues, and understanding that partners can disagree and still understand each other's perspective.

Intervention Format

I modelled the style and presentation format of the intervention (e.g., use of infographics) after educational campaigns delivered on social media. Social media has increasingly been used as a cost-effective method to disseminate information to wide audiences about health promotion and psychoeducational topics such as weight management (Jane et al., 2018), smoking cessation

(Phua, 2013), and prevention of STI transmission (Gabarron & Wynn, 2016). Educational material delivered via social media has the potential to reach wider and more diverse audiences, including marginalized groups who may not have access to traditional health promotion avenues (Moorhead et al., 2013; Neiger et al., 2012). A large proportion of consent interventions are delivered through higher education (Burton et al., 2023; Kubota & Nakazawa, 2024), so using a social media campaign could be a tool to disseminate information beyond undergraduate student populations. Supporting the argument that social media has unique impacts for marginalized groups, Nikkelen and colleagues (2020) found that lesbian, gay, and bisexual youth were more likely to consult online sources for information about sexuality than their heterosexual peers. Additionally, a recent review of qualitative studies concluded that when messages are conveyed in an appropriate tone (i.e., balancing entertainment with educational value), young people perceive social media as a valuable health promotion platform due to its ease of access, increased interactivity, and integration within the audience's pre-existing social environments (Engel, 2023). Although research has typically focused on the power of social media to educate adolescents and young adults, recent studies have also investigated the role of social media in health promotion for broader age groups (including middle-aged and older adults) following the COVID-19 pandemic (e.g., Petkovic et al., 2021; Tang et al., 2026; Zhang et al., 2025).

Instagram is among the most popular social networking sites today and is one of the most frequently-used apps used to promote and search for health information, particularly among younger people (Lim et al., 2022). Therefore, I designed the intervention to be stylistically similar to content that might be uploaded to Instagram by a health promotion account. Consistent with the design of the Instagram platform at the time of data collection, the intervention used square-shaped panels that were colourful and included both text explaining the key messages as

well as relevant clip art that illustrated the points being made. Text overlaid on an image in this manner can enhance perceived message effectiveness (vs. photos alone, text in the caption of the post, or text split between the image and the caption; O'Donnell & Willoughby, 2017).

The perspective-taking module contained 4 sections, each with an actionable tip for integrating perspective-taking (and motivation to perspective-take) into sexual communication and an example of a hypothetical couple demonstrating the skill to resolve a problem in their relationship (see Appendix C for additional details). Inclusion of the hypothetical couple was based on principles of social learning theory, which suggests that people can learn new skills through observation of others practicing those skills (Bandura, 1971) and which has long been recommended as an approach to health behaviour education (Parcel & Baranowski, 1981). The couple in the infographic, Joe and Samantha, were described as struggling with issues of sexual frequency after a few months of dating. Over the four examples, Joe creates a positive/relaxing environment before bringing up the problem ("Create an Accepting Atmosphere"), asks questions to check his understanding against Samantha's ("Ask, Don't Assume"), attends to Samantha's emotional and nonverbal reactions during the conversation ("Tune Into Their Feelings") and accepts differences that arise during the discussion with an open mind to compromising ("Understanding Doesn't Always Mean Agreeing"). The modules and corresponding examples appeared in the same order for each participant. Once all four of the modules were presented, a summary image stated the main message of the module: "Taking your partner's perspective enhances sexual communication in any type of sexual relationship, whether it's a casual relationship or a long-term commitment." I included the University of Waterloo logo on this summary image to enhance the credibility of the intervention.

Intervention Engagement Strategies

I implemented a number of strategies to increase participant engagement with the intervention and facilitate application of the intervention's content to participants' own relationships. These included the use of interactive components to facilitate deeper thinking about the intervention content, inclusion of a hypothetical couple that served as a role model for participants to learn from, and a cover story that encouraged participants to believe their response to the intervention would be used to help other intervention participants. These strategies were derived from recommendations made by Walton and Wilson (2018), who developed a series of best practices for “psychologically wise interventions,” or interventions “that focus on ... the meanings and inferences people draw about themselves, other people, or a situation they are in and use precise, theory- and research-based techniques to alter these meanings” (pp. 618). The strategies implemented in the present study, and their theoretical justification, are detailed below.

Emphasis on Growth Mindset. Participants were given some background information stating that studies have shown that perspective-taking can enhance sexual communication and promote more satisfying relationships. Consistent with research suggesting that a growth mindset (i.e., belief that abilities are not fixed and can be developed over time; Dweck, 2006) is associated with decreased anxiety about learning (Zarrinabadi et al., 2021), decreased cognitive load, and improved learning outcomes (Xu et al., 2021), the preamble also explained that perspective-taking skills can be developed rather than being fixed traits, and as such our lab was pilot testing a perspective-taking module specific to sexual communication. Participants were told that “the goal of the model is to help you recognize opportunities to practice perspective-taking and prepare you for situations where you might use this skill.”

Prompting Meaning-Making, Increasing Commitment Through Action, and Active Reflection. Walton and Wilson (2018) emphasize the importance of subjective meaning-making in creating lasting change; in other words, interventions should help people change the way they make sense of themselves and social interactions, rather than imposing an “objective truth” about the behaviour in question. In order to achieve this meaning-making, they recommend tactics such as encouraging recipients to actively reflect on specific changes they can integrate into their lives, addressing potential barriers to change (e.g., negative beliefs that undermine the target behaviour/outcome), and increasing commitment through action (e.g., by having the audience advocate for the target ideas of the intervention as if they already endorsed the ideas). This can be achieved through techniques such as having participants advise others on the concepts.

After each section of the perspective-taking module, participants were asked to provide either an example of a time that they acted in a way that exemplified the behaviours described in that section (e.g., “Tell us about a time when you asked questions instead of making assumptions for a conversation with a partner about a sexual issue”), or to give an example of how they might do so in the future (e.g., “Or, tell us about questions that you could ask, instead of assuming, in a future conversation with a partner”). The language used in these prompts was deliberately chosen to reflect the assumption that participants already have the tools to engage in perspective-taking, as has been done in previous studies to decrease cognitive dissonance and potential resistance to information that conflicts with one’s view of themselves (e.g., Marigold et al., 2007). This process also encouraged active reflection on the intervention’s content, as opposed to passive receipt of information.

Building on the suggestion that participants already have tools to effectively take their partner’s perspective, the intervention in Study 3 made use of the saying-is-believing technique

(Higgins & Rholes, 1978) to enhance message effectiveness. Using this technique, a subject is asked to tailor a message for another audience (e.g., to provide advice to another learner), which leads the subject to think more actively about the idea and increases the likelihood they will adopt the ideas within the message. Walton and Wilson argue that this method leverages prosocial motivations, increases the persuasiveness of the message, and helps people take more ownership of the new information as they integrate it with their own lives. In the current study, participants were told that the intervention module draws on examples from real-life couples and that the examples they provided after each prompt might be anonymously used to educate future intervention participants.

Procedure

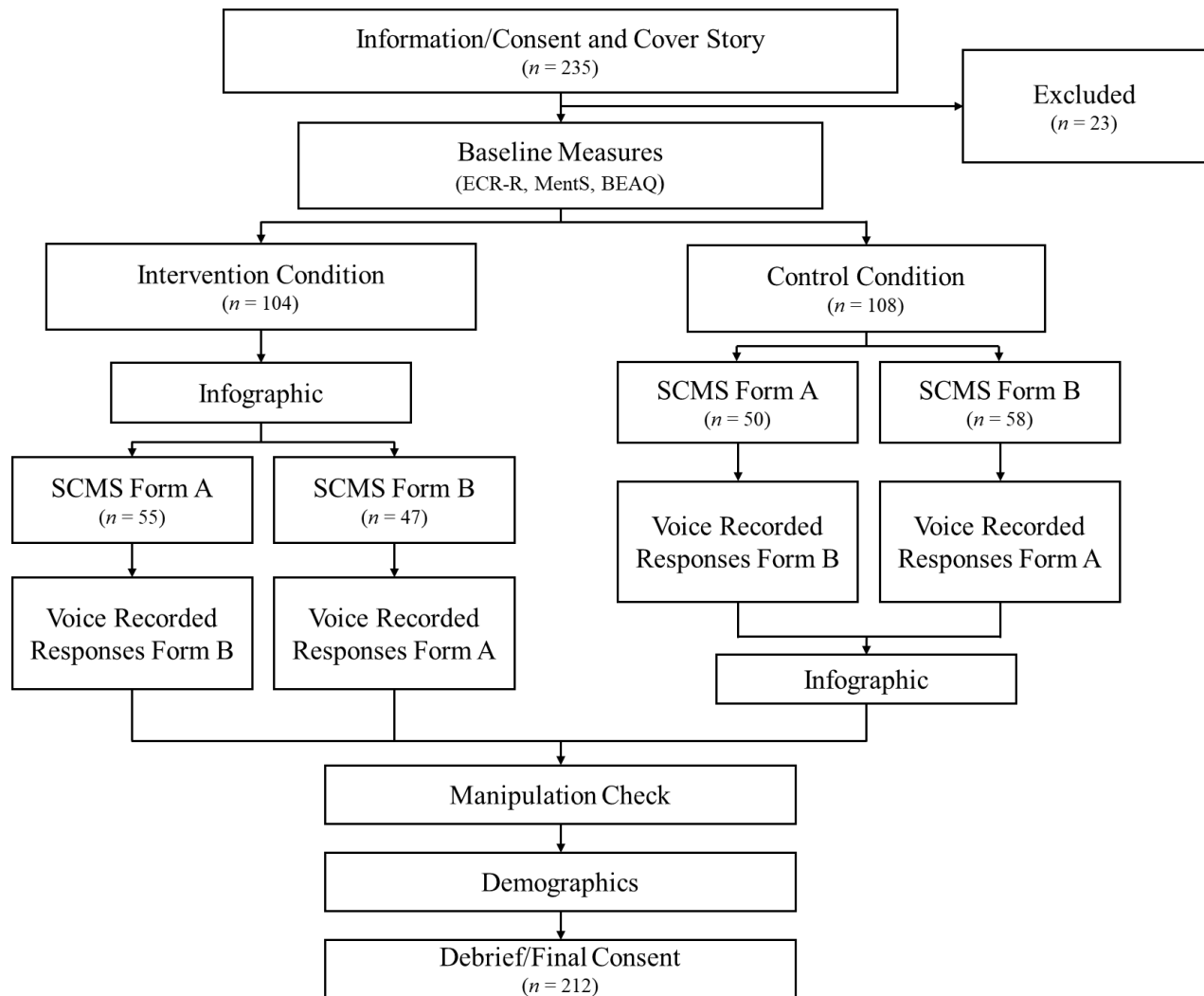
In order to minimize demand characteristics related to the perspective-taking intervention, participants were told that the purpose of the study was for researchers to gain feedback about two separate educational programs designed to improve sexual communication in the general population. They were told that one of these programs involved reading educational materials and that the other would involve answering questions about sexual consent scenarios as a way of preparing them to deal with those situations in real life. Participants completed screening items to assess whether they were able to participate in the audio recording components of the study and were screened out if they indicated they did not have a working microphone on their device or that they were not in a location where they were able to speak comfortably and openly.

Next, participants completed the ECR-R and other baseline exploratory measures prior to participating in the experimental tasks. In the experimental condition ($n = 104$), participants first read the perspective-taking intervention and then responded to the sexual consent scenarios;

these tasks were completed in the opposite order for the control condition ($n = 108$). After completing both tasks, participants completed a manipulation check and demographic questionnaire and then were debriefed about the true purpose of the study. Because of the deception used, participants had a final opportunity after the debrief to provide consent for us to use their data. Figure 5 contains a flowchart summarizing the study procedure.

Figure 5

Procedural Flowchart for Study 3



Note. Exclusions were as follows: screened out before participating due to meeting technological requirements ($n = 3$); or, screened out after participation due to not responding to the primary study measures ($n = 15$), revoking consent following debrief ($n = 3$), or for suspected fraudulent responding ($n = 2$). Two participants were assigned to the intervention condition and completed the infographic but did not complete the SCMS and subsequent measures.

Study Materials

Attachment Insecurity

Participants completed the ECR-R as a measure of attachment insecurity. Both subscales had excellent reliability ($\alpha_{\text{anxiety}} = .95$; $\alpha_{\text{avoidance}} = .96$).

Intervention Manipulation Checks

At the end of the intervention, participants were asked to describe the main message of the flyer in their own words and complete an attention check in which they were presented with the section titles from the intervention (i.e., “Create an Accepting Atmosphere,” “Ask, Don’t Assume,” “Tune Into Their Feelings,” and “Understanding Doesn’t Always Mean Agreeing”) in addition to a decoy response (“Focus on Emotions, Not Solutions”) presented in a randomized order. Participants were asked to choose which subheading was *not* included in the intervention (i.e., the decoy response); three-quarters ($n = 163$; 76.2%) of participants passed this attention check. They also provided feedback about the infographic by rating 6 statements (e.g., “I learned something new from this infographic,” “This infographic teaches important information”) on a 7-point scale from “Strongly Disagree” to “Strongly Agree”.

Additionally, coders assigned scores to participants’ qualitative responses to each of the 4 modules of the intervention and the intervention summary. For each module, participants were asked to describe a time when they used the skill or when they could use the skill in the future. These responses received a score of 0 points (response does not describe use of the skill), 1 point (response partially demonstrates the skill but is missing a key concept) or 2 points (response illustrates an effective example of skill application). The intervention summary was scored on a similar rating scale, with 0 points reflecting poor understanding of the intervention (e.g., inaccurate description or missing the key concept of perspective-taking), 1 point reflecting

partial understanding of the intervention (e.g., listing skills without noting the central concept of perspective-taking), and 2 points reflecting a response that clearly emphasizes the role of perspective-taking in romantic/sexual communication. A coding scheme was developed and reviewed with the coders, which contained general principles for coding and specific examples for each item. then each response was coded by 2 coders. I made the final decision on any coding discrepancies for the four skill application questions; however, I acted as one of the coders for the intervention summary, so the final codes for summaries were determined by my supervisor. Participants' scores on all the modules and the intervention summary were summed to create a total "intervention score" ranging from 0 points to 10 points. Cronbach's alpha suggested low but acceptable validity for the 5 items comprising the intervention score ($\alpha = .65$).

Sexual Consent Motivations and Behaviour

Measurement of consent motivations and behaviour was conducted in a similar manner to Study 2. Key changes included the introduction of a preamble that told participants that this was an intervention designed to "help people rehearse their responses to sexual consent dilemmas that often arise ... and think about these kinds of situations more deeply" as well as the introduction of voice recordings to measure consent behaviour. First, participants responded to 5 vignettes (i.e., one of two Forms as described in Study 2) by completing the SCMS for that situation; reliability of these ratings ranged from .83 to .90 for each vignette. For the other form, participants were told to audio-record a response that described exactly what they would say or do in the situation, with specific instructions to include verbal communication in the same tone that they would use if they were actually communicating with their partner, as well as the nonverbal signals (e.g., body position, gestures, facial expression) they would use to convey the message. The instructions told participants that the research team was interested in their natural,

unrehearsed response and requested that they submit the first recording (in the absence of any technical issues). Voice recordings were collected using the Phonic.ai voice recording platform. Because Phonic does not capture number of recording attempts, participants were also asked to indicate the number of times they recorded their response before submitting. For each individual vignette, between 5 and 14 participants re-recorded their response at least once; 18 participants rerecorded multiple responses and 5 participants rerecorded all 5 of their responses. Of note, participants commented at the end of the study that there were technological problems recording their responses, which may account for all or a portion of the re-recordings.

After completing both tasks, participants were shown the set of vignettes that they recorded audio responses to for a second time. They were asked to write what they thought their partner would be thinking/feeling in each situation; this was included as an additional exploratory manipulation check and was not intended to be formally analyzed as part of the dissertation.

Coding for the audio responses used the same coding scheme as in Study 2b (see Appendix B) and was coded concurrently; three research assistants were trained to code audio responses. The same modifications were made to both the Study 2b and Study 3 coding scheme based on research assistant feedback. To account for the richer emotional data available in the audio responses, coders were encouraged to take the speaker's tone of voice into account when coding communicative valence, in addition to the content of the speaker's responses, though this was not formally recorded in the coding scheme. Table 12 shows the frequency of each code by vignette. Reliability (internal consistency of a participant's responses to each vignette) was low for the directness measure ($\alpha = .41$ for Form A and $\alpha = .54$ for Form B) and the valence measure ($\alpha = .56$ for Form A and $\alpha = .60$ for Form B).

Table 12

Frequencies of final qualitative codes (codeable responses only) in Study 3.

Form	Vignette #	Directness Codes					Valence Codes				
		0	1	2	3	4	0	1	2	3	4
A	1	0	5	7	16	61	1	10	33	27	18
	7	1	4	9	30	47	1	4	47	31	8
	10	1	5	8	50	18	1	3	50	18	10
	11	0	4	4	30	50	7	32	42	6	1
	6†	0	9	7	38	30	1	14	53	13	3
B	3	1	10	4	30	38	2	12	29	30	10
	4	0	0	2	43	83	2	27	30	15	9
	9	0	7	9	33	33	0	19	44	16	3
	12	0	2	5	15	60	1	4	44	16	17
	18†	1	3	6	27	46	1	10	41	24	7

Note. Vignette numbers are retained from their labelling in Study 2a to maintain consistency across studies. †Denotes exploratory

vignettes not originally planned to use in analyses.

Results

Descriptive statistics for the ECR-R, intervention score, and consent communication variables are depicted in Table 13. Attachment anxiety and avoidance were significantly correlated, $r = .29, p < .001$. There were no significant correlations between the intervention score and either attachment anxiety ($r = .01, p = .92$) or avoidance ($r = -.02, p = .76$).

Independent-samples t-tests confirmed there were no significant differences between the experimental and control group on either attachment dimension ($p = .201$ for anxiety and $p = .735$ for avoidance).

Outlier analyses revealed 4 univariate outliers (all on communicative directness and valence). Running the analyses with Winsorized variables did not alter any of the results.

Perceptions of Perspective-Taking Intervention

On average, participants felt that they learned something new from the intervention ($M = 4.89; SD = 1.64$). Participants indicated that the intervention was easy to understand ($M = 6.24; SD = 0.88$) and viewed it as teaching important information ($M = 6.10; SD = 0.95$). Generally, participants felt that they understood how to apply the information to their own relationships ($M = 5.93; SD = 1.07$) and indicated that they were likely to use tips from the intervention in the future ($M = 5.63; SD = 1.44$). Finally, participants indicated that they were somewhat likely to share the infographics with a friend or peer ($M = 4.94; SD = 1.80$). These responses indicated that participants perceived the intervention as valuable, relevant, and appropriate.

Table 13*Descriptive statistics for Study 3 variables.*

Variable	Range	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
(1) ECR-R Avoidance	1.00-7.00	3.07	1.43	0.56	-0.17
(2) ECR-R Anxiety	1.00-7.00	3.34	1.48	0.11	-1.04
(3) Communication directness	0.67-4.00	3.31	0.55	-1.27	3.20
(4) Communication valence	0.00-4.00	2.24	0.59	0.23	1.57
(5) SCMS	1.00-5.10	2.81	1.00	0.03	-0.92
(6) Intervention Score	0.00-10.00	5.00	3.09	-.11	-1.16

Form Differences

Independent-samples t-tests were conducted to ensure there were no differences between the two forms. There was no difference between Form A and Form B for communicative directness, $t(183) = 0.29, p = .775$, communicative valence, $t(183) = -0.04, p = .969$, or consent motivations, $t(208) = 1.37, p = .171$. There was also no difference between those who were assigned to each form on either of the attachment measures, $ps = .211$ (for avoidance) and $.780$ (for anxiety).

Analytic Approach

Hierarchical regression analyses were conducted for each dependent variable (directness, valence, and consent motivations) to examine the effects of attachment insecurity (avoidance and anxiety) and experimental condition. Initial analyses examining the Attachment $\times$ Intervention interaction did not yield significant interaction effects; therefore, I included participants' total intervention scores (0-10 points) as a third predictor. Inclusion of the intervention score was exploratory in nature, aiming to clarify whether participants' understanding of the intervention influenced outcomes. Each regression followed a two-step process: Step 1 (main effects) examined the main effects of attachment (anxiety or avoidance), experimental condition, and the intervention score. In Step 2, I entered all two- and three-way interaction terms. All continuous predictors were mean-centered prior to analysis. Results for all analyses are summarized in Table 14 to Table 16.

Table 14

Hierarchical regression estimating effects of predictors on communicative directness (Study 3).

Variable	Model 1				Model 2			
Attachment Variable: Anxiety	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	3.37	0.06		<.001	3.36	0.06		<.001
Attachment anxiety	0.00	0.03	-.00	.995	0.02	0.04	.06	.632
Condition	-0.13	0.08	-.12	.125	-0.13	0.09	-.12	.138
Intervention score	0.04	0.01	.19	.010	0.04	0.02	.19	.070
Attachment $\times$ Condition					-0.03	0.06	-.06	.599
Attachment $\times$ Intervention score					0.00	0.02	-.00	.993
Condition $\times$ Intervention score					-0.00	0.03	-.07	.941
Attachment $\times$ Condition $\times$ Intervention score					-0.01	0.02	-.04	.745
R^2	.04				.05			
F for change in R^2	$F(3, 181) = 2.61,$ $p = .053$				$F(4, 177) = 0.18,$ $p = .951$			
Attachment Variable: Avoidance	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	3.36	0.06		<.001	3.36	0.06		<.001
Attachment avoidance	0.02	0.03	.05	.466	0.01	0.04	.04	.714
Condition	-0.12	0.08	-.11	.132	-0.14	0.09	-.13	.109
Intervention score	0.04	0.01	.19	.011	0.04	0.02	.20	.059
Attachment $\times$ Condition					0.02	0.06	.04	.699
Attachment $\times$ Intervention score					-0.01	0.01	-.04	.633
Condition $\times$ Intervention score					0.00	0.03	.01	.960
Attachment $\times$ Condition $\times$ Intervention score					-0.01	0.02	-.03	.736
R^2	.04				.05			
F for change in R^2	$F(3, 181) = 2.80,$ $p = .041$				$F(4, 177) = 0.14,$ $p = .969$			

Table 15

Hierarchical regression estimating effects of predictors on communicative valence (Study 3).

Variable	Model 1				Model 2			
Attachment Variable: Anxiety	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	2.21	0.06		<.001	2.19	0.06		<.001
Attachment anxiety	0.01	0.03	.01	.851	0.05	0.05	.11	.337
Condition	0.02	0.02	.10	.206	-0.01	0.02	-.06	.593
Intervention score	0.06	0.09	.05	.523	0.04	0.09	.03	.693
Attachment $\times$ Condition					-0.03	0.06	-.06	.638
Attachment $\times$ Intervention score					0.01	0.02	.09	.449
Condition $\times$ Intervention score					0.06	0.03	.21	.045
Attachment $\times$ Condition $\times$ Intervention score					-0.03	0.02	-.17	.134
R^2	.01				.05			
F for change in R^2	$F(3, 181) = 0.82,$ $p = .484$				$F(4, 177) = 1.56,$ $p = .188$			
Attachment Variable: Avoidance	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	2.21	0.06		<.001	2.21	0.06		<.001
Attachment avoidance	0.00	0.03	.01	.937	0.01	0.04	.03	.753
Condition	0.02	0.02	.10	.205	-0.00	0.02	-.02	.880
Intervention score	0.06	0.09	.05	.531	0.05	0.09	.04	.605
Attachment $\times$ Condition					-0.04	0.07	-.06	.601
Attachment $\times$ Intervention score					-0.01	0.01	-.10	.228
Condition $\times$ Intervention score					0.05	0.03	.15	.157
Attachment $\times$ Condition $\times$ Intervention score					0.04	0.02	.16	.064
R^2	.01				.05			
F for change in R^2	$F(3, 181) = 0.81,$ $p = .489$				$F(4, 177) = 1.77,$ $p = .137$			

Table 16

Hierarchical regression estimating effects of predictors on consent motivations (Study 3).

Variable	Model 1				Model 2			
Attachment Variable: Anxiety	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	2.74	0.09		<.001	2.76	0.09		<.001
Attachment anxiety	0.23	0.04	.33	<.001	0.29	0.07	.42	<.001
Condition	0.17	0.13	.09	.202	0.17	0.13	.08	.213
Intervention score	-0.05	0.02	-.17	.013	-0.02	0.03	-.07	.448
Attachment $\times$ Condition					-0.16	0.09	-.17	.091
Attachment $\times$ Intervention score					-0.02	0.02	-.09	.364
Condition $\times$ Intervention score					-0.07	0.04	-.15	.095
Attachment $\times$ Condition $\times$ Intervention score					0.03	0.03	.10	.271
R^2	.13				.14			
F for change in R^2	$F(3, 206) = 10.52,$ $p < .001$				$F(4, 202) = 1.85,$ $p = .121$			
Attachment Variable: Avoidance	<i>B</i>	<i>SE</i>	β	<i>p</i>	<i>B</i>	<i>SE</i>	β	<i>p</i>
Intercept	2.76	.09		<.001	2.79	.09		<.001
Attachment avoidance	.21	.05	.30	<.001	.25	.06	.36	<.001
Condition	.12	.13	.06	.364	.16	.13	.08	.224
Intervention score	-.05	.02	-.15	.022	-.02	.03	-.06	.490
Attachment $\times$ Condition					-.17	.10	-.16	.079
Attachment $\times$ Intervention score					-.02	.02	-.10	.162
Condition $\times$ Intervention score					-.08	.04	-.18	.057
Attachment $\times$ Condition $\times$ Intervention score					.07	.03	.20	.006
R^2	.11				.14			
F for change in R^2	$F(3, 206) = 8.80,$ $p < .001$				$F(4, 202) = 3.08,$ $p = .017$			

Communicative Directness

Attachment Anxiety

Step 1 of the regression explained approximately 4% of the variance in directness. There was a significant main effect of intervention score, suggesting that greater understanding of the intervention predicted more direct communication, regardless of condition. No main effects of attachment anxiety or condition were significant. Adding the interaction terms in Step 2 did not explain significantly more variance in outcomes, and no main effects or interactions were significant.

Attachment Avoidance

Step 1 of the model explained about 4% of variance in outcomes and again revealed a main effect of intervention score, but no significant effects of attachment avoidance or condition. No significant interactions emerged in Step 2 of the model, which did not explain significantly more variance than in Step 1.

Communicative Valence

Attachment Anxiety

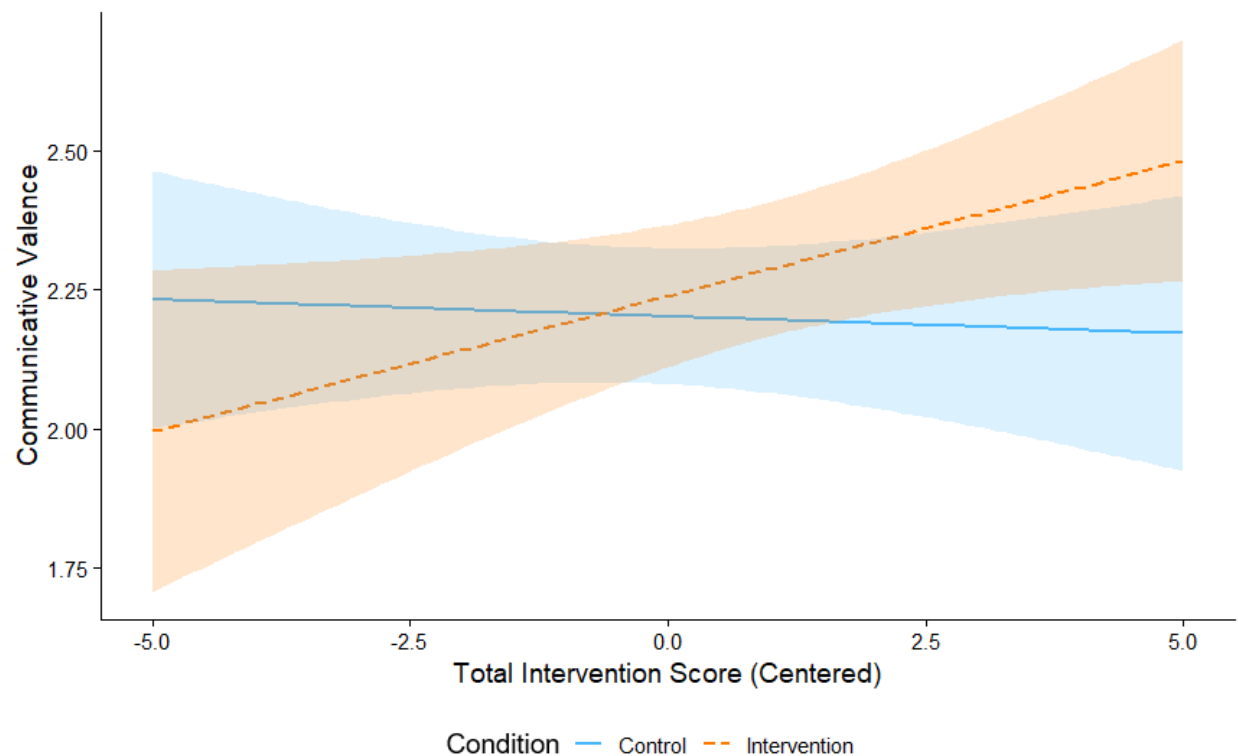
Step 1 of the model explained only 1% of the variance in outcomes, and did not reveal any significant predictors. Interaction terms were added in Step 2 and explained about 4% additional variance. There was a significant two-way interaction between experimental condition and intervention score; the other interaction terms were not significant.

Model 1 of the PROCESS Macro v 4.2 (Hayes, 2022) was used to investigate the two-way interaction between condition and intervention score, controlling for attachment anxiety. Simple slopes effects suggested a marginally significant relation between condition and valence at higher intervention scores (+1 SD above the mean), $b = .22$, $SE = .13$, $p = .088$, 95% CI = [-

0.03, 0.47]. Visual inspection of the interaction plot (Figure 6) suggested that among those in the experimental condition, stronger understanding of the intervention led to marginally more positive communicative valence in the subsequent vignette responses, whereas in the control condition there was no apparent relation between intervention score and communicative valence.

Figure 6

Two-Way Interaction of Condition and Intervention Score on Communicative Valence, Controlling for Attachment Anxiety (Study 3)



Note. Shaded areas represent 95% confidence intervals.

Attachment Avoidance

Step 1 of the model ($R^2 = .01$) did not reveal any main effects of attachment, condition, or intervention score on communicative valence. Step 2 explained approximately 4% additional variance, which was not statistically significant, and none of the main effects or interactions were significant.

Consent Motivations

Attachment Anxiety

Step 1 of the model explained approximately 13.3% of the variance in consent motivations. In this step, there was a significant main effect of attachment anxiety, as well as a significant main effect of total intervention score. These main effects indicated that regardless of condition, those high in attachment anxiety tended to endorse more barriers to consent; in contrast, those who demonstrated stronger understanding of the intervention endorsed fewer consent barriers. When interaction terms were added in Step 2 ($R^2 = .16$), only the main effect of attachment anxiety remained, while the effect of intervention score was no longer significant. None of the interaction terms were significant.

Attachment Avoidance

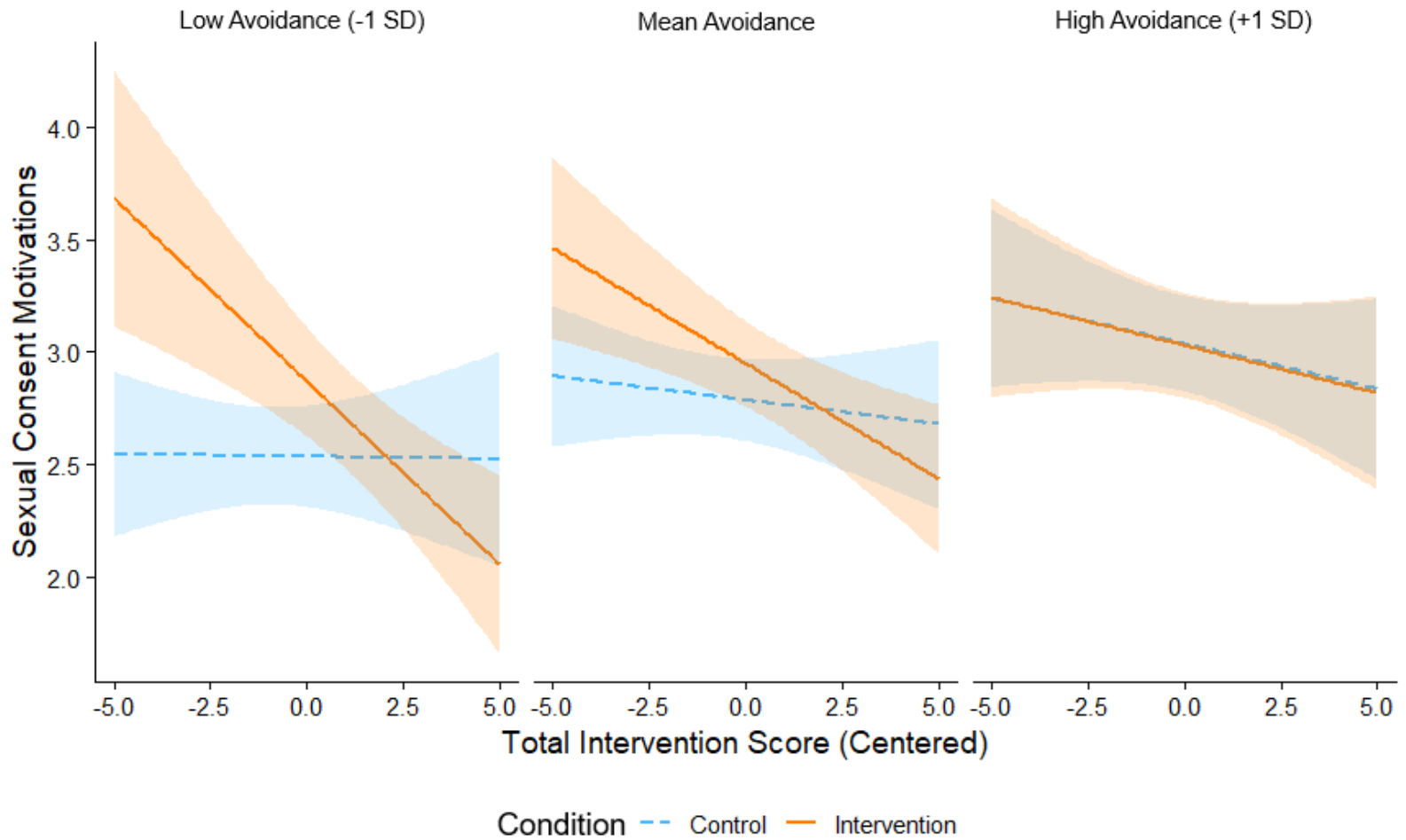
Step 1 of the regression ($R^2 = .11$) revealed a main effect of attachment avoidance and of intervention score, though there was no main effect of condition. In Step 2 ($R^2 = .17$), the main effect of attachment avoidance remained significant, and there was no main effect of condition or intervention score. However, a significant three-way interaction emerged between condition, attachment avoidance, and intervention score.

Further breakdown of the three-way interaction was conducted using the PROCESS Macro's Model 3 (moderated moderation), the results of which are depicted in Figure 7. Consent

motivations were entered as the dependent variable, intervention score was entered as an independent variable, and condition and attachment avoidance were entered as moderators. The model was significant, $R^2 = .16$, $p < .001$, and revealed a significant two-way interaction between condition and intervention score at low levels of attachment avoidance (-1 SD from the mean), $b = -.20$, $p = .004$, as depicted in Figure 7. Simple slopes analysis suggested that among people in the experimental condition with low attachment avoidance, there was a significant negative relation between intervention score and consent motivations, $b = -.19$, $p < .001$, 95% CI = [-.29, -.09], and a similar negative relation was found in the experimental condition at mean levels of attachment avoidance, $b = -.10$, $p = .002$, 95% CI = [-.17, -.04], but these effects were not seen in the control condition. These findings indicate that among people in the experimental condition with low or average attachment avoidance, those who showed a stronger understanding of the intervention reported fewer barriers to consent in their vignette responses, whereas the same relation was not present in the control condition.

Figure 7

Three-Way Interaction of Attachment Avoidance, Condition, and Intervention Score on Consent Motivations



Note. Shaded areas represent 95% confidence intervals.

Results Summary

In sum, the perspective-taking intervention did not appear to influence communicative directness. There was an inconsistent relation between understanding of the intervention and directness (regardless of condition), but this effect disappeared when controlling for interaction terms. Controlling for attachment anxiety, there was a marginally significant interaction between condition and intervention scores on communicative valence, suggesting that strong understanding of the intervention led to more positive valence in the subsequent vignette activity (an effect that was not seen in the control condition). However, this relation was only significant when controlling for the 3-way relation between attachment anxiety, condition, and intervention score. Attachment anxiety and avoidance both predicted poorer sexual consent motivations. A three-way interaction between attachment avoidance, condition, and intervention score emerged that suggests people with low to average attachment avoidance, who demonstrated good understanding of the intervention, later perceived fewer barriers to consent in the consent vignette portion of the study; the same was not true for those high in attachment avoidance.

Study 3 Discussion

Study 3 was designed to test a compensatory intervention model for the cognitive pathway of the proposed Cognitive-Affective Model, in which enhancing perspective-taking skills (the mediating variable from Studies 1 and 2) was expected to buffer the negative effects of attachment insecurity on consent communication. Additionally, I tested whether voice-recorded responses to the same vignette task as Study 2 would be an effective measurement of consent communication skill.

Overall, the perspective-taking intervention did not have the intended effect at high levels of attachment avoidance or anxiety, and it was necessary to include a measure of how well

participants understood the intervention to understand the intervention's effects on consent communication. Interestingly, although I originally hypothesized that the intervention would be most beneficial for those high in attachment insecurity (who show the greatest deficits in perspective-taking), the results indicated that the intervention was successful in improving consent motivations primarily among those lower in attachment avoidance (when they also demonstrated good understanding of the intervention principles). Additionally, there was evidence that good understanding of the intervention led to more positive communicative valence, when controlling for attachment anxiety. However, there were no effects on communicative directness, likely due to restriction of range on this variable.

Theoretical and Practical Implications

Previously, Study 2 demonstrated that perspective-taking mediates the relationship between attachment avoidance and sexual consent motivations (i.e., the cognitive pathway of the proposed Cognitive-Affective model). Study 3 provides further support for the cognitive pathway by demonstrating the malleability of sexual consent motivations through perspective-taking psychoeducation. Although this effect was constrained to specific circumstances (i.e., people with low to average attachment avoidance who showed the ability to summarize and apply perspective-taking concepts), the results confirm that for some people, sexual consent motivations can be altered through intervention. This is consistent with the principles of the Information-Motivation-Behavioural Skills Model which suggests that changing health behaviour motivations is an important precursor to increasing the target health behaviour (Fisher et al., 2003). Previous research has also shown that techniques such as motivational interviewing, personalized feedback, and reflective listening can be used by healthcare providers to alter health behaviour motivations (Chang et al., 2014). The current research extends our understanding of

intervention within the IMB model by demonstrating that relatively low-cost, self-guided interventions may have beneficial impacts in the area of sexual consent motivations.

The results of Study 2 indicated that those high in attachment avoidance are likely the most in need of intervention to improve consent motivations; however, in Study 3, the intervention only improved motivations of those low in attachment avoidance. It is possible that due to their internal working models (which result in heightened self-reliance, low trust in others, and inhibited emotional intimacy; Fraley et al., 1998) people high in attachment avoidance are more resistant to emotional engagement with their partners, which was emphasized in the intervention, and are threatened by suggestions to consider their partner's perspective. People high in attachment avoidance tend to divert attention from attachment-related threats (Fraley et al., 1998), which may prevent them from engaging with the skills required to perspective-take effectively and to address barriers to sexual consent communication. Previous interventions have found that perspective-taking interventions given to the *partners* of avoidant individuals yield positive outcomes, but that the interventions do not yield desired outcomes in the avoidant individuals themselves (e.g., Bernstein et al., 2015). Future interventions may need to be tailored specifically for avoidant individuals, perhaps by framing perspective-taking in ways that minimize perceived threats to autonomy or by emphasizing the self-protective benefits of effective communication rather than emotional closeness with partners. Additionally, a self-directed intervention may not be as effective a format for those who have baseline difficulties with perspective-taking, so formats with additional guidance/scaffolding (e.g., from peers or educators) could be more appropriate.

I did not make specific predictions about any effects the intervention might have on communicative valence. Nevertheless, when controlling for attachment anxiety, participants in

the intervention condition who reported good understanding of the intervention principles appeared to demonstrate more positive affect in their vignette responses, relative to those in the control condition or who had lower intervention scores. There are two core theoretical considerations regarding this finding: First, positive communication valence is not a universally positive outcome. As previously outlined, there are situations when positive/constructive approaches may be inappropriate for achieving goals (e.g., when conveying a strong boundary violation). However, use of “softening” approaches (i.e., positively-valenced communication that downplays problem severity, uses humour, and/or accommodates/ignores undesirable partner behaviour) can be an important protective measure that reduces short-term partner defences and enhances relationship satisfaction, though there may be negative impacts on problem-solving and communication if these approaches are used long-term to bypass serious issues (Overall et al., 2009). The perspective-taking intervention focused on individual discussions, as did the majority of consent vignettes, so use of positively-valenced communication might be viewed as an appropriate method to convey empathy and reduce partner defensiveness in the moment.

A second theoretical consideration is the degree of conceptual overlap between perspective-taking and empathy. Some researchers define these constructs as identical (e.g., Long et al., 1999), whereas others view them as distinct (e.g., Stietz et al., 2019) or consider perspective-taking to be the “cognitive component” of empathy that complements an “affective component” (e.g., Pélouin et al., 2011). If perspective-taking and empathy are indeed separate constructs, they may play separate roles in influencing communicative valence. The intervention in the current study did include emotion-focused language (e.g., the “Tune into their Feelings” skill specifically instructed participants to attend to emotional cues and showed characters labelling their partner’s emotions from these cues) that may have prompted increased affective

empathy in the vignette task. Although a component analysis is beyond the scope of the current dissertation, this will be an important consideration in revisions of the proposed intervention and clarification of the pathways in the Cognitive-Affective Model.

Methodological Contributions and Strengths

The assessment of sexual consent communication in Study 3 relied on having participants audio record responses to vignettes, a technique that has been used in few studies of sexuality (see Kingston, 2023 for a recent exception examining attitudes towards sex work) and does not appear to have been previously used in studies of sexual consent. Compared with the text-based responses captured in Study 2, the recordings in Study 3 showed greater variability in communicative valence, though there were drawbacks in the ability to assess directness, which was the primary outcome of interest in this study. Researchers interested in emotional variability may choose to use audio recordings over text-entry responses to glean more relevant information; meanwhile, researchers who are interested in both emotion and directness may need to revise the coding scheme and/or task instructions to achieve this goal with an audio recording format. An extension of this method could be to present participants with audio-recorded, rather than written vignettes; this was done by Kingston (2023) who argues that recorded vignettes have a stronger emotional impact and reduce “social distance” compared to written vignettes.

Limitations and Directions for Future Research

A primary limitation of Study 3 was that there was low variability in communicative directness (i.e., over 85% of responses were categorized as “direct”). This constraint likely contributed to the lack of findings related to communicative directness. It is possible that the recording task primed participants to use dialogue because participants were verbally recording responses without the opportunity to demonstrate body language or nonverbal cues other than

tone of voice (which can be readily used to establish emotional valence but provides less information about directness). The task instructions did explicitly request participants to describe nonverbal communication. However, explicit descriptions of nonverbals may have been more effortful and less naturalistic than reporting what might be said in response to a particular vignette, and a review of responses suggests that participants infrequently described nonverbal cues. Further, it is unclear whether participants would have been sufficiently aware of nonverbal cues that signal indirectness (e.g., physical proximity or distance, avoiding eye contact) to describe them in their audio recordings. One way of addressing this could be to replicate the study with a video-recorded in-lab task, perhaps making use of a confederate or dyadic design to enhance external validity. Alternatively, verbal and nonverbal responses could be measured separately (e.g., the audio recording could capture verbal responses while other measures are used to assess nonverbal responding).

It is also important to note that the directness and valence measures of consent communication demonstrated low internal consistency, as with Study 2. Possible reasons for this limitation are outlined in the Study 2 discussion, and similar reasons likely apply to Study 3 (i.e., restricted range, low number of items, contextual variability between items, gender expectations). Because data for Studies 2 and 3 were collected around the same time, and were coded simultaneously with the same general coding scheme, it was not possible to make adjustments to improve reliability in Study 3. Future work is required to improve the reliability of this measure.

Another factor to consider is whether the intervention succeeded in conveying its intended message. Although participants on the whole reported strong positive impressions of the infographics, these impressions were weakly correlated, at best, with their understanding and

application of the intervention concepts. This may be a reflection of self-enhancement biases which motivate people to overestimate self-efficacy for tasks that are perceived to be easy (Kim et al., 2016; Stone, 1994), as well as discrepancies between task- and self-report measures of perspective-taking (e.g., Murphy & Lilienfeld, 2019): Participants may have reported that the infographics were beneficial, and perceived themselves as having learned to perspective-take effectively, while being unaware of potential “blind spots” in their perspective-taking ability or underestimating the difficulty of perspective-taking in practice. There are also two important caveats related to the use of the intervention score: First, its inclusion in the analyses was exploratory in nature, due to the initial pattern of null results obtained when not accounting for this variable. Second, the intervention score was more heavily weighted to real-life application of the intervention concepts, rather than knowledge/comprehension of the material, which may be linked to different outcomes.

The perspective-taking intervention incorporated wise intervention principles (Walton & Wilson, 2018), which have been shown to produce meaningful, enduring change in several behaviours. Further research will be required to fine-tune the intervention’s messaging and the meaning-making processes used by the audience. Specifically, given the finding that the intervention was more effective for people with relative attachment *security*, future work should identify ways to modify perspective taking in those with high attachment insecurity, tailored to their unique needs. For example, the finding that anxiously-attached people experience hyperarousal following a self-perspective-taking induction (Henschel et al., 2020) suggests that imagining how one would feel if they were in their partner’s place could have detrimental effects in this group by increasing threat perceptions, motivating the use of self-protective strategies that paradoxically inhibit perspective-taking and effective communication.

While the intervention tested in Study 3 is in the early stages of development, the intervention's content is broadly consistent with at least one perspective-taking campaign that was separately, but concurrently developed by another group (Feiring & Li, 2025); this supports the theoretical grounding of the intervention. Over time, as various interventions are refined, more information will likely emerge about the dose-response relationship between perspective-taking interventions and communicative/relationship outcomes. An open question is whether interventions focused on perspective-taking should be prioritized or if specifically consent-focused interventions are more efficacious in directly targeting motivations. Perspective-taking interventions are better-established in the literature and may have wider-ranging effects on relationship communication processes more generally; further, the results of Studies 1 to 3 suggest that perspective-taking may be a prerequisite to accurately perceiving the barriers and rewards of sexual consent communication. However, specific consent-focused interventions may be required to help audiences make connections between general perspective-taking and sexual consent communication.

The results included a number of findings that were in the range of $p = .050$ to $p = .060$. Given the exploratory nature of the analyses (due to the addition of total intervention score as an independent variable), I implemented a strict threshold for significance and chose not to report these findings. However, the study was likely under-powered to detect these effects. Brysbaert (2019) recommends a sample size of 100 participants plus 100 participants per predictor variable for 80% power in a straightforward multiple regression analysis; in this study, there were 3 *a priori* independent variables and one independent variable added post-hoc, suggesting 400 to 500 participants would be needed to detect main effects (and more to test for interactions).

Finally, the number of participants who re-recorded their audio responses is important to consider, as re-recordings may have compromised the original study goal of obtaining participants' intuitive or spontaneous responses to the vignettes. The reasons that participants re-recorded their responses are not clear and could speak to technological problems, impression management concerns, or a number of other potential explanations. Future research may address this limitation by using in-vivo methods (e.g., responding to vignettes with a research assistant present either virtually or in lab), which will afford researchers greater control and oversight over participant responding.

General Discussion

Over the last three decades, affirmative consent, or the active, unambiguous, and direct communication of agreement to participate in sexual activity, has been advanced as a corrective response to the “traditional sexual script,” a model of consent that is believed to facilitate victim-blaming (Muehlenhard et al., 2016). Research has repeatedly identified a gap between expressed positive attitudes towards consent and limited use of affirmative communication behaviours (Curtis & Burnett, 2017; Kedzior et al., 2025; Shumlich & Fisher, 2020), which hinders widespread uptake of affirmative consent practices. Theoretical work such as the Information-Motivation-Behavioural Skills (IMB) model (Fisher et al., 2003) and social exchange theory (Sprecher, 1998) suggest one possible explanation for this gap: Perceived risks or barriers to consent communication may outweigh perceptions of the value of affirmative consent, reducing overall motivation to enact affirmative consent practices. The balance of these perceptions is termed *sexual consent motivations* (Edwards et al., 2022; Shumlich & Fisher, 2019).

The goal of this dissertation was to develop a model of intrapersonal factors that predict sexual consent motivations and facilitate effective sexual consent communication. This model would identify (a) factors that indicate for whom sexual consent communication is the most difficult, (b) the extent to which these factors impact sexual consent motivations and behaviour, and (c) whether risk factors for poor consent communication can be mitigated through intervention. Bringing together literature on the IMB model (Fisher et al., 2003), the role of emotional avoidance in sexual communication (e.g., Metts & Cupach, 1989), and mentalization/perspective-taking (e.g., Batson et al., 1997; Fonagy & Luyten, 2018), the proposed Cognitive-Affective Model of Sexual Consent Communication identifies attachment security, perspective-taking, and emotion regulation (specifically, experiential avoidance) as core

constructs influencing sexual consent motivations and subsequent sexual consent communication practices. This model was developed and tested across three studies, with a primary focus on the cognitive pathway of the model. In addition to creating the model, I developed and tested a novel, vignette-based method to assess sexual consent communication, in an effort to mitigate concerns related to social desirability bias and to gather more ecologically valid behavioural data about sexual consent communication in a variety of scenarios.

Here, I first review findings related to the three primary goals of the Cognitive-Affective Model described above and evaluate the proposed model against the empirical results. Next, I describe the methodological contributions of this work, including new tools to measure consent motivations and behaviour. Then, I discuss implications of this research for sexual health education, public health initiatives, and other avenues that promote affirmative consent. Finally, I discuss the limitations of this work and future directions for research.

Evaluating the Cognitive-Affective Model of Sexual Consent Communication

The Role of Attachment in Consent Communication

Studies 1 and 2 established that attachment insecurity is significantly related to sexual consent communication. In Study 1, attachment anxiety was linked to less use of behaviours that treat consent as an ongoing process (rather than a discrete event at the start of a sexual encounter), consistent with the principles of affirmative consent. Strikingly, attachment anxiety was also linked to an increase in subtly coercive behaviours that contradict the principles of affirmative consent. This finding has concerning implications, as use of subtle coercion strategies (intentionally or otherwise) may reflect acute safety risks, whereas poor uptake of communicative sexuality may diminish sexual quality but does not automatically pose a risk of coercive/non-consensual encounters. Furthermore, anxiously attached individuals in Study 1 and

Study 3 endorsed more barriers to consent communication, consistent with the idea that sexual communication may activate fears about relationship compatibility and security that are highly salient to anxiously attached individuals (e.g., Birnbaum, 2016; Edwards et al., 2022; Rehman et al., 2019). Study 2 also showed a link between attachment anxiety and indirect consent communication across several vignettes, similar to previous research indicating that anxiously attached women report inhibited and less collaborative sexual communication (Davis et al., 2006; Impett & Peplau, 2002; Pedneault et al., 2025) and in contrast to studies that do not find such a link (e.g., Brassard et al., 2015; McNeil et al., 2018).

Those high in attachment avoidance in Study 1 were less likely to engage in communicative sexuality practices, which involve explicitly communicating during and about sex (Glance et al., 2021), even when controlling for other variables. Attachment avoidance was also negatively correlated with perceptions of sexual consent as rewarding/beneficial to themselves and their relationships. In Study 2, high attachment avoidance predicted poorer consent motivations and, subsequently, less direct consent communication. The effect of avoidance on consent motivations was preserved even when accounting for other mediating variables, suggesting that sexual consent communication is threatening for this group independent of perspective-taking and emotion regulation. Attachment avoidance also predicted poorer consent motivations in Study 3 (although there was no main effect of attachment avoidance on consent behaviour). These findings correspond with research showing an inverse correlation between attachment avoidance and emotional/intimacy motives for having sex (Davis et al., 2004; Schachner & Shaver, 2004), as well as research showing a link between attachment avoidance and inhibited sexual communication (Davis et al., 2006).

Studies 1 and 2 demonstrate that attachment insecurity is meaningfully related to consent communication practices, both for people in current relationships (Study 1) and people who are not currently partnered (Study 2). The link between attachment and sexual consent motivations was also partially replicated in Study 3, although Study 3 did not find a direct link between attachment and consent communication behaviour. The cognitive and affective pathways of the model propose two potential explanations for the links between attachment and sexual consent motivations/behaviours.

The Cognitive Pathway

The cognitive pathway of the proposed model suggests that attachment insecurity influences sexual consent motivations (perceived consent barriers and rewards) and behaviour through deficits in perspective-taking: That is, high attachment avoidance or anxiety may contribute to difficulties acknowledging, understanding, and appropriately responding to one's partner's point of view, which then decreases motivation to engage in affirmative consent practices and results in less frequent use of these practices. Overall, there was good evidence for the cognitive pathway across all three studies. In Studies 1 and 2, stronger perspective-taking was significantly associated with increased engagement in sexual consent behaviours, and Study 3 demonstrated that brief psychoeducation about perspective-taking can positively impact sexual consent motivations (under certain conditions).

As predicted, perspective-taking emerged as a mediator between attachment and consent communication. In Study 1, the effect of attachment anxiety on consent behaviour was no longer significant after controlling for perspective-taking and consent motivations, and Study 2 demonstrated that these variables serially mediated the link between attachment and consent communication directness. In other words, attachment anxiety and avoidance appear to be

associated with perspective-taking deficits, increasing perception of barriers to consent communication and ultimately reducing anxiously attached individuals' ability to communicate directly and openly about sexual consent. Further, in Study 3, the perspective-taking intervention specifically benefitted people with low attachment avoidance (whose consent motivations improved following the intervention). This may indicate that attachment avoidance is a particularly strong risk factor for ineffective consent communication (possibly because their weak perspective-taking skills are less malleable via brief interventions).

Findings were inconsistent regarding the impact of perspective-taking on consent motivations. The perspective-taking measure in Study 1 was not associated with consent rewards or barriers, yet in Study 2, self-reported perspective-taking emerged as a strong predictor of consent motivations on vignette tasks, and in Study 3 the perspective-taking intervention enhanced consent motivations for some participants. This may speak to the conditions under which perspective-taking becomes relevant to sexual consent communication: In Study 1, the measure of consent motivations examined the perception of barriers and rewards in the early stages of participants' current sexual relationships. Participants may or may not have experienced disagreements or miscommunications in these stages. In contrast, motivations in Study 2 and 3 were reported in response to specific, hypothetical scenarios, most of which implied potential or actual conflict between the participant and their sexual partner (or discrepancies about what each partner wanted in the situation). Thus, in non-conflictual scenarios, strong and weak perspective-takers may experience similar consent motivations; a motivational discrepancy between these two groups arises only when there is perceived need to implement perspective-taking skills, since weak perspective-takers will likely view such situations as more challenging or threatening than

strong perspective-takers. This would be consistent with Apperly's (2012) argument that mentalization skills are deployed when there is sufficient motivation to mentalize.

Emerging measures such as the Sexual Mentalizing Scale (Gaertner et al., 2025), which specifically measures mentalization about one's own and others' sexual arousal and attraction, may enhance the predictive power of the Cognitive-Affective Model. Gaertner and colleagues argue that the development of sexual mentalizing follows a different developmental process from general mentalizing (as it is developed outside the family of origin), meaning that general mentalizing and perspective-taking measures may not capture the cognitive processes involved in sexual communication. Testing general and sexual mentalizing skills concurrently in the context of sexual consent communication would also allow researchers to further evaluate the hypothesis that sexual mentalizing is developmentally distinct from other forms of mentalizing.

Taken together, these results suggest there is a cognitive pathway that influences consent behaviour (particularly for those who are avoidantly attached), though there are likely other mediators in the process that are not included in the proposed model, and identification of these mechanisms would help to refine the model further. Due to the poor psychometric properties of the MASC-R in Study 2, I was unable to assess the specific impacts of overmentalizing vs. undermentalizing on consent motivations and behaviour; separating these two types of mentalization errors in future studies could enhance precision within the cognitive pathway.

The Affective Pathway

Studies 1 and 2 assessed the affective pathway of the model, which suggests that poor emotion regulation and/or high experiential avoidance explain the link between attachment and sexual consent communication. Ultimately, the results provide limited evidence for the role of emotion regulation and experiential avoidance in consent communication (though the affective

pathway was not tested as rigorously as the cognitive pathway). In Study 1, I assessed participants' use of a range of emotion regulation strategies: More emotion regulation difficulties were associated with poorer consent motivation, but were not associated with consent behaviour. However, in Study 2, I used a measure of experiential avoidance, which is presumed to underlie most emotion regulation difficulties (e.g., Kashdan et al., 2006), and this construct was neither associated with sexual consent motivations nor consent communication. While experiential avoidance is related to emotion regulation difficulties, the Difficulties in Emotion Regulation Scale (DERS) in Study 1 captures a broader range of difficulties than the Brief Experiential Avoidance Questionnaire (BEAQ), so it is possible that the DERS captured additional information that was more relevant to consent communication, such as impulse control or the ability to engage in appropriate goal-directed behaviour when experiencing negative emotions (Gratz & Roemer, 2004). Alternatively, the different approaches to measuring consent communication in Study 1 (Likert-type scale about general consent communication within the current relationship) and Study 2 (open-ended vignette responses about specific, hypothetical situations) may explain the difference in findings.

The finding that experiential avoidance is not associated with consent behaviours or motivations conflicts with studies showing that sexual communication is avoided due to fear of evoking negative emotions (e.g., Edwards et al., 2022; Rehman et al., 2019), including during sexual activity (Séguin, 2022). It is also surprising given that emotion influences perceptions of sexual consent both during sexual activity and in retrospect (Davis et al., 2024). At least one other study has examined the link between attachment, experiential avoidance, and motivations for sexual communication using a different motivational framework; this study also found no link between experiential avoidance and motivations (Wasson & Rehman, 2024). Wasson and

Rehman noted that because experiential avoidance is influenced by attachment (e.g. Ross et al., 2016; Vanwoerden et al., 2015), there may not be enough unique variance to detect the effect of experiential avoidance itself. This is consistent with the proposed model, which views attachment as a precursor to experiential avoidance. However, experiential avoidance was only moderately correlated with attachment variables in the current study, so it is important to consider alternative explanations.

One such explanation involves the conditions under which the pathways of the model are activated. The Cognitive-Affective Model, as presented, assumes that both the cognitive and affective pathways are active to some extent in most sexual consent scenarios. The theoretical work used to develop the affective pathway collectively suggests that people engage in emotional/experiential avoidance to regulate actual or anticipated distress (Cassidy, 1994; Metts & Cupach, 1989; Gross, 1998). Much of the empirical work supporting this pathway also focuses on conflict discussions (e.g., Rehman et al., 2019; Shahar et al., 2018). This raises the question of whether the affective pathway should be expected to be active during sexual scenarios where perceived emotional threat is relatively low or easily managed. It is possible that experiential avoidance (and by extension, the affective pathway) is relevant only for sexual situations that rise above a particular threshold of distress, such as under conditions of sexual coercion or in the presence of sexual dysfunction.

The relevance of heightened emotional distress to consent communication processes is supported by the large body of evidence linking experiential avoidance to negative mental health outcomes following sexual victimization, such as increased symptom severity in posttraumatic stress disorder (Leonard et al., 2020; Russell et al., 2020), compulsive sexual behaviour (Brem et al., 2018), shame (Brem et al., 2018; Merwin et al., 2009), and depression (Merwin et al., 2009).

In recent research, Walsh et al. (2025) found that emotion regulation difficulties partially mediated the relation between sexual victimization history and greater use of passive consent cues in current sexual relationships. Emotion regulation also appears to be protective against initiating coercive sexual behaviour: Men with above-average emotion regulation skills are less likely to endorse sexually coercive behaviours when they are sexually aroused (compared to men with average or below-average skills; Craig et al., 2022).

Studies also find that in couples experiencing clinical sexual dysfunction, emotional suppression is linked to negative outcomes including low sexual assertiveness, poor sexual communication, and lower relationship and sexual satisfaction (e.g., Dubé et al., 2019; Rosen & Bergeron, 2019; Wang et al., 2023). Fischer et al. (2022) note that emotion regulation, sexual functioning, and sexual satisfaction may reciprocally interact, so people who experience sexual dysfunction or low sexual satisfaction may in turn experience greater emotion regulation difficulties (whereas people in more satisfying relationships, and without sexual dysfunction, may not experience these difficulties). Because the current dissertation focused on normative consent communication that was not outwardly coercive in nature, and did not assess sexual dysfunction, the conditions for “activating” the affective pathway may not have been met (assuming that high distress plays a role).

This proposed explanation also fits with an observation from Study 1, in which emotion regulation difficulties predicted sexual consent motivations within one’s current sexual relationship, but did *not* predict sexual consent behaviour. People with weaker emotion regulation skills may not view themselves as capable of navigating negative emotions that arise during consent communication. This could lead to an exaggerated sense of barriers to consent communication (and, perhaps, under-valuing of the potential rewards of consent

communication). However, it is possible that these lower consent motivations do not influence behaviour unless there is a perceived need to use emotion regulation skills (e.g., due to conflict between one's own and one's partner's desires, victimization history, or sexual dysfunction).

Ultimately, more research needs to be done to clarify the exact role of emotion regulation and experiential avoidance in consent communication. However, the literature on various sexual problems, including victimization history and sexual function disorders, suggests several avenues for refining the conditions under which an affective pathway for consent communication would be important to consider.

The Role of Consent Motivations

Sexual consent motivations were a key construct of the proposed model that was hypothesized to explain the link between attachment and consent communication behaviours. Across the three studies, links between attachment, sexual consent motivations, and behaviour were evident, though motivations did not consistently correlate with perspective-taking or emotion regulation. As discussed above, when a person perceives possible conflict, disagreement, or miscommunication, they may experience changes in their consent motivations dependent on their baseline perspective-taking abilities; in sexual situations where this is not identified (e.g., the person believes they and their partner are on the same page), perspective-taking may be less influential on motivations. The link between consent motivations and behaviours is consistent with both the Cognitive-Affective Model and the IMB Model, and adds additional context to research showing that even when people express a positive valuation of affirmative consent (i.e., they describe strong consent motivation), they do not always implement affirmative consent in their sexual communication practices (Curtis & Burnett, 2017; Kedzior et al., 2025; Shumlich & Fisher, 2020). Studies that highlight this discrepancy are primarily

interview-based and do not typically disentangle (statistically or conceptually) the extent to which support for affirmative consent might be undermined by psychological and interpersonal barriers; as the IMB model posits, health behaviour motivations are comprised of the *balance* between perceived risks and benefits of the behaviour in question (Fisher et al., 2003). The current research developed quantitative methods to assess both perceived rewards and perceived barriers (which may “cancel out” rewards). This approach may have provided a more complete picture of motivation than prior studies to explain the apparent disconnect between attitudes and behaviours.

Perceived barriers and rewards also appear to predict different types of behaviour: In Study 1, perception of rewards was associated with greater engagement in prosocial consent practices (e.g., communicative sexuality), whereas barriers were correlated with engagement in more subtly coercive sexual consent practices. These findings suggest that preventing sexual coercion may represent a separate goal from enhancing the overall quality and depth of consent communication between partners; this distinction has important implications for sexual health education (discussed below). Due to methodological constraints, barriers and rewards were not separated in Studies 2 and 3, though the measure was more heavily weighted towards barriers, in contrast to other studies. Examining specific types of barriers and rewards to consent (e.g., looking at subscales of the Sexual Consent Barriers Scale and Sexual Consent Rewards Scale) could increase precision by identifying what types of barriers/rewards are most strongly associated with consent communication outcomes.

Furthermore, the models in Study 1 explained much more variance in sexual consent barriers (32%) than sexual consent rewards (5%); given that rewards and barriers were differentially linked to consent behaviours in the current research, more work is needed to

identify the factors that predict perceptions that sexual consent is rewarding. At the intrapersonal level, this could include personality traits such as emotional stability, conscientiousness, extraversion, and openness to experience, which have all been linked to more open sexual communication (Jirjahn & Ottenbacher, 2023). Certain implicit theories of sexuality may also make sexual consent rewards more salient. For example, sexual growth beliefs emphasize the importance of hard work and effort in maintaining sexual satisfaction, underscoring the value of working through sexual conflicts and challenges (Maxwell et al., 2017). When faced with sexual problems, those who endorse sexual growth beliefs show more sexual responsiveness (motivation to meet their partner's sexual needs) than those who endorse sexual destiny beliefs, which characterize sexual compatibility between partners as immutable and diminish the perceived benefits of working through such challenges (Uppot et al., 2024). Those who adopt a sexual growth mindset may perceive the benefits of sexual consent communication more readily. Interpersonal and systemic factors (e.g., peer norms, media exposure) might also explain a larger proportion of variance in consent rewards.

Altering Consent Motivations and Behaviour

Whereas Studies 1 and 2 demonstrated that attachment and perspective-taking abilities are clearly linked to sexual consent motivations, it was unclear if motivations can be changed or if the effects of attachment, perspective-taking, and consent motivations can be buffered to promote effective sexual consent communication. Study 3 introduced a perspective-taking intervention and established that sexual consent motivations are modifiable: Those low in attachment avoidance improved their sexual consent motivations via the perspective-taking intervention, when they reported good understanding of the intervention content.

Contrary to predictions, Study 3 did not demonstrate that perspective-taking interventions could alter sexual consent behaviour, as the intervention did not affect communicative directness or valence. There are several possible explanations for these results. First, it was hypothesized that the intervention would primarily impact communicative directness, but the range of this variable was restricted in Study 3, limiting the extent to which it could correlate with other variables. Second, although the vignettes were designed to resemble real-life situations and were rated as realistic in pilot testing, I did not directly measure actual consent practices following the intervention, which may have demonstrated more heterogeneity and increased the generalizability of the study.

It is also important to consider how intervention design could have affected the results. For example, the language, examples, or presentation format could be changed to maximize impact, and it is possible that the interactive components did not encourage sufficient active reflection to allow participants to internalize perspective-taking skills in the brief duration of the intervention (as recommended by Walton and Wilson, 2018). In its current form, the intervention may not be suitable for people who are specifically at-risk of poor consent practices (given that the group who benefitted the most demonstrated relative attachment security, which was previously associated with stronger consent motivations and more affirmative consent practices). Further, how well participants understood the intervention was an important predictor variable for other outcomes; refining the intervention to be understood by a wide variety of audiences may increase its reach and ability to promote effective consent practices. Comparing this intervention to other psychoeducational perspective-taking interventions that are currently being evaluated (e.g., Feiring & Li, 2025) will help to maximize intervention efficacy broadly and inform strategies to tailor the intervention to different groups.

Summary of Evidence for the Proposed Model

Taken together, the results of Studies 1 to 3 provide evidence that intrapersonal factors influence the perception of sexual consent as rewarding vs. costly, and subsequently the types of consent behaviour that people choose to engage in. The results also indicate that although attachment insecurity and poor perspective-taking represent risk factors for poor sexual consent communication, sexual consent motivations can be altered through intervention; further work is needed to establish whether targeting consent motivations can impact behaviour downstream and to develop interventions suited for at-risk individuals. Ultimately, the results provide the strongest support for the cognitive pathway of the model, as perspective-taking and consent motivations mediated the links between both types of attachment insecurity and sexual consent communication behaviour. Less consistent support was found for the affective pathway: Whereas there were links between emotion regulation difficulties and sexual consent behaviour on a quantitative measure, measures of experiential avoidance and responses to open-ended vignette measures of consent were not related. It is possible that the conditions of the current studies were not optimal to test the affective pathway (e.g., if the consent scenarios in Studies 2 and 3 did not evoke sufficient negative emotion for emotion regulation or experiential avoidance to influence participant responses).

Methodological Contributions

Measurement of Sexual Consent Motivations

A core contribution of this work was to develop quantitative methods for assessing sexual consent motivations. This was done in two different ways across the three studies. In Study 1, barriers (demotivating factors) and rewards (motivating/facilitating factors) were assessed separately in the Sexual Consent Barriers Scale (SCBS) and Sexual Consent Rewards Scale

(SCRS) respectively. In Studies 2 and 3, barriers and rewards were assessed as a single construct (in order to reduce participant fatigue given the vignette-based design), with rewards items reverse-scored to create a composite measure. All three scales demonstrated good psychometric properties; these measures represent the first tools that researchers can use to measure consent motivations quantitatively, though future work would be beneficial to further establish the construct validity of these measures.

Sexual consent motivations are currently understudied, so the development of these measures can inform further research to uncover factors that influence consent motivations and outcomes of poor consent motivations (e.g., on sexual satisfaction or on perceptions of sexual agency). One potentially valuable line of research would be to conduct further research on the factors of the SCMS, which correspond to different types of barriers/rewards as identified in prior qualitative work (Edwards et al., 2022) and pilot testing of the SCMS. For example, endorsing beliefs that consent is unnecessary may have different effects on consent communication behaviour than endorsing beliefs that consent will evoke negative emotions or erode trust in the relationship. Examining specific types of consent barriers/rewards (and evaluating the distinct contributions of barriers vs. rewards) will allow for greater precision in the Cognitive-Affective Model by specifying the challenges faced by specific groups, and this would inform more effective, personalized education and intervention. Additionally, aggregating the barriers and rewards as was done in the current work may obscure important information such as the relative weight of each barrier (which may differ by attachment style). This approach may also have over-weighted the influence of barriers as compared to rewards: Given the human tendency to prioritize negative information over positive information (Baumeister et al., 2001), averaging the items of the SCMS may not accurately capture the extent to which a person

perceives consent as rewarding vs. challenging, and this approach could be refined in future work. It would also be useful to examine variability in consent motivations across time, since consent communication itself varies considerably within-person (Willis & Jozkowski, 2019; Willis et al., 2021).

Measurement of Sexual Consent Communication Behaviour

Study 1 implemented a Likert-type quantitative measure of sexual consent behaviour that was previously validated and developed to assess endorsement of affirmative consent practices (Glance et al., 2021). However, self-report measures carry a risk of social desirability biases, particularly in the case of sexuality (King, 2022). Therefore, in Studies 2 and 3 I developed a novel vignette measure with the goal of reducing such biases (although it can also be argued that participants may have written in or recorded socially desirable responses regardless, and this is a limitation that should be examined in future work). Using Overall and McNulty's (2017) dimensions of couple conflict communication, the interpersonal circumplex model (Leary, 1957), and Russell and Feldman-Barrett's (1999) dimensional model of emotion as bases, I developed a qualitative coding scheme to measure communicative directness and communicative valence for participants' vignette responses (in addition to quantitative measures of consent motivation for each vignette).

In addition to potentially reducing social desirability biases, the vignette measure has several other advantages. First, it allows for assessment of sexual communication across contexts (e.g., initiating vs. responding, ambiguous vs. clear partner communication, before vs. during sexual activity), consistent with findings that consent communication differs situationally (Willis & Jozkowski, 2019; Willis et al., 2021). The measure asks participants to describe their own consent communication, in contrast to most other consent vignette studies which ask participants

to evaluate consent communication between two fictional characters (e.g., Humphreys, 2007; Piemonte et al., 2022; Willis & Jozkowski, 2022). The measure was tested in two modalities (text-entry and audio-recording of responses), allowing greater flexibility in how it is implemented in future research, and the creation of two parallel forms of the vignette measure may facilitate longitudinal and experimental designs by preventing practice effects.

The psychometric properties of the vignette measure suggest some avenues for improvement. First, the reliability of the vignette measures was relatively low for both directness and valence. This raises questions about how adequately the vignettes assessed sexual communication, though it may also reflect the variability of consent communication strategies across scenarios. Additionally, the text-based responses in Study 2 did not vary much in terms of emotional valence (i.e., the vast majority of responses did not appear to have any indicators of positive or negative emotional tone); the Study 3 audio-recorded responses addressed this limitation, but showed decreased variability in directness.

It is also important to note that the pilot data yielded few scenarios that were rated as equally applicable to men and women. Therefore, future work to refine this measure may involve constructing additional scenarios that are gender-neutral, or developing separate assessment tools that are relevant to different genders/gender roles. However, this would come at the expense of inclusivity for people in same-sex partnerships and for nonbinary individuals, which is an important gap in the literature: Research suggests that LGBTQ+ people are marginalized by heteronormative approaches to sexual consent and experience unique barriers to consent communication as a result (de Heer et al., 2021). However, LGBTQ+ people have also been shown to develop alternative scripts for sexual consent that challenge the dominant norms

(Rittenhour & Sauder, 2024), and including these perspectives would be informative for developing more inclusive measures.

For parsimony in analyses, I elected to analyze participants' average scores on directness and emotional valence; as future work enhances the reliability of the measure and between-participant variability, researchers may opt to use other methods. For instance, examining the proportion of a participant's responses that were direct (vs. indirect/unclear) may provide more insight into their typical communication style than calculating an average. A similar approach could also be applied to examining the percentage of responses with positive, negative, or neutral emotional valence. Alternatively, it may be important to examine the within-participant *variability* of emotional valence, reflecting the assumption that positive and negative emotional expression are each useful in different types of sexual consent scenarios. This assumption aligns with broader research on emotion regulation, which suggests that *flexible* use of emotion regulation strategies is more adaptive than consistent use of any individual emotion regulation strategy (Bonanno & Burton, 2013), and this flexibility is also adaptive for co-regulating emotions with others (Battaglini et al., 2023). In other words, people who demonstrate a greater variety of emotional responses in their consent communication may possess greater emotional and communicative flexibility, and the predictors of the Cognitive-Affective Model may influence this flexibility rather than a tendency to be overall positive or negative in one's consent communication. Some work has indicated that people (particularly women) tend to be more variable in their expressions of warmth when discussing sexual vs. nonsexual conflicts (Rehman et al., 2017), supporting the notion that flexibility may be adaptive in sexual communication. New research also proposes other systems that can be used to categorize emotion that are consistent with the theoretical models used in the current work, such as a new quantitative

measure based on the interpersonal circumplex model of emotion (Horner et al., 2025); this measure has not yet been adapted for state-level analysis, but such an approach may be valuable given that consent communication is inherently an interpersonal process.

Implications for Education and Public Health

These were the first studies to introduce and test the Cognitive-Affective Model of Sexual Consent Communication, a novel framework for understanding intrapersonal factors that influence consent communication. The information gained from these studies has important implications for the theories of sexual communication and for education and prevention efforts related to sexual consent communication.

Enhancing Sexual Consent Motivations and Related Competencies

Evidence from the current studies indicates that attachment insecurity and perspective-taking affect how people make decisions about consent communication, and may contribute to the observed gap between people's ideals of consent communication versus how they communicate consent in practice. Specific barriers for anxiously- or avoidantly-attached people likely differ based on the core fears associated with those styles (i.e., fear of abandonment for attachment anxiety, and fear of relying on others for attachment avoidance; Brennan et al., 1998). The current research suggests that attachment anxiety and avoidance are differentially linked to consent motivations and behaviours, so educators may benefit from understanding the attachment styles of their audiences and tailoring their communication to the audience. Development of perspective-taking capacities may motivate people to engage in affirmative consent communication, perhaps not only through improving one's ability to recognize when perspective-taking would benefit the relationship, but also through increasing their self-efficacy or through increasing their sense that the trade-offs of affirmative consent (which is often viewed

as less socially acceptable than the “traditional” consent script; Shumlich & Fisher, 2020) will result in positive outcomes. Based on the results of Studies 1 and 2, developing these capacities may be particularly important for avoidantly attached individuals.

Building on this, the results of Studies 1 to 3 indicate that it is important to understand an audience’s sexual consent motivations before attempting to change their sexual consent behaviour. Motivations differ from person to person (as evidenced by the differences in predictors of consent rewards vs. barriers in Study 1), and interventions must go beyond increasing knowledge and communicative skill to address the emotional and relational concerns that people raise regarding consent communication. Educators and clinicians may also benefit from increasing *perspective-taking motivation*, in addition to perspective-taking capacity itself. This can be done through techniques such as enhancing curiosity about others, deepening awareness of differences between one’s own and one’s partner’s perspective, fostering responsibility for resolving these discrepancies, highlighting relational benefits of perspective-taking, portraying perspective-taking as a socially desirable quality, and enhancing perspective-taking self-efficacy (see Gehlbach et al., 2012; Gehlbach & Mu, 2023; and Hodges et al., 2018).

Clarifying the Construct of Consent

Researchers and educators vary considerably in their definitions of sexual consent communication (Fenner, 2017). How consent is defined is not merely a semantic issue, but alters the goals, cogency, and acceptability of any potential intervention. When consent is framed narrowly as a legal obligation to prevent sexual coercion, interventions may focus heavily on the *content* of consent communication (i.e., what communication is required to establish that an encounter is consensual), ignoring or oversimplifying the socio-emotional skills that support effective consent communication and the complex social dynamics at play (Kubota & Nakazawa,

2024; Setty, 2025). Defining consent in this manner also diminishes the perceived importance of consent motivations, as communication is framed as an ethical/legal requirement whose primary function is reducing sexual assault, with limited relevance for sexual or relationship quality. However, the results of Study 1 indicated that perceived barriers to consent communication did predict coercive communication, suggesting that these motivations are important to consider, even when applying a more limited definition of consent. As Hardesty and colleagues (2022) outline in their study of college students, most are not motivated primarily by the goal of reducing sexual assault, but are concerned about how their sexual practices may impact their relationships, peer networks, and social standing. Therefore, framing consent in this manner may make it difficult to promote affirmative consent practices, as it trivializes the context in which most people negotiate consent. A more expansive definition of consent, which embeds legal/ethical considerations within a relational context and reckons with the complexity of consent communication, will likely resonate more strongly with lay audiences and provide more opportunity to address consent motivations.

Evidence from the current studies and from Edwards et al. (2022) also suggests that people do ascribe relational value to consent, which is more consistent with process-oriented definitions of consent, and that this relational value contributes to the decision to communicate consent directly/affirmatively. Educators can capitalize on the *process* of sexual consent to make the case that affirmative consent benefits relationships, such as through promoting the development of a mutually satisfying sexual script and potentially contributing to trust, closeness, and sexual satisfaction over time. These broader definitions may also challenge the belief that consent is irrelevant to long-term relationships due to the relative assurance of sexual safety in an established relationship (Beres, 2014).

Artificial Intelligence in Sexual Consent Education

Artificial intelligence (AI) has the potential to rapidly transform the current landscape of sexual health education, though its use must be carefully evaluated. The results of the current research point toward important considerations for the use of AI technology in sexual consent education, especially for thinking about whether AI can adequately address sexual consent motivations.

Emergent research critically examines the role of AI in sexual health education: A systematic review found that AI interventions can reduce stigma about sexual health education and allow people to seek out sexual health information confidentially (Bergam et al., 2025), which may reduce some of the fear of negative emotions associated with learning about consent. AI chatbots have been shown to provide generally accurate information about the definition of sexual consent and general principles regarding contextual nuances (e.g., consent communication when using substances; Marcantonio et al., 2025), suggesting they may be a helpful starting place for gaining sexual consent *information* as specified in the IMB Model. However, caution is needed as the information provided by these chatbots is not regulated, and researchers have raised important concerns about credibility and bias (Bergam et al., 2025; Greer et al., 2025; Marcantonio et al., 2025). Further, there is evidence that AI is currently inadequate for evaluating more complex or ambiguous sexual consent scenarios such as those involving substance use (Vowels & Marcantonio, 2025). In other words, AI can provide concrete knowledge but is likely less effective for assisting users to apply such knowledge to navigate the intricacies of consent in real-life scenarios (such as those included in the vignette measures of the current work).

The ability of AI to develop sexual consent *motivations* and *behavioural skills* is untested at this time, and the current studies demonstrate that addressing motivations is crucial as these

predict engagement in affirmative consent practices. Literature reviews critique the limited extent to which AI can respond to the emotional aspects of sexuality (Bergam et al., 2025), and most identified consent motivations are emotional/relational in nature (Edwards et al., 2022). Further, AI is not equipped to facilitate the type of interactive learning that occurs in group activities or interaction with health professionals (Greer et al., 2025), which can challenge perceptions of affirmative consent as unusual or socially awkward. Importantly, AI technologies present information based on the average, or most common, sentiments expressed within their databases: As such, AI has limited power to change social norms (Greer et al., 2025), which likely contribute to sexual consent motivations. By reproducing existing norms such as perception that affirmative consent is incompatible with the heteronormative sexual script (Shumlich & Fisher, 2020), AI chatbots may inadvertently reinforce pressure to avoid affirmative consent. Researchers and educators should be aware of these potential limitations, and strive to address these gaps through interactive learning, promotion of affirmative consent as normative, and open discussion of the motivational aspects of sexual consent communication. Additionally, although AI may enable people to ask questions about consent without perception of social/moral judgment from others, the less emotional nature of communication with a chatbot could appeal to people with high attachment avoidance, reinforcing difficulties in sexual communication that were identified in the current dissertation.

Study Limitations and Future Directions

Although the current studies advance our understanding of factors that precipitate effective sexual consent communication, there are a number of limitations that can be addressed through future research. First, in many cases the studies relied on self-report questionnaire measures to assess key constructs. Some of these measures showed ceiling and floor effects, such

as relatively high attachment security in Study 1, suggesting that restriction of range may have impacted the results and could be addressed in a future study. Although I planned to use a performance-based perspective-taking measure in Study 2 to address potential self-enhancement biases, the Movie for the Assessment of Social Cognition had low reliability, constraining its correlation with other measures. Furthermore, in survey feedback, participants reported confusion when responding to the videos used in this task. Future research should make use of other methods of assessing perspective-taking, given research showing that self-reports of perspective-taking abilities differ meaningfully from behavioural measures (Murphy & Lilienfeld, 2019). Additionally, attachment style can be measured with tools such as the Adult Attachment Interview (Hesse, 2008), which could triangulate or supplement findings obtained using self-report attachment measures.

Beyond cross-sectional task- and interview-based measures, longitudinal designs such as daily diary or experience sampling studies could capture more within- and between-person variability in the components of the model. For example, one study found that 50-80% of the variance in sexual consent (both internal feelings of wantedness and outward expressions of consent) can be explained by within-person variability, and that consent is also affected by the type of sexual activity, highlighting the need for designs that use repeated measurements (Willis et al., 2021). It stands to reason that sexual consent motivations could also vary across time, though this has not been definitively established. Other situational factors, such as sexual arousal, have also been shown to influence perceptions of sexual consent (Rerick et al., 2024) and could be assessed with a longitudinal paradigm. Daily diary studies have also measured the impact of fluctuations in perspective-taking (Reid & Overall, 2024) and attachment (Feeney, 2002; Haak et al., 2017) on relationship satisfaction and interactions, suggesting it may be

worthwhile to examine how day-to-day attachment security and perspective-taking impact sexual consent communication. Examining the model in longitudinal studies would also provide additional support for the proposed causal pathways and could shed light on how the pathways influence the development of a sexual script in the early stages of a relationship. With these designs, it would be possible to assess whether sexual consent practices feed back into the earlier components of the model (e.g., testing whether affirmative consent during sexual activity improves later consent motivations or enhances feelings of attachment security).

While the vignette measures were intended to address concerns regarding social desirability bias and self-enhancement bias, vignette methodologies have their own limitations. They rely on hypothetical scenarios, which may or may not resemble participants' actual sexual experiences and relationship practices (though the selected vignettes were rated as realistic in pilot testing). In the current study, we also manipulated several aspects of the vignettes, such as whether the participant is initiating vs. responding to sexual communication, level of ambiguity, and the presence/absence of coercive elements. Because vignette research typically manipulates several characteristics at once, there is typically too large of a vignette population to administer all possible combinations of scenarios to a single participant; vignette selection can therefore introduce measurement error (Atzmüller & Steiner, 2010). Further, although I intentionally sampled a broad range of sexual consent scenarios to assess consent in a comprehensive manner, the low reliability of the measure suggests that it may be important to develop consent measurements with a narrower focus. Additionally, the open-ended, qualitative response format used in the current study, while capturing more variability in how people communicate, is less tightly controlled than quantitative measurements or forced-choice selections. As discussed above, future work can improve the vignette measure by enhancing its reliability, modifying the

instructions or coding system to increase variability in responding, compare different modalities of administration, and address concerns related to gender differences in consent communication.

The vignette measure assessed both consent motivation and consent communication, but focused exclusively on new relationships given that consent is perceived differently in established relationships (Humphreys, 2007), and was only pilot tested on people who were not in current sexual relationships. Developing tools to assess consent motivation and behaviour in committed relationships (or relationships with any degree of sexual history) would be important to understand how consent changes over time and across contexts. The vignette measure used in this study would benefit from continued refinement and psychometric testing, particularly given the low reliability, as discussed above.

Further, whereas Study 2 participants submitted text responses that showed less variability in communicative valence, the use of audio responses in Study 3 appeared to constrain variability in directness. Therefore, aspects of the task instructions or the coding scheme may need to be adapted to develop a tool that captures variability in both dimensions. At present, it is unclear how communicative valence, as assessed in the vignette measure, fits into the proposed model. Although most emotion during sexual activity can be assumed to be positive, negative emotional expression is typically avoided when negative feelings arise during sex (Séguin, 2024). This avoidance serves many functions, such as protecting a partner's ego and avoiding conflict (Séguin, 2024), yet in the case of consent communication, judicious expression of negative emotion (e.g., to assert a boundary) is likely important to ensuring authentic agreement between partners. Further, some research suggests that avoiding negative emotion (e.g., deflecting through humour) contributes to perceptions of sexual conversations as unsatisfying and might ultimately produce more negative emotions over time (Faulkner &

Lannutti, 2010). Thus, more work is needed to understand how communicative valence (and perhaps specific emotions) during consent communication impacts sexual relationships, and whether it is associated with specific outcomes such as sexual satisfaction or sexual assertiveness.

Study 3 demonstrated that a brief psychoeducational intervention on perspective-taking improved sexual consent motivations for some groups. However, the success of this intervention was fairly constrained and did not benefit the groups that I intended to target. There are a few questions to consider in improving this intervention. First, it is unclear the extent to which the intervention improved perspective-taking skills (and/or the application of these skills) vs. motivation to mentalize, which has been identified in the literature as an important precursor to utilising perspective-taking skills (Apperly, 2012). It will also be important to clarify which components of the intervention contributed to the outcomes observed in Study 3. It may be prudent to expand on Walton and Wilson's (2018) wise intervention principles by including more personalized elements such as motivational interviewing, personalized feedback, and reflective listening. These techniques, while more costly to implement, are consistent with the principles of the IMB Model and have been used in interventions based on this model (Chang et al., 2014), so there is solid theoretical justification for their role in creating long-term behaviour change.

The proposed Cognitive-Affective model indicates two primary pathways that influence consent behaviour (with greater support at this time for the cognitive pathway). However, these pathways are not exhaustive, and certain relations within the model need to be clarified in further work. For example, it is currently unclear how and to what extent emotion regulation and perspective-taking influence each other in the context of consent communication. If the affective pathway is only active during high-conflict or high-distress situations, as posited above, it would

be important to consider the extent to which perspective-taking influences perception of threat (or, whether there is a level of threat at which emotion regulation *overrides* perspective-taking, given that high anxiety reduces perspective-taking and increases egocentrism; Todd et al., 2015). Other intrapersonal mediators may constitute additional “pathways” through which attachment can impact consent communication. It would also be important to identify other precursors to activating the affective pathway. New research indicates that the discrepancy between valuing vs. enacting affirmative consent may be more pronounced in autistic individuals (McKenney et al., 2026), who experience perspective-taking and emotion regulation deficits, suggesting the need to study this model in neurodivergent populations.

Apperly (2012) also argues that a person must have available cognitive capacity to perspective-take effectively. Studies demonstrate that experimentally-induced sexual arousal causes men to overestimate others’ sexual intent (Bouffard & Miller, 2014; Livingston et al., 2022), which can contribute to sexual miscommunications (Livingston & Rerick, 2026). Another study found that sexual arousal increases men’s willingness to engage in potentially or definitively coercive behaviours such as encouraging a date to drink to increase the chance of sexual activity or continuing to initiate sex after their date says “no” (Ariely & Loewenstein, 2006). While sexual arousal has not been found to impact attitudes towards affirmative consent, it can enhance both men’s and women’s endorsement of token resistance (i.e., the notion that women will refuse sexual activity to save face even when they truly want to have sex; Rerick et al., 2024). Thus, arousal and internal consent might reduce the motivation and capacity to perspective-take effectively, giving rise to potential confirmation bias or decreasing motivation to communicate consent affirmatively. However, there are currently no studies examining the impact of sexual arousal on perspective-taking, outside of forensic populations. Future work on

the cognitive pathway may account for the ways that arousal can interfere with perspective-taking and how this impacts consent motivation/behaviour.

The Cognitive-Affective Model is intrapersonal in nature, consistent with the available research, which primarily studies consent communication in an individual context. However, sexual consent communication is inherently an interpersonal construct. Therefore, the study of sexual consent is incomplete without accounting for the influences one's sexual partner and relationship dynamic has on their interpretation and expression of consent. Extending the model to account for dyadic interactions could include measurement of partner characteristics that are associated with sexual communication, such as perceived partner responsiveness (Merwin & Rosen, 2020; Reyes & Clark, 2025). Dyadic designs will also improve our understanding of the existing pathways in the model. For example, Viana-Sousa and colleagues (2023) conclude that couples regulate their emotions together, rather than independently, and this regulation is influenced by situational and relational factors; deficits in one partner's emotion regulation (either at the trait-level or within a particular situation) may not have detrimental impacts if their partner possesses complementary abilities and is able to compensate. Beyond dyads, the Social Ecological Model (Bronfenbrenner, 1979) highlights the importance of understanding how the Cognitive-Affective Model is influenced by broader systems, such as sexual health curricula, mass media, peer group norms, legal and political institutions, cultural practices, and social media/technological influences (Willis & Jozkowski, 2018). These systems can impact sexual scripts, gender roles, and other expectations or attitudes related to consent communication.

Conclusion

This dissertation introduced the Integrative Cognitive-Affective Model of Sexual Consent Communication, which proposes that attachment insecurity contributes to perspective-taking

deficits (the *cognitive pathway*) and difficulties in emotion regulation (the *affective pathway*), both of which decrease the motivation to engage in sexual consent communication, resulting in ineffective communication behaviours. Three studies provided evidence for the model, particularly the cognitive pathway, suggesting that attachment insecurity limits perspective-taking skill, increasing the perception that consent communication is threatening and inhibiting people from engaging in affirmative consent communication practices. One study demonstrated the initial feasibility of a psychoeducational perspective-taking intervention for improving consent motivations, though this effect was restricted to individuals who showed pre-intervention high attachment security and was not sufficiently refined to target attachment insecurity. Additionally, across all studies, I developed two methods for assessing sexual consent motivations and a new vignette-based measure for evaluating sexual consent communication in a variety of common scenarios.

The current work extends our understanding of sexual consent communication by identifying groups who would benefit from specific intervention to develop their consent communication skills, and the processes by which their consent communication is disrupted. It also builds the case for targeting sexual consent motivations, which include not only skill deficits but emotional and relational consequences (positive or negative) that people associate with consent communication.

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Appendix A

Full Text of Vignettes Piloted in Study 2a

Note. Vignettes in bold were included in Studies 2b and 3. Vignettes 6 and 18 were included for exploratory purposes and not used in final analyses.

1. **You are with your partner, hanging out after a long day at work. Your partner leans over to cuddle you and starts kissing your face and neck. The last time they tried to initiate sex you turned them down, but you are tired and are not in the mood today.**
2. You are with a new partner that you have never had sex with, but you are attracted to them and think you may want to have sex with them. You go back to their place after a date and start to kiss. As the interaction unfolds, you start to feel uncomfortable and unsure if you want to continue. Your partner tries to remove your shirt, and you stop them by pushing their hand away. They stop and ask, “what’s wrong? I thought we were having fun” while frowning.
3. **Your partner mentions that they would like to try a new sexual activity that neither of you have ever done before. You agree to try it out. As things progress, you find yourself enjoying this new activity. However, your partner is not making eye contact or responding much to what you are doing.**
4. **Your partner invites you over to their house to watch a movie, but you expect that you will also be having sex. As the movie ends, you move closer to your partner and start to kiss them. They move away and say, “I’m not really feeling it tonight, can we do something else?”**
5. You and your partner are making out in your bed. You are comfortable with the activity so far, but are not really sure if you want to have sex today. You want to communicate that you are unsure if you want to have sex. Your partner moves to unbutton your pants, but stops and asks, “what’s going on?”
6. **The last time you and your partner had sex, you both tried a new sexual activity that neither of you had ever engaged in before, either with each other or with previous partners. Your partner said they enjoyed it and would love to do it again. You were unsure how you felt about it, but in the time since, you decide this activity isn’t for you. The next time you hang out with your partner, they try to initiate the activity again.**
7. **You and your partner are in the middle of having sex, and you are really enjoying yourself. You begin to notice that your partner is being less responsive to your touch. You are unsure of what might be going on, but you know that if you stop you will be frustrated.**
8. You and your partner are in the middle of having sex after recently patching up an argument. At first, you were enjoying yourself, but you start to realize that you are still upset by the argument and cannot stop thinking about it. You would rather stop to first discuss the argument.
9. **You are having sex with your partner. Suddenly, your partner starts to do something (e.g., switches to a new position) that you have done together once before, but you**

are not in the mood to try that right now and were enjoying how things were previously.

10. **You and your partner are in the middle of having sex. In the heat of the moment, you remember a sexual activity or position that you and your partner had discussed trying but had never explicitly agreed to. You decide that trying it out in this moment would be exciting and satisfying.**
11. **You are in the midst of enjoyable sex with your partner. On occasion, you and your partner have discussed sexual activities that you are not interested in and refuse to do. During this sexual interaction, your partner starts doing something that you have told them you have had bad experiences with and would prefer not to do again.**
12. **You and your partner are in the middle of having sex for the first time. So far, the sex has been satisfying and exciting. However, in the middle of the interaction you start to feel a bit physically unwell and want to pause or stop altogether.**
13. You and your partner are about to start having sex. The last time you had sex, your partner did something that you ended up not enjoying, but you did not say anything at the time. However, as you are making out, they say that they “can’t wait” to do it again because they “know how much you liked it last time.”
14. You and your partner are in the middle of having sex. As you look at your partner’s face, it appears that they might be tearing up.
15. You and your partner are in the middle of having sex. It seems that you are both enjoying yourselves, but at one point your partner tenses up. As you look to see what’s going on, they say “it’s okay, keep going” but their tone of voice is a bit distant.
16. You are having sex with your partner. Although the sex feels good physically, you are feeling mentally distracted today and unsure if you want to continue. Your partner tells you how much they are enjoying having sex with you.
17. You've been on a few dates with someone you're really into. While you're making out on the couch, they start touching you in a way that makes you uncomfortable.
18. **You're at a party and you hit it off with someone you've just met. You're both flirting heavily and there's clear sexual tension between you. They suggest going back to their place, but you're not sure if you're ready for that kind of intimacy yet.**
19. Your partner tells you that they want to try a new sexual position that you're not sure you're physically capable of. As a result, you feel somewhat hesitant to try it.
20. You're out on a date and your partner keeps touching you in ways that make you uncomfortable. They ask if you want to go back to their place.

Appendix B

Final Coding Scheme used in Studies 2b and 3

Instructions:

Participants in this study described their responses to a number of sexual consent communication scenarios (vignettes). We are evaluating their communication skill within each response; by “communication,” we mean both verbal and nonverbal behaviours that convey some sort of intention/meaning to the other person. For each response to a vignette, you are going to code the response on two dimensions: the *directness* of the communication, and the *valence* of communication (i.e., how positive or negative it is).

Some responses will be uncodeable – for example, if the participant’s response is unintelligible, or it appears that they were responding to the wrong situation. These will usually be pretty obvious (e.g., we ask them how they would respond to a refusal from a partner, and they describe how they would communicate their own refusal instead). There are codes to use to indicate the reason that the response is uncodeable. If the reason is not covered in the list provided, code it as 3 (or “other”) and indicate the reason in the “Notes” column of the Excel spreadsheet.

Some guidelines to consider:

1. Each time you start a coding shift, review the section of the coding manual that relates to that particular vignette to refresh yourself about the category definitions.
2. Code one vignette at a time, rather than coding all vignettes for one participant.
3. It will work better to go through participant responses for a given vignette and to code “directness” for all participants and then re-code all responses’ valence. The rationale for this is that you may want to give a participant “credit” on valence based on your rating for them on their level of directness. It is important that these categories are independent of each other, and coding them separately will reduce the chances of interference. It is also advisable to hide the directness column when coding valence, and vice versa.
4. It is advisable not to do more than 2 hours of coding at a time.

Vignette 1		
<i>You are with your partner, hanging out after a long day at work. Your partner leans over to cuddle you and starts kissing your face and neck. The last time they tried to initiate sex you turned them down, but you are tired and are not in the mood today.</i>		
Key considerations: - Participant does not want to have sex; the most direct response clearly communicates both the disinterest in sex <i>and</i> the true reason why - An effective response anticipates that the partner may feel hurt, rejected, or disappointed, and takes some action to respond to that possibility		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., “I would feel guilty”, “I would hate that” or “they would be angry” <i>without</i> a corresponding response)
	1 = highly indirect communication	Goes along with partner desires against own wishes (e.g., “I would let them”)
	2 = slightly indirect communication	Redirects partner without explicitly stating wishes (e.g., makes an excuse, distracts partner); chooses not to communicate or avoids communication (e.g., “I would turn away and hope they get the hint,” “I would pretend to be asleep”); verbally states that they are tired but asks to continue sexual activity
	3 = slightly direct communication	Clearly communicates disinterest (e.g., “I’d say, ‘not today’” or “I’d tell them I wasn’t in the mood/feeling it”) without giving an explanation or exclusively using nonverbal communication (e.g., “I’d push them off of me”)

	4 = highly direct communication	Clearly communicates disinterest in sex as in category 3 <i>and</i> shares own feelings/reasons (e.g., “since I’m so tired from work”), suggests a compromise (e.g., “I can make it up to you tomorrow”), or explores/responds to partner’s possible reactions
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would tell them I’m not in the mood today” or “I would just say no”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., “I would make a joke” or “I would say sorry but I don’t want to” or “I would try to do it in a playful way”) If participant describes giving into advances, code as 3 only if the stated reasoning is related to wanting to reassure or protect the partner
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., “I would tell them I still love them, but I’m just not feeling it”)

Vignette 10		
<i>You and your partner are in the middle of having sex. In the heat of the moment, you remember a sexual activity or position that you and your partner had discussed trying but had never explicitly agreed to. You decide that trying it out in this moment would be exciting and satisfying.</i>		
Key considerations: • Ideally, participant would check in with partner before moving to the other position.		
Uncodeable: • 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) • 2 = incomprehensible (gibberish, unclear language) • 3 = refuses to answer question/cannot imagine situation • 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> would be an indirect response) May focus only on feelings (e.g., “I would feel excited” or “they would love it” <i>without</i> a corresponding response)
	1 = highly indirect communication	Avoids communicating about the new position (e.g., decides not to try the new position at all or waits for the partner to remember it)
	2 = slightly indirect communication	Directs partner into new position without checking in. May indirectly monitor for feedback via partner’s body language, facial expressions, etc.
	3 = slightly direct communication	Verbally asks about switching to the new position before doing so; or, switches to new position without asking and then verbally asks for feedback
	4 = highly direct communication	Verbally asks about switching to the new position as in category 3, <i>and</i> monitors for feedback or discloses about own feelings/reactions (e.g., excitement, gratitude, nervousness)
Communication valence If both positive and negative cues exist within the same	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger

response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would tell them I want to do this” or “I would just switch it up”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., playful, humorous, or gentle)
	4 = extremely positive (engaging/affirming)	Communication style strongly conveys excitement and enthusiasm (i.e., higher intensity emotions than a rating of 3)

Vignette 11		
<i>You are in the midst of enjoyable sex with your partner. On occasion, you and your partner have discussed sexual activities that you are not interested in and refuse to do. During this sexual interaction, your partner starts doing something that you have told them you have had bad experiences with and would prefer not to do again.</i>		
Key considerations: Especially for this vignette, it's important to remember that "valence" is unrelated to the effectiveness of the response. So, even though it's probably less effective to reassure and comfort a partner in this situation, we would still code it as positive, and even though it's pretty effective to push the partner away and get angry at them, we would still code that as very negative. Avoid trying to give participants "extra credit" for a good response.		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., "I would feel guilty", "I would hate that" or "they would be angry" <i>without</i> a corresponding response)
Focus on the predominant type of communication in the response.	1 = highly indirect communication	Goes along with partner desires against own wishes (e.g., "I would let them anyway"), even if they communicate that they don't want to do it
If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	2 = slightly indirect communication	Redirects partner without explicitly stating wishes (e.g., makes an excuse to stop or tries to go back to what was happening previously <i>without</i> acknowledging the boundary violation, such as saying "maybe later")
	3 = slightly direct communication	Explicitly communicates that boundaries have been violated or that they do not want to do this particular activity (e.g., "stop" or "I don't want that")

	4 = highly direct communication	Explicitly communicates boundary violation as in category 3, but also refers to participant's or partner's emotions, references previous discussions (e.g., "I told you that this is off the table"), and/or communicates a consequence (e.g., ends relationship, says something like "if this happens again we're done")
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., "I would tell them to stop" or "I would just say no")
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., "I would make a joke" or "I would say sorry but I don't want to" or "I would try to do it in a playful way"). Can include going along with what partner wants to reassure them if the expressed emotions are positive
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., "I would tell them I still love them, but I'm just not feeling it")

Vignette 7		
<i>You and your partner are in the middle of having sex, and you are really enjoying yourself. You begin to notice that your partner is being less responsive to your touch. You are unsure of what might be going on, but you know that if you stop you will be frustrated.</i>		
Key considerations: It's not certain that the partner actually wants to stop or is not enjoying themselves; the ideal response here involves checking if the partner is okay and proceeding based on the results of the communication		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., "I would feel guilty", "I would hate that" or "they would be angry" <i>without</i> a corresponding response)
	1 = highly indirect communication	Does not check in/assumes nothing is wrong and continues with sexual activity
	2 = slightly indirect communication	Does not immediately check in/stop, but monitors for additional signals; or, stops activity unilaterally without inquiring about what might be going on for the partner
	3 = slightly direct communication	Checks in with partner about whether they want to stop
	4 = highly direct communication	Checks in with partner as in category 3, <i>and either</i> (1) inquires about partner's state, (2) communicates own feelings, or (3) discloses/describes managing own frustration
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying

responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	2 = neutral	No positive/negative context (e.g., “I would stop” or “I would ask what happened”)
	3 = slightly positive (softening)	Adopts a generally positive communication style/expression of emotions (e.g., describes being gentle or calm) but without direct reassurance that is specific to the situation
	4 = extremely positive (engaging/affirming)	Provides significant reassurance or affirmation regarding partner potentially wanting to stop (e.g., “Don’t worry, I don’t want to do this unless you’re also into it”); soothes or comforts the partner

Vignette 6

The last time you and your partner had sex, you both tried a new sexual activity that neither of you had ever engaged in before, either with each other or with previous partners. Your partner said they enjoyed it and would love to do it again. You were unsure how you felt about it, but in the time since, you decide this activity isn't for you. The next time you hang out with your partner, they try to initiate the activity again.

Key considerations:

- Ideally, participants are able to address the ambiguity/change of heart with their partner (e.g., partner may have reason to believe they would enjoy the activity, and the participant has changed their mind)
- Participants may decide that they want to give the activity another try. If they describe what they would do afterwards if they decide it really isn't for them, code *that* portion of the response. If they do not describe such a response (i.e., just say they would try it again), code directness as "1."

Uncodeable:

- 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around)
- 2 = incomprehensible (gibberish, unclear language)
- 3 = refuses to answer question/cannot imagine situation
- 4 = other

Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., "I would feel guilty", "I would hate that" or "they would be angry" <i>without</i> a corresponding response)
Focus on the predominant type of communication in the response.	1 = highly indirect communication	Does not communicate preferences and continues with sexual activity
If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	2 = slightly indirect communication	Uses ineffective methods to communicate sexual dislike, such as moving away, appearing disinterested and hoping partner notices, saying things like "not right now" or "maybe later"
	3 = slightly direct communication	Communicates disinterest verbally without acknowledging feelings, history, etc. (e.g., "I don't want to do this" or "I'd rather do something else", "I changed my mind")

	4 = highly direct communication	Communicates disinterest in this sexual activity while providing insight to the partner into their process of reflection (e.g., “I thought I was ok with it, but I’ve had some time to think and I’m not actually that comfortable”) or validates potential response of partner (e.g., “I can see why you thought I might be interested in that,” “I can see why you’d be frustrated with me setting this boundary”). Or, waits until after sex to discuss the experience and their preferences with the intent of having a more in-depth discussion
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would stop” or “I would ask what happened”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., “I would make a joke” or “I would say sorry but I don’t want to” or “I would try to do it in a playful way”)
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., “I would tell them I still love them, but I’m just not feeling it”)

Vignette 4		
<i>Your partner invites you over to their house to watch a movie, but you expect that you will also be having sex. As the movie ends, you move closer to your partner and start to kiss them. They move away and say, “I’m not really feeling it tonight, can we do something else?”</i>		
Key considerations: The ideal response involves both respecting the partner’s boundary and engaging the partner in further communication to either problem-solve, check in with the partner, or reinforce that their agency is important (i.e., that they have the right to decline sex and it will not affect the relationship)		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> would be an indirect response) May focus only on feelings (e.g., “I would feel hurt”, “I would hate that” or “they would feel guilty” <i>without</i> a corresponding response)
	1 = highly indirect communication	Persists in trying to initiate sex, brushes off partner’s concerns (e.g., “it’s no big deal,” “I’ll be quick, don’t worry”), or ignores their statement and continues to initiate
	2 = slightly indirect communication	Acknowledges refusal but tries to override partner’s wishes by coaxing them, flirting with them, or trying to persuade them
	3 = slightly direct communication	Agrees to not continue with the sexual activity
	4 = highly direct communication	Agrees not to continue as in category 3 <i>and</i> does something to engage the partner further (e.g., suggests an alternative, reassures them, asks if there is any reason or something on their mind, shares own reactions)
Communication valence If both positive and negative cues exist within the same	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger

response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would stop” or “I would ask what happened”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., “I would make a joke” or “I would try to be nice about it”)
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., “I would tell them I still love them”, “I would give them a reassuring hug to calm them down”)

Vignette 3		
<i>Your partner mentions that they would like to try a new sexual activity that neither of you have ever done before. You agree to try it out. As things progress, you find yourself enjoying this new activity. However, your partner is not making eye contact or responding much to what you are doing.</i>		
Key considerations: • Quite similar to Vignette 7: It's not certain that the partner actually wants to stop or is not enjoying themselves; the ideal response here involves checking if the partner is okay and proceeding based on the results of the communication		
Uncodeable: • 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) • 2 = incomprehensible (gibberish, unclear language) • 3 = refuses to answer question/cannot imagine situation • 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., "I would feel guilty", "I would hate that" or "they would be angry" <i>without</i> a corresponding response)
	1 = highly indirect communication	Does not check in/assumes nothing is wrong and continues with sexual activity
	2 = slightly indirect communication	Does not immediately check in/stop, but monitors for additional signals; or, stops activity unilaterally without communicating with partner about what is going on for them
	3 = slightly direct communication	Checks in with partner about whether they want to stop
	4 = highly direct communication	Checks in with partner as in category 3, <i>and either</i> (1) inquires partner's state, (2) communicates own feelings, or (3) discloses/describes managing own frustration Or, waits until after sex to discuss the experience and their preferences with the intent of having a more in-depth discussion (if check-in is more cursory, code as 2 instead).

Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would stop” or “I would ask what happened”)
	3 = slightly positive (softening)	Adopts a generally positive communication style/expression of emotions (e.g., describes being gentle or calm) but without direct reassurance that is specific to the situation
	4 = extremely positive (engaging/affirming)	Provides significant reassurance or affirmation regarding partner potentially wanting to stop (e.g., “Don’t worry, I don’t want to do this unless you’re also into it”); soothes or comforts the partner

Vignette 9		
<i>You are having sex with your partner. Suddenly, your partner starts to do something (e.g., switches to a new position) that you have done together once before, but you are not in the mood to try that right now and were enjoying how things were previously.</i>		
Key considerations: • Similar to Vignette 11 with a key difference being that this is not a hard boundary; the participant may want to engage in this activity/position at another time		
Uncodeable: • 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) • 2 = incomprehensible (gibberish, unclear language) • 3 = refuses to answer question/cannot imagine situation • 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., “I would feel guilty”, “I would hate that” or “they would be angry” <i>without</i> a corresponding response)
	1 = highly indirect communication	Goes along with partner desires against own wishes (e.g., “I would let it happen”)
	2 = slightly indirect communication	Redirects partner without explicitly stating wishes (e.g., makes an excuse to stop or tries to go back to what was happening previously <i>without</i> concrete feedback)
	3 = slightly direct communication	Explicitly communicates they do not want to do this particular activity (e.g., “stop” or “I don’t want that”) or that they want to go back to what they were doing before Participant may suggest an alternative activity but in a cursory way (e.g., “let’s do this instead”)

	4 = highly direct communication	Explicitly communicates preference as in category 3, but also refers to participant's or partner's emotion or checks in with partner in a way that is not simply a cursory check-in (e.g., "Did you not like what we were doing before? Is there something I can do differently if we go back to that?") Participant may suggest an alternative activity in a way that invites the partner to give feedback about what they like/dislike (i.e., more in-depth than a code 3; e.g., "Was something wrong with what we were doing? We can do this instead" or "What are you liking about this? Maybe we can do something similar")
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., "I would stop" or "I would ask what happened/if everything is okay")
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., "I would make a joke" or "I would say sorry but I don't want to" or "I would try to do it in a playful way")
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., "I would tell them I still love them, but I'm just not feeling that"); or communication style strongly conveys excitement and enthusiasm (i.e., higher intensity emotions than a rating of 3)

Vignette 12		
<i>You and your partner are in the middle of having sex for the first time. So far, the sex has been satisfying and exciting. However, in the middle of the interaction you start to feel a bit physically unwell and want to pause or stop altogether.</i>		
Key considerations: Because it's early in the sexual relationship, the partner may feel slighted or confused – the ideal response clearly communicates the reason for stopping and provides some form of affirmation/reassurance		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., “I would feel guilty”, “I would hate that” or “they would be angry” <i>without</i> a corresponding response)
Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	1 = highly indirect communication	Tries to continue sexual activity without communicating about feelings
	2 = slightly indirect communication	Redirects partner without explicitly stating wishes (e.g., makes an excuse to stop without sharing feelings, leaves without saying anything, tries to communicate discomfort via facial expressions alone)
	3 = slightly direct communication	Explicitly asks to stop <i>or</i> says they are not feeling well
	4 = highly direct communication	Explicitly communicates both desire to stop and reason, or does one of the above while responding to partner's potential reactions (e.g., “it's not your fault,” “when I'm better we can...”) or sharing own feelings (e.g., “I'm sad we have to stop”)
Communication valence If both positive and negative cues exist within the same	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger

response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would stop” or “I would say how I was feeling”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., “I would make a joke” or “I would say sorry but I don’t want to” or “I would try to do it in a playful way”) Can include giving into advances (e.g., if the reasoning is related to wanting to reassure partner)
	4 = extremely positive (engaging/affirming)	Strong attempt to directly reassure, soothe, or comfort the partner (e.g., “I would tell them I still love them, but I’m just not feeling it”, “I would make sure they know it’s not their fault”)

Vignette 18		
<i>You're at a party and you hit it off with someone you've just met. You're both flirting heavily and there's clear sexual tension between you. They suggest going back to their place, but you're not sure if you're ready for that kind of intimacy yet.</i>		
Key considerations: Whether the participant decides to go home with the person or not should not affect coding in and of itself (e.g., some people may be willing to go without being 100% sure)		
Uncodeable: 1 = responded to wrong situation/misinterpreted (e.g., describes how they would respond to a partner rejecting them instead of the other way around) 2 = incomprehensible (gibberish, unclear language) 3 = refuses to answer question/cannot imagine situation 4 = other		
Dimension	Ratings	Notes/Examples
Directness/Indirectness of communication Focus on the predominant type of communication in the response. If multiple strategies are described (e.g., I would do x, and then if they said y I would do z) only code the part that is directly in response to the vignette and not any added details/speculation by the participants	0 = no communication	No description of communication (note: explicitly <i>choosing not to communicate</i> or freezing up would be an indirect response) May focus only on feelings (e.g., “I would feel guilty”, “I would hate that” or “they would be angry” <i>without</i> a corresponding response)
	1 = highly indirect communication	Goes along with invitation without communicating desire not to have sex
	2 = slightly indirect communication	Makes an excuse to leave the situation (e.g., “I have work tomorrow”) that is clearly related to avoiding communicating true thoughts/intentions
	3 = slightly direct communication	Directly declines invitation (including if they decide not to see them again), <i>or</i> agrees to go with the person but communicates their feelings (or that they may not be interested in sex tonight), <i>or</i> suggests a cursory alternative (e.g., exchanges contact information)

	4 = highly direct communication	Explicitly declines the invitation and either explains own feelings, suggests an alternative while communicating values or intentions (e.g., “what if we get together for coffee next week and get to know each other better”), communicates continued interest in the person, or explores partner’s reaction
Communication valence If both positive and negative cues exist within the same response, code the predominant valence for the response. If multiple responses are described (e.g., based on how partner might react), only code the part of the response that is directly in response to the vignette.	0 = extremely negative (oppositional)	Expresses strong/intense negative emotions (e.g., anger, hostility, fear); include nonverbal expressions of emotion such as physical expressions of anger
	1 = slightly negative (defensive)	Expresses lower-intensity negative emotions (e.g., nervousness, mild irritation, guilt, or disappointment); include nonverbal expressions of emotion such as crying
	2 = neutral	No positive/negative context (e.g., “I would try to get out of it” or “I would go to their place”)
	3 = slightly positive (softening)	Communication style (body language, tone, etc.) is generally positive (e.g., “I would make a joke” or “I would say sorry but I don’t want to” or “I would try to do it in a playful way”) Can include giving into advances (e.g., if the reasoning is related to wanting to reassure the person and the emotions conveyed are positive)
	4 = extremely positive (engaging/affirming)	Communication style (i.e., tone, body language, wording choices) strongly conveys excitement/ enthusiasm or continued interest in the person (i.e., higher intensity emotions than a rating of 3)

Appendix C

Perspective-Taking Intervention Used in Study 3

Note: Each square image/slide was shown on a separate page and was larger than presented in the current document to enhance readability.



1

Create an Accepting Atmosphere (a no-judgement zone)

Sexual communication can be a vulnerable process - when people feel judged, they tend to share less or to stop sharing altogether. When they feel affirmed and understood, they share more (and more authentically).

To truly understand your partner, **create a safe space** for them to express themselves. Remember that what they are sharing may feel quite personal. Even when you feel surprised by what your partner shares, **express your appreciation** for their willingness to let you in and **avoid making judgmental comments**.



Create an Accepting Atmosphere (a no-judgement zone)

Joe and Samantha had been in a relationship for 9 months. Joe noticed they were having sex less often and wanted to change this, but did not want Samantha to feel criticized.

*Joe opened the conversation by **waiting for a time when they both felt relaxed** and saying, "Hey, I've been thinking about the fact that we've been having sex less often, and I wondered if we could have a conversation to figure out what's going on. **I don't blame you** or anything, but to me it **makes sense for us to both share our feelings instead of bottling it up.**"*



2

Ask, Don't Assume

Sometimes, people assume that their partners want the same things as them. However, it is normal and expected that partners might sometimes feel differently.

Stay curious and ask questions to get more information about what your partner is saying, then **reflect what they say back to them** to check your understanding.



Ask, Don't Assume

Joe suspected that Samantha had lost attraction to Joe. He asked, "You know, I wonder if the 'honeymoon phase' is over, and maybe you're not as attracted to me as before. **Am I getting that right, or is there something else going on?**" Samantha replied, "Not at all! I'm glad you brought this up, but I am sorry you had that impression. I am very much still attracted to you – you know, my boss has really been on my case at work lately and until just now, I never connected the dots about how that was affecting us."



Joe replied, "I had no idea! You **must have a lot on your plate**, and that probably makes it hard for you to get in the mood at the end of a long day." Samantha agreed. Joe's questions allowed him to get a more accurate understanding of the problem.

3

Tune Into Their Feelings



Try to tune into how your partner is feeling during sexual situations or conversations by **focusing on their body language and tone of voice**.

When people feel that **their feelings are being accepted and understood**, rather than dismissed or challenged, they are **more likely to share** their point of view.



Tune Into Their Feelings



As the discussion unfolded, Joe noticed that Samantha was **making less eye contact** and **sitting further away**. Joe leaned over and commented, "Hey, it **seems like this conversation is making you tense** – we don't have to keep talking about it if you don't want to, but **I want you to know I'm here for you.**"

Samantha turned, moved closer to Joe, and said, "Thanks. I guess **I just feel sad** that you thought I wasn't as attracted to you anymore! I can see how me turning you down so often would feel hurtful if you didn't know what was going on."



4

Understanding Doesn't Always Mean Agreeing

Sometimes people think that if they acknowledge their partner's perspective, they have to change how they feel about an issue to stay compatible. This isn't true. You can **both have different opinions and preferences and still be really good at understanding each other**, and creating a sexual repertoire that meets both of your needs.



Understanding Doesn't Always Mean Agreeing

*Samantha said, "While we're talking, I've also been thinking it would be fun to try some role play in the bedroom. It would keep things fresh and help me get out of my head a bit. **What do you think?**" Joe hesitated for a second and replied, "I've done that in previous relationships, and it never really worked for me. **I could think about it** and see if there's a type of role play that would feel less 'icky' for me, but I'm not sure right now."*

*Samantha responded, "That is **so sweet of you to be willing to think about it**, but if it's not your thing then we don't have to do it. I'm sure **we can find tons of other ways** to get creative that would satisfy us both!"*





**TAKING YOUR PARTNER'S PERSPECTIVE
ENHANCES SEXUAL COMMUNICATION IN
ANY TYPE OF SEXUAL RELATIONSHIP,
WHETHER IT'S A CASUAL RELATIONSHIP
OR A LONG-TERM COMMITMENT.**



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