RESPONSES TO SEXUAL REJECTION AND SEXUAL AND RELATIONSHIP WELL-BEING IN COUPLES COPING WITH SEXUAL INTEREST/AROUSAL DISORDER

by

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DEDICATION

For my parents, who did not know what a dissertation was 5 years ago, and without whom I would never have written one myself. Thank you for moving across the world so your children could have a better future, and for all the sacrifices along the way.

We did it.

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ABSTRACT

Sexual Interest/Arousal Disorder (SIAD) is the most common sexual problem reported by women. Affected individuals often encounter higher sexual desire from partners, resulting in frequent sexual rejection (i.e., declining a partner's sexual advances). Despite clinical and theoretical models conceptualizing sexual desire challenges in the context of relationship dynamics, no studies have investigated the implications of partner *responses* to sexual rejection for couples' sexual well-being (e.g., sexual satisfaction, dyadic sexual desire, sexual distress, and sexual frequency) and relationship satisfaction. In my dissertation, I addressed this gap by examining four distinct partner responses to sexual rejection: *understanding* (e.g., responsiveness), *resentful* (e.g., guilt-tripping), *insecure* (e.g., feeling hurt), and *enticing* (e.g., attempting to re-initiate). Using a cross-sectional design in Study 1, I compared the frequency of each response and their associations with sexual well-being and relationship satisfaction among couples coping with SIAD (N = 241) and community couples (N = 105). After controlling for sexual rejection frequency, couples coping with SIAD reported greater resentful and insecure responses to sexual rejection than community couples, and individuals with SIAD perceived less understanding responses than their partners reported. For both groups, more understanding and less resentful and insecure responses were associated with greater sexual and relationship well-being, with mixed findings for enticing responses. In Study 2, I examined daily (56 daily diaries, N = 200 couples) and prospective (6-month follow-up, N = 170 couples) associations between responses to sexual rejection, sexual well-being, and relationship satisfaction in couples coping with SIAD. Generally, in both analyses, higher understanding and lower resentful and insecure responses were associated with both couple members' greater sexual well-being and relationship satisfaction, with mixed results for enticing responses. Unexpectedly, at the daily level, greater understanding responses than usual were linked to both couple members' greater sexual distress, and prospectively, individuals with SIAD's greater perceived insecure responses predicted their partners' greater sexual satisfaction, six months later. Collectively, these results support and expand upon models of dyadic sexual desire and models for treating sexual desire challenges; moreover, they provide initial evidence for targeting responses to sexual rejection in therapeutic interventions for couples experiencing frequent sexual rejection.

LIST OF ABBREVIATIONS AND SYMBOLS USED

α	Alpha significance level or Cronbach's alpha coefficient of reliability
AFAB	Assigned female at birth
API	Asian/Pacific Islander
APIM	Actor-Partner Interdependence Model
B	Unstandardized beta coefficient
BIC	Bayesian Information Criterion
BIPOC	Black, Indigenous, and People of Colour
CAD	Canadian dollar
CBCT	Cognitive-behavioural couple therapy
CFI	Comparative fit index
CI	Confidence interval or credible interval
CIHR	Canadian Institutes of Health Research
CSI	Couples Satisfaction Index
CTS	Conflict Tactics Scale
DIADICS	Dyadic Interactions Affecting DyadIC Sexual desire
DSM-5	The 5th Edition of the Diagnostic and Statistical Manual of Mental Disorders
DSM-5-TR	The 5th Edition of the Diagnostic and Statistical Manual of Mental Disorders – Text Revision
EFCT	Emotionally focused couple therapy
Est	Standardized model estimate
F	F-value for F-tests of significance
FSDS-R	Female Sexual Distress Scale-Revised
FSAD	Female Sexual Arousal Disorder
FSIAD	Female Sexual Interest/Arousal Disorder
GMSEX	Global Measure of Sexual Satisfaction
GPPPD	Genito-pelvic pain/penetration disorder
HSDD	Hypoactive Sexual Desire Disorder
IBM	International Business Machines Corporation
IERM	Interpersonal Emotion Regulation Model

IWK	Izaak Walton Killam
M	Mean
N	Population sample size
n	Subsample size
nEffective	Effective sample size
NPSC	Non-physical sexual coercion
OSF	Open Science Framework
p	p-value for significance testing
p_{holm}	Holm-Bonferroni corrected p-value for significance testing
PSR	Proportional Scale Reduction
r	Pearson correlation coefficient
R_C	Reliability of change
RDSEM	Residual dynamic structural equation modeling
RMSEA	Root mean square error of approximation
RSRS	Responses to Sexual Rejection Scale
SD	Standard deviation
SDI	Sexual Desire Inventory
SDS-SF	Sexual Distress Scale-Short Form
SE	Standard error
SSHRC	Social Sciences and Humanities Research Council of Canada
SPSS	Statistical Package for the Social Sciences
SIAD	Sexual Interest/Arousal Disorder
t	t-value for t-tests of significance
TLI	Tucker-Lewis index
US	United States
USD	United States dollar
WEIRD	Western, Educated, Industrialized, Rich, and Democratic
Δ	Change or difference between two values

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CHAPTER 1: INTRODUCTION

Sexual well-being and relationship satisfaction are vital to overall health, life satisfaction, and happiness (Buczak-Stec et al., 2019; Londero-Santos et al., 2021; Mitchell et al., 2021; Soysal & Smith, 2022). Indeed, having a strong relationship with a partner—which is facilitated by greater sexual well-being (Diamond & Huebner, 2012; Muise et al., 2013)—is a stronger predictor of mortality than other known risk factors (e.g., smoking, alcohol use, and obesity; Holt-Lunstad et al., 2010). While there are many definitions of sexual well-being (Mitchell et al., 2021), some common features include satisfaction with sexual relationships, sustained desire for sexual activity, greater frequency of sexual behaviours (positive associations at frequencies up to, but not greater than, once a week; see Muise et al., 2016), and less distress related to sexual experiences (Byers & Rehman, 2014). Unsurprisingly, experiencing sexual difficulties, such as low sexual desire, is associated with poorer mental and physical well-being and relationship outcomes (Byers & Rehman, 2014).

The most common sexual dysfunction experienced by women[1] (estimated 7% to 23% population prevalence; Briken et al., 2020; West et al., 2008; Witting et al., 2008) is Sexual Interest/Arousal Disorder[2] (SIAD; i.e., clinically low sexual desire; American

[1] These studies refer to 'women' and 'female' participants, however, the majority did not specify if participants were exclusively cisgender women.

[2] The diagnosis is listed as Female Sexual Interest/Arousal Disorder (i.e., FSIAD). I omit 'Female' from the diagnostic label and use the term 'SIAD' instead to accurately reflect our sample: inclusive of women with diverse bodies and gender diverse individuals who were assigned female at birth (e.g., intersex, non-binary, trans). Consistent with best research practices for gender inclusivity and to prevent erasure of experiences (Brotto & Galea, 2022), when referring to participants within my dissertation studies, I use gender additive language such as 'women and gender diverse individuals with SIAD' and 'men, women, and gender diverse partners'. To promote readability and clarity, I also refer to participants as 'individuals with SIAD' and 'partners'.

Psychiatric Association, 2022). Researchers have established that there are biological, psychological, and sociocultural factors which contribute to the development of SIAD (Ronghe et al., 2023; van Anders et al., 2022). In line with clinical and theoretical models which conceptualize desire difficulties as a relationship dynamic, desire discrepancy is one of the most common reasons cited by couples seeking therapy, and couples coping with SIAD report lower sexual and relationship satisfaction and greater sexual distress than community couples (Péloquin et al., 2019; Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; Rosen et al., 2019). Given the dyadic nature of sexual problems, interpersonal factors have been posited as key to coping with sexual desire difficulties (Prekatsounaki et al., 2022; Rosen & Bergeron, 2019). However, few studies have examined interpersonal factors associated with SIAD at the dyadic level. Moreover, the vast majority of these studies have been cross-sectional (e.g., Hogue et al., 2019; Raposo & Muise, 2021), limiting knowledge of how these factors are linked to adjustment in couples' daily lives and over time, such as causality and the potential dynamic nature of development and change in the associations. Qualitative research in couples coping with low sexual desire identified sexual rejection—declining a partner's sexual advances—as a common interpersonal interaction resulting in distressing emotions, beliefs, and behaviours for both couple members (Frost & Donovan, 2019). Experiencing sexual rejection has been linked to lower sexual and relationship satisfaction in community couples, with negative impacts persisting for multiple days (Byers & Heinlein, 1989; Dobson et al., 2020). Prior research in sexual rejection has primarily focused on how individuals may reject their partner more effectively (e.g., Dobson et al., 2020; Kim et al.,

2018; Kim et al., 2020) and overlooked the potential role that the rejected partner may play in the interaction. For couples coping with SIAD, sexual rejection experiences may be especially salient, and partners of affected individuals have expressed frustration and uncertainty about their ability to improve their own and the affected women's well-being (Frost & Donovan, 2019). Yet, prior to my dissertation, no studies have examined how partners' *responses* to sexual rejection may impact sexual and relationship well-being over time in couples coping with SIAD. Enhanced knowledge of how partners respond to rejection in the context of SIAD will inform targeted treatment interventions.

The goal of my dissertation was to examine the associations between responses to sexual rejection and sexual well-being (e.g., sexual satisfaction, partner-focused sexual desire, sexual frequency, and sexual distress) and relationship satisfaction in couples coping with SIAD using multiple methods (i.e., cross-sectional, daily, and prospective analyses). In the following section, I provide an overview of SIAD (including its definition, consequences, and etiology), dyadic perspectives of sexual dysfunctions, and clinical and theoretical models for understanding low desire. Then, I discuss responses to sexual rejection, its relevance to SIAD, the distinct types of responses sexual rejection examined in my dissertation, and their theorized associations with sexual well-being and relationship satisfaction. Next, I summarize the limitations and gaps in the extant literature. Finally, I conclude this chapter with a summary and overview of my dissertation manuscripts.

1.1 Overview of Sexual Interest/Arousal Disorder

1.1.1 Definition of Sexual Interest/Arousal Disorder (SIAD)

The *5th Edition of the Diagnostic and Statistical Manual of Mental Disorders – Text Revision* (DSM-5-TR; American Psychiatric Association, 2022) indicates that SIAD is a diagnosis for females/women[3], whereas males/men experiencing chronically low sexual desire may receive a diagnosis of Male Hypoactive Sexual Desire Disorder (HSDD). The SIAD diagnosis was introduced in 2013 as a combination of two previous sexual dysfunction diagnoses for women (i.e., HSDD and Female Sexual Arousal Disorder [FSAD]; see Graham, 2016 for a review) and includes diagnostic criteria that allow for multiple combinations of symptoms (American Psychiatric Association, 2013). Per the DSM-5-TR, SIAD is characterized by a lack of, or significantly reduced, sexual interest/arousal persisting for at least six months and causing clinically significant individual distress. To meet the diagnostic criteria for SIAD, these symptoms cannot be better accounted for by a non-sexual mental disorder, a medical condition, effects of a substance or medication, severe relationship distress, or other significant stressors. The presence of SIAD can be lifelong (i.e., present since the individual became sexually active) or acquired (i.e., after a period of being relatively symptom-free), and situational (i.e., only occurring with certain types of stimulation, situations, or partners) or generalized (i.e., not limited to any specifics). The prevalence of SIAD remains unknown; however, population studies of HSDD, FSAD, and distressing clinically low

[3] The DSM-5-TR differentiates between sex (i.e., referring to "…factors attributable to an individual's reproductive organs and XX or XY chromosomal complement.", p. 20) and gender (i.e., referring to "…a result of reproductive organs as well as an individual's self- representation and includes the psychological, behavioural, and social consequences of the individual's perceived gender.", p. 20). The description of FSIAD, however, refers to both "female" and "women" throughout (e.g., "By definition, the diagnosis of female sexual interest/arousal disorder is only given to women.", p. 493). Given this, I use the terms "females/women" and "males/men" to reflect whom these diagnoses pertain to while recognizing that sex and gender are separate concepts.

sexual desire suggest that lifetime estimates range from 7.4% to 12.7% (Burri et al., 2014; Witting et al., 2008), with point estimates ranging from 9.3% to 34.5% (Dennerstein et al., 2006; Shifren et al., 2008; Worsley et al., 2017), and women aged 30 to 64 years generally reporting the highest prevalence across lifetime and point estimate studies (Dennerstein et al., 2006; Hayes et al., 2007; Rosen et al., 2009; Shifren et al., 2008; West et al., 2008; Zheng et al., 2020).

1.1.2 Consequences of SIAD

Research indicates that individuals with SIAD experience psychological, sexual, and relational consequences associated with the sexual dysfunction. It is important to highlight the scarcity of longitudinal studies in this literature. Longitudinal research may offer insights into how consequences change, interact, and evolve over time. However, our understanding of SIAD outcomes relies heavily on correlational findings. Thus, although causality and directionality cannot be deduced from correlational studies, the following sections reflect research that examined theoretically grounded psychological, sexual, and relational consequences of SIAD.

Further, some of the studies discussed include samples of individuals with HSDD and FSAD, undiagnosed distressing low sexual desire, and sexual desire in community women. Although individuals with SIAD often resemble those previously diagnosed with HSDD and FSAD, emerging evidence suggests that their symptoms tend to be more severe than those who met criteria for HSDD in the past (O'Loughlin et al., 2018). Nonetheless, the associations with poorer well-being discussed below have been

consistently documented in the literature[4], and, for conceptual clarity, I specify the sample included in each study when reviewing the existing research. Moreover, while I only present the consequences for the individual experiencing low desire in this section, consequences for their partners' and the couple are reviewed in Section 1.1.4 (Dyadic Perspective of Sexual Dysfunctions).

1.1.2.1 Psychological Consequences

Prior studies have examined associations between the presence of SIAD and declines in individuals' psychological well-being. In cross-sectional studies, women with low sexual desire report poorer mental health, including greater symptoms of depression and anxiety, compared to their own partners and to community women (Biddle et al., 2009; Bravo et al., 2007; Rosen et al., 2019; Trudel et al., 1997). Compared to women without sexual desire difficulties, women with HSDD reported greater negative feelings (e.g., concern, disappointment, sadness, frustration, anger, shame), lower self-esteem, more worry about letting their partner down, and greater feelings of less femininity and being a sexual failure (Graziottin, 2007). These results are further supported by women's qualitative descriptions of feelings of anxiety, fear, sadness, guilt, and shame, and poorer sexual self-esteem and self-concept, resulting from low sexual desire (Akbari et al., 2018; Frost & Donovan, 2019; Graham et al., 2017; Hinchliff et al., 2009; Træen, 2008). Given that the prior studies were correlational, associations between psychological well-being and low sexual desire may be bi-directional, similar to other sexual dysfunctions (e.g.,

[4] It is worth noting that the extant literature has primarily examined samples of women that are White, from Western cultures, and—either in actuality or assumed to be—cisgender, heterosexual, and partnered with men (van Anders et al., 2022).

Atlantis & Sullivan, 2012), unidirectional in either direction, or due to one or more confounding variables.

1.1.2.2 Sexual Consequences

Since SIAD involves distress associated with clinically low sexual desire, it follows that individuals tend to experience consequences in all aspects of their sexual well-being. Women who experience symptoms of SIAD are more likely to report challenges with other aspects of their sexual functioning (e.g., orgasm, pain during penetration), compared to women who do not experience distress with low desire, women who previously met criteria for HSDD, and community women who do not have sexual dysfunction (O'Loughlin et al., 2018; Rosen et al., 2019; Rosen et al., 2009). Women with distressing low sexual desire also report engaging in sexual activity less often than women without low desire (Dennerstein et al., 2009; Dennerstein et al., 2006) and greater avoidance of sex than women who are not distressed (Hendrickx, Gijs, & Enzlin, 2016). Interestingly, a recent psychophysiological study determined that relationship satisfaction moderated the association between women with SIAD's genital arousal and their desire for sex with a partner (Blumenstock et al., 2024). For affected women with high relationship satisfaction, genital arousal was positively associated with desire for partnered sexual activity. However, for those with low relationship satisfaction, as genital arousal increased, their desire for sex with a partner decreased. It may be that individuals in low-quality relationships experience reduced desire for sex with a partner despite experiencing physical arousal, possibly due to negative associations or avoidance behaviours triggered by unsatisfying or negative interactions with their partner. These

findings emphasize the importance of relational factors in low desire (see Section 1.1.3.3 for more on the role of relational factors).

Compared to their own partners and control women, when women with SIAD do engage in sexual activity, they are more likely to do so to avoid negative outcomes (i.e., avoidance sexual goals, such as to prevent a partner from being angry or falling out of love), than because they are motivated to meet their partner's sexual needs (i.e., sexual communal strength), or because they want to enhance positive outcomes of sex (i.e., approach sexual goals, such as to promote intimacy or express love; Bockaj et al., 2019). Reporting lower sexual communal strength and higher avoidance sexual goals is associated with lower sexual desire and satisfaction in women with another sexual dysfunction, genito-pelvic pain/penetration disorder (GPPPD), which tends to also be associated with low sexual desire (Muise et al., 2017; Rosen et al., 2018). Accordingly, women with SIAD report lower sexual desire and satisfaction, and higher sexual distress compared to their own partners, control women undiagnosed with SIAD, and women with HSDD (Hendrickx, Gijs, & Enzlin, 2016; O'Loughlin et al., 2018; Rosen et al., 2019). Women with SIAD also endorse poorer sexual communication (e.g., greater embarrassment and difficulty, or never discussing sexual matters) than control women (Rosen et al., 2019).

1.1.2.3 Relationship Consequences

Despite the established association between sexual and relationship satisfaction (e.g., Fallis et al., 2016; Rausch & Rettenberger, 2021), there are mixed findings regarding relationship satisfaction in women with distressing low sexual desire. Some

studies indicate that women with distressing low desire feel their relationship suffers due to the low desire (Kingsberg, 2014), and report greater relationship distress (e.g., concerns about declines in intimacy and emotional closeness) and poorer relationship quality and satisfaction than controls (Revicki et al., 2012; Trudel et al., 1993). However, other research found no significant differences between women with SIAD's and control women's reported relationship satisfaction (Rosen et al., 2019). These mixed findings align with a typology study of women's sexual desire which identified three groups: average desire (average sexual desire and sexual and relationship satisfaction, and skillful sexual communication), globally distressed (i.e., low sexual desire, satisfaction, and communication, and very low relationship satisfaction) and sexually dissatisfied (i.e., low sexual desire, satisfaction, and communication, and average relationship satisfaction; Sutherland et al., 2020). Notably, women with sexual and relational dissatisfaction tended to be in the low desire groups and those with greater satisfaction were in the average desire group, suggesting that women's sexual desire is deeply intertwined with the circumstances of their relationships (Sutherland et al., 2020). Indeed, it is challenging to disentangle whether sexual difficulties cause or result from relational troubles as relationship quality has been shown to predict women's sexual desire at the daily level (Brotto & Velten, 2020; Dewitte & Mayer, 2018). Among partnered women with low desire, women who are unhappy with their relationship more frequently report sexual distress and low sexual satisfaction (Rosen et al., 2009). Women with distressingly low desire who report lower levels of sexual interest report less frequent sexual and non-sexual interactions (e.g., communicating feelings, sharing daily life activities,

caressing) with a partner (Dennerstein et al., 2009). Qualitatively, women share that distressing low desire impacts their relationship though increased conflict and tension, loss of connection and intimacy, and challenges communicating both sexually, and generally about their thoughts, feelings, and behaviours (Akbari et al., 2018; Frost & Donovan, 2019). Importantly, while the research described in this section reflects studies of relationship consequences of SIAD, below I review the body of research regarding relational factors associated with the etiology of SIAD (see Section 1.1.3.3), suggesting that there may be a reciprocal association between relationship dynamics and SIAD.

1.1.3 Biopsychosocial Etiology of SIAD

SIAD, like all sexual dysfunctions, has a multifaceted nature. Given the numerous unique factors that contribute to the development and maintenance of SIAD, I will use a biopsychosocial approach to present its most common correlates and predictors (e.g., Malary et al., 2015; Thomas & Thurston, 2016), rather than providing a comprehensive overview.

1.1.3.1 Biological Factors

Biologically, aging has been linked to a greater likelihood of reporting distressing low sexual desire (Abdo et al., 2010), with this association amplified if menopause occurs prematurely (Graziottin, 2007). However, other research suggests that age is no longer a significant predictor in the development of distressing low sexual desire after controlling for additional risk factors (e.g., hormones, health problems, relationship length; Jiann et al., 2009). This finding is supported by results indicating that—independent of age—there is a higher prevalence of distressing low sexual desire in women who

experience medically induced menopause, compared to pre-menopausal women and women who experience naturally occurring menopause, likely due to the abrupt change in hormone levels (Dennerstein et al., 2006; Graziottin, 2007; Leiblum et al., 2006; Rosen et al., 2009; West et al., 2008). Relatedly, there have been mixed findings regarding the role of hormonal contraceptives in low desire (see Parish & Hahn, 2016 for a review). Regarding medical conditions, women with HSDD are more likely to report chronic widespread pain, cardiovascular disease, diabetes, and breast cancer than control women—researchers hypothesize that this may be due to associated hormonal, physical, and emotional changes that contribute to inhibiting desire (Abdo et al., 2010; Burri et al., 2014; Jiann et al., 2009). Further, medications used to treat medical and psychological conditions (e.g., corticosteroids, selective serotonin reuptake inhibitors) may impact sexual desire through their effects on hormones and neurotransmitters (Basson & Schultz, 2007; Graziottin, 2007). Although mood disorders can impact sexual desire (discussed below), the adverse sexual effects of antidepressants are more prominent than those of the mood disorder itself, and manifest earlier than the intended symptom reductions (Lorenz et al., 2016).

1.1.3.2 Psychological Factors

Research indicates that low sexual desire is highly comorbid with psychological disorders such as depression, anxiety, obsessive compulsive disorder, panic disorder, phobias, anorexia, and schizophrenia (Basson & Gilks, 2018; Dobkin et al., 2006; Mercan et al., 2006; Miller & Finnerty, 1996; Pinheiro et al., 2010; Vulink et al., 2006). Interestingly, paradoxical associations have also been reported between depression and

anxiety and sexual desire. Daily diary research found that while most women report lower desire when they feel more depression and anxiety, a minority of women (estimated 10% to 20%) report greater desire at both extremes (i.e., very high and very low) of depression and anxiety (Bittoni & Kiesner, 2022), and similar results have been seen in cross-sectional studies (e.g., Lykins et al., 2006). Despite these mixed findings in community samples, 40% to 50% of women with major depressive disorder report clinically low sexual desire (Kennedy et al., 1999; Thakurta et al., 2012), and similar rates were found in women with anxiety disorders (Bodinger et al., 2002; Figueira et al., 2001). These findings suggest that clinical levels of depression and anxiety, compared to non-clinical levels, may be more likely to contribute to or co-occur with distressing low desire. In addition to biological factors, potential contributions are thought to arise from emotions and cognitions associated with depression and anxiety. For example, compared to control women, women with HSDD report greater negative emotions when facing sexual situations (e.g., loneliness, helplessness, incompetence), greater endorsement of dysfunctional sexual beliefs (e.g., *Sex is dirty and sinful*; Nobre & Pinto‐Gouveia, 2006), and greater negative automatic thoughts during sexual activity (e.g., *When will this be over?*; Nobre & Pinto-Gouveia, 2008).

1.1.3.3 Sociocultural and Relational Factors

Sociocultural and relational factors across the lifespan have been linked to low sexual desire (see Mark & Lasslo, 2018 for a review). Women with a history of adverse interpersonal experiences in childhood (e.g., abuse, neglect) are more likely to experience sexual dysfunction, particularly low sexual desire and sexual aversion, compared to those

with no history of adverse experiences (see Brotto et al., 2016 for a review). Researchers suggest that greater depression symptomology is the predominant mechanism connecting childhood trauma to low sexual desire (O'Loughlin et al., 2020). At the societal level, cross-cultural studies find significant differences in the prevalence of women's low sexual desire across ethnic backgrounds (Avis et al., 2005; Huang et al., 2009; Laumann et al., 2005). Cohort studies of women aged 40 to 80 years old, indicate that Latina, Hispanic, and Black women generally report greater sexual desire than Asian women, with mixed findings for White women (Avis et al., 2005; Huang et al., 2009). Further, a global study across 29 countries found higher rates of sexual dysfunction related to lack of sexual interest in East and Southeast Asian, and Middle Eastern women, compared to Central and South American, and European women (Laumann et al., 2005). Between and within cultural groups, factors such as values, traditionalism, religiosity, access to resources, and systems of privilege and oppression may mediate or modulate the association between a woman's cultural background and her sexual desire (Ahrold & Meston, 2010; Atallah & Redón, 2023; Giménez-García et al., 2020; Mark & Lasslo, 2018; Woo et al., 2011). Indeed, although rates of clinically low sexual desire are higher in Asian women, they are less likely to report associated distress than White women (Rosen et al., 2009). Researchers have posited that this difference is attributable to the expectation in Asian cultures that "faithful wives" do not have sexual desire nor ask for sex, thus, low desire is normalized and not considered a problem (Lo & Kok, 2014).

Following a review of approaches to treating women's sexual desire, researchers concluded that biological "fixes" (e.g., testosterone, Flibanserin) have shown no or

incredibly small effects, and that the relative success of some psychological interventions is linked to their capacity to address side effects of socialization (van Anders et al., 2022). For example, women with distressing low sexual desire often have negative self-schemas and automatic thoughts about body image (Nobre & Pinto‐Gouveia, 2006), which psychotherapy may address by challenging or shifting focus away from these distracting, problematic thoughts promoted by cultural beauty standards and toward more helpful ways of thinking (e.g., non-judgmental, present-moment focused) that facilitate sexual desire and reduce distress (e.g., non-judgmental, accepting, present-moment focused; Brotto & Velten, 2020; van Anders et al., 2022).

Research supports the notion that social norms and gendered expectations play an important role in women's sexual desire. For example, there is an enduring belief that desire manifests differently in women and men, and that men experience greater sexual desire than women, despite a review of contemporary research indicating that there are more similarities than differences in sexual desire across these two groups (see Dawson & Chivers, 2014 for a review). Common sexual scripts (i.e., socially constructed norms that dictate what is considered appropriate or expected in sexual encounters) center men's orgasms, prioritize penile-vaginal intercourse, and neglect sexual behaviours that provide more clitoral stimulation (e.g., oral or manual sex), each of which are associated with women's lower sexual pleasure (see Conley & Klein, 2022 for a review). Greater endorsement of these gendered sexual scripts is a robust predictor of heterosexual women's lower sexual desire (Rubin et al., 2019). Gendered expectations may also reduce sexual desire through promotion of inequitable gendered divisions of labour (see

van Anders et al., 2022 for a review), with women experiencing less leisure time, and providing greater labour hours in the home, which include more childcare-related and frequent chores (e.g., cooking, laundry). Moreover, women also experience greater stigmatization of sexuality than men (see Conley & Klein, 2022 for a review), including receiving more negative sexual messaging (e.g., regarding consequences and risks of sex) and being held to stricter moral standards (e.g., harsher judgment for engaging in sexual activity), which have been linked to less sexual satisfaction and pleasure, and greater shame and guilt, and, consequently, less sexual desire.

Notably, while some social norms and gendered expectations may play a greater role in the sexual desire of women in heterosexual relationships (e.g., gendered divisions of labour, gendered sexual scripts), qualitative research with bisexual, lesbian, and heterosexual women found that—for all participants—attitudes towards sexuality as taboo were salient, often developed in childhood, and diminished their lifelong sexual desire (Rosenkrantz & Mark, 2018). Further, the limited literature examining whether different sexual orientation groups (e.g., lesbian, bisexual, and straight women) differ in levels of sexual desire has produced mixed findings. For example, one study indicated that lesbian participants reported significantly lower sexual desire than bisexual, gay, and straight participants, with no significant differences identified among the latter three groups (Mark et al., 2018). Notably, the effect sizes of the significant differences were small to medium, and the sample was comprised of women, men, and genderqueer individuals, whose inclusion may have conflated the findings. Other research found that women in same-gender relationships reported greater desire for sexual activity compared

to women partnered with men (Holmberg & Blair, 2009). However, the effect size was small, and interpretation of the result is limited as the researchers did not collect information regarding participants' sexual identity. Moreover, a study comparing straight, mostly straight, bisexual, mostly bisexual, lesbian, and mostly lesbian women's desired frequency of sexual activity per week found no significant differences (Persson et al., 2016). In sum, further research is required to accurately determine whether and how sexual desire may differ among women with diverse sexual identities.

Studies have consistently found that relational factors within a romantic relationship are important predictors of women's sexual desire, above and beyond age, race, sexual orientation, and hormonal factors (Brotto & Velten, 2020; Dennerstein et al., 2009; Hayes et al., 2008; Vowels et al., 2021). Feelings of greater closeness, trust, mutual support, and affection have been shown to predict women's sexual desire and attraction for a partner (Carvalho & Nobre, 2010; Dewitte & Mayer, 2018; Rubin & Campbell, 2012). Research indicates that relational factors may be especially relevant for women with distressing low sexual desire. In women experiencing low desire, greater distress is predicted by lower relationship satisfaction and communication about sexual needs, and a partner's sexual difficulties (Hendrickx, Gijs, Janssen, et al., 2016; Træen & Skogerbø, 2009; Witting et al., 2008). Distress associated with low desire—and, thus, meeting criteria for a diagnosis of SIAD—is nearly three to five times more likely to occur in partnered than unpartnered women (Rosen et al., 2009; Worsley et al., 2017). Further, compared to women without significant sexual difficulties, women reporting significant difficulties with desire, arousal, and orgasm were more likely to endorse a model of

sexual response that reflected engaging in sexual activity with a partner for non-sexual reasons (e.g., seeking emotional intimacy) than models indicating that sexual activity stemmed from intrinsic sexual desire or excitement (Sand & Fisher, 2007). However, factors associated with greater closeness and intimacy have also been depicted as having a dampening effect on women's desire. In a qualitative study, women meeting criteria for HSDD describe feelings of over-familiarity with a partner (e.g., less romance) and over-availability of sex (e.g., less spontaneity and excitement, greater predictability in sexual activity) as having de-eroticizing effects, contributing to declines in their sexual desire (Sims & Meana, 2010). These findings point to a potential delineation in the components of closeness and intimacy which may support (e.g., affection, tenderness, feeling desired) or inhibit (e.g., comfort, stability) women's sexual desire.

In sum, research highlights both the importance of relational factors for women's sexual desire and the interdependence of sexual function between couple members—with one's sexual difficulties often translating to relational and sexual challenges for their partner (Brotto et al., 2016). Nonetheless, studies of women's sexual dysfunction that have examined partners' experiences are scarce, and fewer yet have included both couple members in the context of SIAD, limiting our understanding of how couple members' thoughts, behaviours, and emotions may interact and influence one another.

1.1.4 Dyadic Perspective of Sexual Dysfunctions

Clinical models for treating couples coping with sexual dysfunctions, especially desire discrepancies, emphasize the consideration and inclusion of an individual's partner in treatment (Avasthi et al., 2017; Dewitte et al., 2020; Jannini & Nappi, 2018; Kingsberg

et al., 2017). These models underscore the importance of understanding partners' consequences in the context of women's sexual dysfunction, and the role both couple members play in their own and their partner's sexual and relationship outcomes. Notably, the limited existing studies in these areas are primarily cross-sectional and most are based solely on mixed-gender/sex[5] couples (van Anders et al., 2022). When relevant, I specify alternative research methods and if the study sample included gender/sex diverse couples.

1.1.4.1 Consequences for Partners

A recent meta-analysis found that, in the context of women's sexual dysfunctions, partners frequently report lower sexual satisfaction and less pleasure from touching and caressing, and are three times more likely to experience sexual dysfunction themselves compared to individuals whose partners are without sexual dysfunction (Chew et al., 2021). A cross-sectional study inclusive of mixed-gender/sex, same-gender/sex, and gender/sex diverse couples found that partners of women with SIAD reported greater sexual distress and difficulties with erectile and orgasmic functioning, lower sexual satisfaction, and poorer sexual communication, compared to their control counterparts (Rosen et al., 2019). In qualitative research, partners of women experiencing distressing low sexual desire report negative changes in their behaviour (e.g., avoidance of partner), emotions (e.g., more frustration, guilt, anxiety, sadness), thoughts (e.g., sexual inadequacy), and relationship (e.g., loss of intimacy, more conflict) attributed to the low desire (Coffelt & Hess, 2015; Elliott & Umberson, 2008; Frost & Donovan, 2019; Ling & Kasket, 2016).

[5] Gender/sex serves as a comprehensive term reflecting the potentially intricate relationship between one's social gender and biological sex, which may, at times, be impossible to disentangle (van Anders, 2015).

1.1.4.2 Interdependence of Predictors and Outcomes in Couples Coping with Women's Sexual Dysfunction

Burgeoning dyadic research in couples coping with women's sexual dysfunction indicates that, for both couple members, their behaviours and cognitions were linked to their own and their partner's outcomes. For example, in cross-sectional studies, when individuals with SIAD or partners reported higher self-expansion (i.e. personal development and a sense of fulfillment facilitated by sharing new experiences and pursuing joint goals with a partner; Raposo et al., 2020), higher sexual communal strength (i.e., motivation to meet a partner's sexual needs; Hogue et al., 2019), greater sexual growth beliefs (i.e., views that continuous effort is required to maintain sexual satisfaction) and lower sexual destiny beliefs (i.e., views that natural sexual compatibility determines sexual satisfaction; Raposo et al., 2021), or more effective emotion regulation (Dubé et al., 2019), both couple members reported better sexual (e.g., higher desire and satisfaction) and relationship (e.g., more affection, less conflict) outcomes. These findings highlight the interconnectedness of couple members' experiences and the importance of considering both partners in treatment.

Sexual communication is considered especially relevant for couples coping with sexual problems such as low desire; moreover, it is positively associated with sexual desire, with larger effect sizes for women than men (Herbenick et al., 2014; Mallory et al., 2019; Mark & Lasslo, 2018). For example, in women with GPPPD and their partners, perceiving greater collaborative (e.g., problem solving, expressing feelings) and lower negative (e.g., criticizing, withdrawing) sexual communication within the couple was

associated with the individuals own greater relationship satisfaction and their partner's lower sexual distress (Rancourt et al., 2017). In the same clinical population, when partners reported lower catastrophizing, women reported decreased pain intensity (Lemieux et al., 2013). This association was mediated by partners' more negative responses to women's pain (e.g., ignoring or expressing frustration; Davis et al., 2015). Research suggests that even at lower frequencies, a partner's negative responses to a women's sexual dysfunction has greater implications for women's increased sexual distress than other consequences that occur more frequently (e.g., decreased pleasure; Stephenson & Meston, 2012).

1.1.4.3 Partner Responses to Sexual Dysfunction

Partners have qualitatively described feeling helpless when faced with women's sexual dysfunction (Frost & Donovan, 2019; Myrtveit‐Stensrud et al., 2023). Research indicates that a potential avenue to reduce helplessness and engage partners in treatment is to explore how partners respond to women's sexual dysfunction, which has been linked to both couple members' sexual and relationship outcomes. Cross-sectional, observational, and daily studies examining partners' responses (e.g., in general, during conversations about sexual difficulties, or during sexual activity) to GPPPD have shown that more positive (e.g., encouragement, empathy, understanding) and less negative (e.g., hostility, frustration, judgment) partner responses to women's pain were associated with greater sexual satisfaction, relationship satisfaction, and sexual function, and lower sexual distress for both women and partners (Bergeron et al., 2021; Bois et al., 2016; Rosen et al., 2010; Rosen et al., 2014; Rosen et al., 2015). Particularly underscoring that

partner responses contribute to creating an environment conducive to both couple members' greater sexual well-being, when women *perceived* their partner to be more responsive (i.e., validating, understanding) than usual, *partners* reported greater sexual functioning (Bergeron et al., 2021). Interestingly, one seemingly positive response type has resulted in mixed findings. Partners' greater solicitous responses (i.e., expressing concern, attempting to alleviate partner's distress) are associated with women's greater pain intensity and lower sexual satisfaction, and partners' poorer sexual functioning (Rosen et al., 2010; Rosen et al., 2014; Rosen et al., 2015). However, after controlling for women's sexual function and their relationship satisfaction, women's greater perceived partner solicitous responses have also been found to be associated with their own greater sexual satisfaction (Rosen et al., 2010). Researchers suggest that these mixed findings may be due to solicitous responses being experienced by women as a partner being responsive to their sexual needs—which is strongly linked to greater sexual satisfaction (see Birnbaum, 2023 for a review)—while still encouraging avoidance of sexual behaviours and increasing negative cognitive-affective factors (e.g., catastrophizing, hypervigilance, anxiety).

Qualitative research also stresses the importance of partners' responses to low desire in the maintenance of women's distress and low desire, and partners' distress (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). Yet, prior to my dissertation, only one study empirically examined partners' responses in the context of low sexual desire. Cross-sectionally, in a sample of women with SIAD and their male, female, and intersex partners, when affected women perceived more positive (e.g.,

understanding, warm, compassionate) than negative (e.g., judgmental, hostile, indifferent) partner responses, they reported greater relationship satisfaction, and both they and their partners reported lower anxiety (Rosen, Corsini-Munt, et al., 2020). When partners of affected women reported more positive than negative responses, they reported greater relationship and sexual satisfaction, and lower sexual distress and anxiety. Although the study was underpowered to detect longitudinal effects, the correlations between partner responses at baseline and outcomes one year later reflect the expected directions, suggesting that it is possible that partner responses can predict changes in sexual and relationship well-being outcomes over time—insight that is particularly relevant to my dissertation (see Chapter 3).

Taken together, the extant research demonstrates how the behaviours and cognitions of couple members coping with sexual dysfunction, including SIAD, are not only associated with their own sexual and relationship well-being, but their partner's as well. These findings are in line with recent theories that emphasize the importance of interpersonal factors in coping with sexual difficulties, and low desire in particular.

1.1.5 Clinical and Theoretical Models for Understanding Low Desire

The following three models bring attention to the importance of conceptualizing desire difficulties as a dyadic process and are relevant to the development and interpretation of my dissertation. First, the *Dyadic Interactions Affecting DyadIC Sexual desire* (i.e., DIADICS) model (Prekatsounaki et al., 2022) sought to address limitations of prior models of sexual desire (e.g., Both et al., 2007; Singer & Toates, 1987) by moving away from focusing on primarily intrapersonal and unidirectional processes in desire, and

towards a dyadic conceptualization. The DIADICS model aims to describe how sexual desire directed at another individual (i.e., dyadic sexual desire) is a product of interpersonal and bidirectional dyadic processes. The model frames interactions between partners in three domains: sexuality (e.g., one's own sexual motivation and attraction, feeling sexually desired by a partner), affiliation (e.g., pursuits of intimacy, self-disclosure, expressions of affection), and exploration (e.g., freedom to pursue one's own goals, engaging in novel experiences with a partner). Especially pertinent to my dissertation is the DIADICS model's assertion that each individual in a couple is simultaneously someone whose actions are contributing to dyadic interactions (e.g., partner responses), and someone who perceives and receives a partner's contribution (e.g., perceptions of partner responses)—in other words, both partners are concurrently affected by and affecting each other's dyadic desire. In light of this interconnectedness, all of the hypotheses and analyses in my dissertation account for the interdependence of couple members' variables.

Second, the *Interpersonal Emotion Regulation Model* of women's sexual dysfunction (IERM; Rosen & Bergeron, 2019) posits interpersonal factors as key to coping with sexual challenges as they play a central role in couples' sexual and relational functioning. Consistent with the current SIAD literature, the IERM recognizes that sexual dysfunctions develop from—and are maintained by—a complex interplay of biopsychosocial factors; however, research has mainly focused on the role of biomedical factors (see Parish & Hahn, 2016 for a review; van Anders et al., 2022) and limited insight exists regarding relevant interpersonal factors. Accordingly, the IERM provides a

framework to understand how the interplay of interpersonal factors at the distal level (i.e., relational experiences, contexts, or styles that predate the sexual challenge, such as intimacy, gendered socialization, or attachment) and proximal level (i.e., experiences during, or immediately preceding or following sexual behaviour, such as mood or a partner's response to a sexual problem) may shape how effectively couple members regulate their emotions when faced with challenges, with implications for sexual and relational outcomes. The pathway proposed by the IERM—that interpersonal factors influence emotion regulation capacity, and subsequently, couples' outcomes—is particularly relevant for my dissertation given the heightened negative emotions (e.g., guilt, frustration, anxiety), sensitivity, and reactivity reported by couples coping with SIAD (Frost & Donovan, 2019; Moor et al., 2021). Thus, the IERM contextualized how interpersonal interactions (e.g., partner responses; see Section 1.2), conceptualized as more distal and stable (e.g., cross-sectional and prospective analyses; see Chapters 2 and 3, respectively) or proximal and fluctuating (e.g., daily analyses; see Chapter 3), contribute to couple members' capacity to manage their emotions constructively, creating a more stable and reassuring relational environment and further promoting couples' sexual well-being and relationship satisfaction.

Finally, *The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men* (van Anders et al., 2022) argues that heteronormativity (i.e., beliefs, norms, and institutions pertaining to gender/sex and sexuality) has contributed to women's experiences of low desire when they are in relationships with men. The theory proposes four hypothesized pathways for the contributions of heteronormative gender inequities on

women's low desire, including inequitable divisions of household labor, blurring of women's roles as partner and mother, objectification of women, and gender norms surrounding sexual initiation. This theory contends that, despite the evident implications of gendered socialization, women's experiences of low sexual desire are typically framed as an issue originating within women's bodies, which should be independently treated through biomedical or psychological means. Taken together with clinical recommendations for addressing desire challenges (Gambescia & Weeks, 2019; Girard & Woolley, 2017), this theory highlights a primary goal of my dissertation: to dyadically examine an interpersonal factor that will support moving away from placing the burden of SIAD on affected women and gender diverse individuals, while simultaneously addressing partners' reported low self-efficacy in coping with SIAD (Frost & Donovan, 2019). Because this theory was published after my dissertation was planned, it has been most influential to the interpretation and discussion of my findings.

In sum, clinical and theoretical models underscore the importance of conceptualizing desire difficulties as a relationship dynamic that can change over time and which both partners play a role in (Gambescia & Weeks, 2019; Girard & Woolley, 2017; Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; van Anders et al., 2022). Further, within the limited and mainly cross-sectional studies that have examined interpersonal factors in the context of SIAD, partners' responses to women's sexual difficulties have been significantly linked to both couple members' sexual and relational outcomes—suggesting promise as a potential target for intervention.

1.2 Responses to Sexual Rejection

1.2.1 Defining Responses to Sexual Rejection and its Relevance to SIAD

Couples coping with SIAD often report discrepant desire levels between partners (e.g., Rosen et al., 2019). As a result, it is likely that these couples frequently contend with navigating the complexities of sexual rejection, defined as declining a partner's sexual advances. In the context of romantic relationships—where sexual communication is often emotionally-charged and couple members may rely primarily on one another to fulfill their sexual needs—sexual rejection can be incredibly painful, both to enact and to experience (Leary et al., 1998; Theiss & Estlein, 2014). This notion is supported by findings in community couples, indicating that although sexual rejection is fairly common, occurring at least once a week, it is linked to lower sexual and relationship satisfaction, with long-lasting effects enduring over multiple days (Byers & Heinlein, 1989; Dobson et al., 2020). In couples coping with low desire, sexual rejection has been identified as a significant source of distress for both couple members, such as greater conflict and less intimacy resulting from frequent rejections (Frost & Donovan, 2019; Graham et al., 2017; Moor et al., 2021; Træen, 2008). Couple members' descriptions of the impacts of sexual rejection often mirror one another. For example, women with low desire report avoidance of intimacy (e.g., touching, kissing) for fear of needing to sexually reject, guilt following rejections, and lower self-esteem and sexual inadequacy due to frequent rejections (Akbari et al., 2018; Fahs et al., 2020; Frost & Donovan, 2019; Graham et al., 2017; Hinchliff et al., 2009; Moor et al., 2021; Træen, 2008). Correspondingly, partners describe avoidance of intimacy for fear of being rejected, guilt

for attempting to initiate sex and feeling as though they were pressuring their partner, and eroded self-confidence and greater insecurities following repeated rejections (Coffelt & Hess, 2015; Elliott & Umberson, 2008; Frost & Donovan, 2019; Ling & Kasket, 2016).

Although qualitative research has begun to elucidate the implications of sexual rejection in couples coping with low desire (Akbari et al., 2018; Coffelt & Hess, 2015; Elliott & Umberson, 2008; Fahs et al., 2020; Frost & Donovan, 2019; Hinchliff et al., 2009; Ling & Kasket, 2016; Moor et al., 2021; Træen, 2008), little is known about the role that partners' *responses* to sexual rejection has for both couple members' outcomes. Prior to my dissertation, only one study examined partners' responses in couples coping with SIAD ($N = 89$ mixed-gender/sex and gender/sex diverse couples) and focused on partners' general responses to women's low desire (Rosen et al., 2020), rather than the more specific and common experience of sexual rejection (Rosen, Corsini-Munt, et al., 2020; see Section 1.1.4 for further discussion of this study). As described earlier, the study cross-sectionally determined that women's perceptions of more positive (e.g., understanding, warm, compassionate) than negative (e.g., judgmental, hostile, indifferent) responses from their partner regarding their low desire were associated with their own greater relationship satisfaction and both their own and their partner's lower anxiety (Rosen et al., 2020). For partners, when they reported greater positive and lower negative responses to women's low desire, they also reported greater relationship and sexual satisfaction, and lower sexual distress and anxiety. Moreover, although the study was underpowered to find effects over time, the correlations between the predictors at baseline and outcomes one year later reflected the expected directions. Additionally, the

measure used in the study assessed affective responses to women's low desire using a positive-negative bipolar scale (e.g., warm-hostile, loving-cold, understanding-judgment). This measurement approach was limited by its bipolar scale, which hindered more detailed interpretations (e.g., comparisons of positive and negative responses that may co-occur), and its omission of behavioural responses. Thus, in my dissertation, I used a measure reflecting a broader spectrum of response types to examine the associations between partners' responses to—the more specific and common experience of—sexual rejection and couples' sexual and relationship well-being in the context of SIAD.

1.2.2 Four Distinct Types of Responses to Sexual Rejection

In community samples, Kim and colleagues (2019) developed the *Responses to Sexual Rejection Scale,* which assesses four distinct types of responses to sexual rejection: understanding, resentful, insecure, and enticing. *Understanding* responses are characterized by responsiveness and reaffirmation of positive regard for a partner. For example, responding to rejection by reaffirming one's love and attraction to their partner. *Resentful* responses are indicative of expressions of anger and attempts to make a partner feel bad. This can include ignoring a partner or accusing them of selfishness after being declined. *Insecure* responses are marked by hurt feelings or taking offense. These responses may involve thinking that their partner is not attracted to them or that something is wrong in the relationship. Finally, *enticing* responses reflect attempts to change a partner's mind and re-initiate sexual activity, such as asking a partner if there is anything that can be done to get them in the mood.

In examining convergent validity, the authors found significant associations in the

expected direction with relevant individual difference factors for understanding responses (i.e., positive correlation with sexual communal strength, which reflects motivation to meet a partners' sexual needs), resentful responses (i.e., negative correlation with sexual communal strength, and positive correlations with trait aggression, trait narcissism, and attachment anxiety), and insecure responses (positive correlation with attachment anxiety). For enticing responses, the expected positive correlation with trait narcissism was found, along with an unexpected positive correlation with sexual communal strength. The authors posited that this mixed finding suggests that, in some contexts, enticing responses may reflect an interest in communal need fulfillment, whereas in others it may come from a place of entitlement—an interpretation that was pertinent to exploring the role of enticing responses in my dissertation (see Section 2.10.1.1).

1.2.2.1 Theorized Associations between Responses to Sexual Rejection and Sexual Well-Being and Relationship Satisfaction

To the best of my knowledge, apart from my dissertation, no other studies have assessed the associations between partners' responses to sexual rejection and couples' sexual well-being (e.g., sexual satisfaction, partner-focused sexual desire, sexual distress, and sexual frequency) and relationship satisfaction, in community or SIAD samples. Thus, my hypotheses were developed by aggregating relevant information from qualitative research regarding sexual rejection (e.g., Frost & Donovan, 2019), prior findings of partners' general responses to women's sexual dysfunction and low desire (e.g., Rosen, Corsini-Munt, et al., 2020), and theoretical frameworks of how interpersonal factors play a role in couples outcomes (e.g., IERM; Rosen & Bergeron, 2019). Taken

collectively, research suggests that more positive responses to sexual rejection, such as understanding responses, may cultivate a more secure relational environment, promoting more adaptive emotion regulation (e.g., approach, reappraisal), and resulting in more positive outcomes for couples. Conversely, more negative responses to sexual rejection (e.g., resentful, insecure) may create a less secure environment, heightening sensitivity and reactivity to perceived threats to the relationship, leading to less effective emotion regulation (e.g., avoidance, catastrophizing) and poorer sexual and relational outcomes. Given the mixed associations for enticing responses discussed above, these analyses were exploratory.

Additionally, as conceptualized by the DIADICS model (Prekatsounaki et al., 2022), in romantic relationships, each couple member is concurrently affecting and being affected by their partner. This model suggests that an individual's *perceptions* of their partner's behaviour (e.g., individuals with SIAD's perceptions of a partner's responses to sexual rejection) and their partner's *reported* behaviour (e.g., a partner's reported responses to sexual rejection) will simultaneously affect the couple's relational context, and, thus, sexual and relationship outcomes. As a result, I hypothesized that the associations described above for understanding, resentful, and insecure responses would be found both for individual's own outcomes (i.e., actor effects) and for their partner's outcomes (i.e., partner effects). Further, while it is possible that these associations remain consistent across varying measurements of time, it could also be that responses to sexual rejection are experienced differently in the moment (e.g., daily analyses; see Chapter 3) compared to over time (e.g., cross-sectional and over time analyses; see Chapters 2 and 3,

respectively). For example, as noted by Kim and colleagues (2019), while understanding responses may promote satisfaction in the moment, prolonged use of understanding responses may interfere with adaptive coping, such as by promoting avoidance behaviours. Given these possibilities, analyses over time were also approached in an exploratory fashion in my dissertation.

1.3 Summary and Limitations of the Extant Literature

Overall, the research reviewed highlights the interdependence of sexual and relationship well-being in couples coping with sexual dysfunctions, including SIAD. Both affected women and partners report significant implications to their sexual and relationship well-being in the context of women's distressing low sexual desire. Further, consistent with clinical and theoretical models, existing research on women's sexual dysfunctions (including SIAD) show that the behaviours, cognitions, and perceptions of both couple members are interrelated and associated with each other's sexual and relationship outcomes. Still, few dyadic studies have examined couples coping with SIAD, limiting our understanding of the interdependent processes inherent in couples' sexual and relationship well-being. Additionally, the samples in the extant dyadic research have primarily focused on women with SIAD and their men partners, neglecting affected individuals who may not identify as women and/or those not partnered with men. This lack of diversity impacts the representativeness of the samples and raises equity concerns by potentially hindering the development of effective treatments and interventions that are applicable to a broader audience, and by perpetuating a lack of understanding and support for underrepresented groups. Moreover, of the minimal dyadic

studies that do exist, most are cross-sectional, overall reducing capacity for inferring causality and directionality. Through use of daily diary studies, we can better understand within-person fluctuations and reduce the potential impacts of recall bias. By conducting analyses over time, we may also be able to offer evidence to support the directionality between the variables examined. These research methods may provide stronger evidence to inform the development of treatments for low sexual desire, which is one of the most common reasons leading couples to seek therapy (Emond et al., 2024; Péloquin et al., 2019). With the available literature, however, our capacity to develop effective interventions—inclusive of both couple members—is restricted, and, thus, may result in greater burden for the woman or gender diverse individual with SIAD (Girard & Woolley, 2017). Indeed, partners of women with distressing low desire qualitatively report feeling frustrated and doubtful of their ability to bolster their own and affected women's well-being (Frost & Donovan, 2019). Further, research suggests that partners' responses to sexual difficulties—and the affected individual's perceptions of these responses—are relevant for both couple members' sexual and relational outcomes (e.g., Bergeron et al., 2021; Bois et al., 2016; Rosen, Corsini-Munt, et al., 2020; Rosen et al., 2015) and that sexual rejection, in particular, contributes to distress in couples coping with low desire (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). Yet, no studies currently exist examining partners' responses to sexual rejection in the context of SIAD or control couples, and if these responses are associated with couples' sexual well-being and relationship satisfaction.

1.4 Outline of Dissertation Papers

The overall objective of my dissertation was to examine the associations between partners' responses to sexual rejection and the sexual well-being (e.g., sexual satisfaction, partner-focused sexual desire, sexual distress, and sexual frequency) and relationship satisfaction of couples coping with SIAD. To accomplish this objective, I examined these associations in two empirical studies employing validated self-report measures and dyadic analyses. The first was a controlled cross-sectional study (Chapter 2), and the second used analyses at the daily level and over time (Chapter 3). In Chapter 4, I discuss the overall results, strengths, limitations, future directions, and theoretical and clinical implications of my research.

1.4.1 Aims and Hypotheses of Chapter 2

In the first manuscript of my dissertation (Chapter 2), I present the findings from a controlled cross-sectional study including couples coping with SIAD (n = 241) and community couples (n = 105). The first aim (1) of this study was to examine whether partners' responses to sexual rejection differed in frequency in couples coping with SIAD and community couples. Specifically, I examined whether the frequency of the four types of responses to sexual rejection differed between samples (i.e., individuals with SIAD's *perceptions* compared to community women and individuals assigned female at birth [AFAB]'s *perceptions*, and between the *reported* responses of partners in the SIAD and community samples). I also examined if these frequencies differed within couple members (i.e., individuals with SIAD's *perceptions* of partner responses compared to their partners' *reported* responses, and the *perceptions* of partner responses of community

women and AFAB individuals compared to community partners' *reported* responses). See Supplemental Figure A.1 for a visual representation of the comparisons examined in the first aim. I hypothesized that compared to their community counterparts, individuals with SIAD would perceive, and their partners would report, more understanding, resentful, insecure, and enticing responses. Comparisons between couple members in both samples were exploratory. The analyses controlled for frequency of sexual rejection and frequency of sexual activity. The second aim (2) was to test the prediction that, for all participants, higher understanding and lower insecure and resentful responses to sexual rejection would be associated with an individual's own and their partner's higher sexual satisfaction, partner-focused sexual desire, sexual frequency, and relationship satisfaction, and lower sexual distress. I took an exploratory approach to testing the associations for enticing sexual rejection responses due to prior mixed findings (Kim et al., 2019). The final aim (3) was to exploratorily examine whether the strength of the associations assessed in the second aim differed by sample (i.e., SIAD vs. community).

1.4.2 Aims and Hypotheses of Chapter 3

In the second manuscript of my dissertation (Chapter 3), my goal was to build upon the results of my first study by examining the daily (i.e., 56 days of diaries) and over time (i.e., 6-month follow-up) associations between responses to sexual rejection and sexual well-being (i.e., sexual satisfaction, partner-focused sexual desire, and sexual distress) and relationship satisfaction in couples coping with SIAD. The sample used in Study 2 (N = 232 couples) across the daily and prospective analyses (see Figure 3.8.2) was derived from the same larger study as that of Study 1. The first aim (1) of this study

was to test the prediction that on days (N = 200 couples included in daily analyses) when individuals with SIAD *perceived*, and their partners *reported*, greater understanding, and lower resentful and insecure responses compared to their average, for both couples members, both they and their partner would report greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress (see Supplemental Figure C.1 for a visualization of the analyses conducted). The second aim (2) was to test the prediction that (N = 170 couples included in analyses over time) individuals with SIAD's *perceived*, and their partners' *reported*, greater understanding, and lower resentful and insecure responses at baseline, would predict, for both couple members, both their own and their partner's greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress six months later (see Supplemental Figure C.2). The final aim (3) was to further explore the associations between enticing responses and sexual and relationship outcomes (previously examined in aims 1 and 2) by including non-physical sexual coercion (i.e., insistence or pressure to engage in unwanted sexual contact; Straus et al., 1996) as a covariate in exploratory follow-up analyses at both the daily level and over time.

CHAPTER 2: COMPARING RESPONSES TO SEXUAL REJECTION AND SEXUAL AND RELATIONSHIP WELL-BEING IN COUPLES COPING WITH SEXUAL INTEREST/AROUSAL DISORDER AND COMMUNITY COUPLES

The manuscript prepared for this study is presented below. Readers are advised that Gracielle C. Schwenck, under the supervision of Dr. Natalie O. Rosen, was responsible for the preparation and execution of this study. Gracielle was the lead on the initial draft of the manuscript and received and incorporated feedback from her coauthors. The manuscript underwent peer-review, and required one revision which Gracielle led, prior to the manuscript's acceptance in *The Journal of Sex Research* on October 13, 2023. Thus, this is an accepted manuscript of an article published by Taylor & Francis in *Journal of Sex Research* on December 5, 2023, available online: http://wwww.tandfonline.com/10.1080/00224499.2023.2282617

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Note that minor changes were made to the accepted manuscript to enhance clarity and flow within the dissertation.

2.1 Abstract

Four distinct partner responses to sexual rejection – sexual advances that are declined by a partner – have been identified. This study assessed the frequency of these responses between and within North American couples coping with Sexual Interest/Arousal Disorder (SIAD) and community couples and – in line with the Interpersonal Emotion Regulation Model – compared the associations between responses to sexual rejection and sexual and relationship well-being across the two samples. Individuals with SIAD and their partners ($N = 241$) and community couples ($N = 105$) completed online measures of sexual rejection responses, sexual satisfaction, sexual desire, sexual distress, sexual frequency, and relationship satisfaction. Results showed that after accounting for sexual rejection frequency, individuals with SIAD and their partners reported greater resentful and insecure partner responses to sexual rejection than individuals in the community sample, and individuals with SIAD perceived less understanding responses than their own partners reported. For both groups, more understanding and less resentful and insecure responses were associated with greater sexual and relationship well-being. Clinicians might encourage couples to reflect on their rejection responses and to shift to more helpful ways of responding to sexual rejection.

2.2 Introduction

Researchers have shown that when sexual desire (i.e., motivation and wish to engage in sexual behaviour; Dewitte et al., 2020) is maintained in romantic relationships, both partners benefit (Kim et al., 2021). For partnered individuals, feeling sexually desirable is associated with higher levels of sexual satisfaction, desire, and relationship quality (Birnbaum et al., 2016; Park & MacDonald, 2022). However, when sexual desire is substantially lower for one partner than the other, couples may experience negative impacts to their sexual and relationship well-being (Jodouin et al., 2021; Mark, 2015). Clinically low sexual desire (i.e., Sexual Interest/Arousal Disorder; SIAD[6]) is the most common sexual problem reported by women and a common reason for seeking couple therapy (Péloquin et al., 2019; West et al., 2008). Compared to community couples, women with SIAD and their partners report poorer sexual and relationship well-being (i.e., lower sexual satisfaction, desire, frequency, and relationship satisfaction, and greater sexual distress; Rosen et al., 2019). Despite the interpersonal nature of low sexual desire (Brotto et al., 2016), dyadic studies are rare as previous research has focused primarily on the person with SIAD, and there is limited understanding of how partner responses to low sexual desire affect couples' adjustment. This is a significant gap in the literature given that the *Interpersonal Emotion Regulation Model* of women's sexual dysfunction (Rosen & Bergeron, 2019) deems interpersonal factors integral to coping with sexual difficulties.

[6] We use the term 'SIAD' to refer to those with Female Sexual Interest/Arousal Disorder because our study was inclusive of women with diverse bodies and/or gender non-binary individuals assigned female at birth. Thus, we typically refer to *individuals* with SIAD despite the diagnosis referring to 'Female' Sexual Interest/Arousal Disorder.

Because of the larger differences in sexual desire within couples coping with SIAD compared to community couples (Rosen et al., 2019), sexual rejection—declining a partners' sexual advances—may occur more frequently in couples with SIAD, suggesting that partner responses in this context might be more salient. Indeed, prior qualitative research in couples coping with low sexual desire has identified sexual rejection as a common concern for both couple members, and one that is associated with distressing beliefs, emotions, and behavioural changes (Frost & Donovan, 2019). The primary aim of this study was therefore to examine whether a novel interpersonal factor—partner responses to sexual rejection—differed in frequency *between* and *within* couples coping with SIAD and community couples. We also aimed to examine how these responses are associated with sexual well-being and relationship satisfaction across the two samples.

2.2.1 Sexual Interest/Arousal Disorder (SIAD) and Sexual and Relationship Well-Being

According to population-based studies, an estimated 8% to 23% of women endorse chronically low, distressing levels of sexual desire (i.e., SIAD; West et al., 2008; Witting et al., 2008). The 5th Edition of the *Diagnostic and Statistical Manual of Mental Disorders—Text Revision* (DSM-5-TR; American Psychiatric Association, 2022) defines SIAD as absent or low levels of sexual interest or arousal persisting for six months or longer, that is distressing to the individual. Women coping with SIAD report greater depressive symptoms and anxiety, and lower levels of sexual satisfaction than women in the community, while there have been mixed findings for relationship satisfaction (Parish & Hahn, 2016; Rosen et al., 2019). Although partners of individuals with SIAD also

report lower sexual and relationship satisfaction and greater sexual distress compared to partners of community women, women with SIAD carry a heavier burden as their sexual desire and sexual satisfaction are lower, and their sexual distress is higher, than those of their partners (Rosen et al., 2019).

Recent clinical and theoretical models have underscored the importance of investigating interpersonal factors associated with low sexual desire and couples' well-being (e.g., Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; van Anders et al., 2022). For example, *The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men* (van Anders et al., 2022) posits that interpersonal factors (i.e., inequitable divisions of household labor and blurring of partner and mother roles) and consequences of socialization (i.e., objectification of women and gender norms surrounding sexual initiation) influence couple members' sexual interactions and expectations. Yet, previous research has often neglected the partner and their potential role in maintaining or intensifying SIAD symptoms and the associated consequences for the couples' sexual well-being and relationship satisfaction.

2.2.2 Responses to Sexual Rejection

The *Interpersonal Emotion Regulation Model* of women's sexual dysfunction (Rosen & Bergeron, 2019) suggests that interpersonal factors at both the distal (i.e., relational experiences that predate the sexual problem, such as attributions and sexual communication) and proximal (i.e., factors that occur before, during, and immediately following sexual activities) levels are key to coping with sexual difficulties. The model suggests that these interpersonal factors influence couples' emotion regulation, and in

turn, affect the couples' sexual and relationship well-being. A novel proximal interpersonal factor that is relevant to SIAD is partner responses to sexual rejection. Sexual rejection is common in relationships, with community couples reporting it occurs at least once a week, and is linked to lower sexual and relationship satisfaction (Byers & Heinlein, 1989). Further, these effects have been shown to be long-lasting, enduring over multiple days (Dobson et al., 2020).

Couples coping with SIAD typically experience a discrepancy in levels of sexual desire between partners, which may lead to more frequent instances of sexual rejection. Qualitative research has identified sexual rejection as a substantial concern for both partners affected by SIAD. In one study, both couple members reported that there is an initiation imbalance (i.e., partners initiate sexual activity more than women with low sexual desire; Frost & Donovan, 2019). Women with low sexual desire described feeling guilty for frequently declining their partner's sexual advances, while their partners reported frustration and sadness, in addition to reduced initiation attempts (Frost & Donovan, 2019). Due to these intense emotions, affected couples may be especially sensitive and vulnerable to the implications of partner responses to sexual rejection relative to those in the community sample. Further, it is unclear whether members of the couple perceive the frequency and type of partner responses to sexual rejection in a similar way (i.e., perceptions of the individual with SIAD vs. self-report of their partners). Identifying whether differences exist in the frequency of different types of responses within and between couples coping with SIAD and community couples is an important starting point for examining the salience of this behaviour and potential

implications for interventions.

In samples of sexually active participants in ongoing romantic relationships, Kim and colleagues (2019) identified four distinct types of responses to sexual rejection including: *understanding* (e.g., responsiveness, reaffirming positive regard towards a partner)*, resentful* (e.g., expressing anger, guilt-inducing)*, insecure* (e.g., responding with feelings of sadness or hurt), and *enticing* (e.g., attempting to re-initiate sex or change a partner's mind). Per the *Interpersonal Emotion Regulation Model* (Rosen & Bergeron, 2019), it is possible that more understanding responses foster a more secure relational environment and promote more adaptive emotion regulation (e.g., reappraisal). Whereas resentful and insecure responses may heighten sensitivity to the threat of rejection, communicate a lack of empathy, and promote less adaptive emotion regulation (e.g., avoidance or catastrophizing). Regarding enticing responses, previous findings have linked greater enticing responses to both greater trait narcissism and sexual communal strength (i.e., responsiveness to a partner's sexual needs)—suggesting that in some cases, enticing responses may come from a place of entitlement, and in other cases they may reflect an interest in communal need fulfillment (Kim et al., 2019). Overall, although interdependent, because responses to sexual rejection are enacted by the rejected partner, and perceived by the rejector, each couple member may interpret the behaviours differently. Therefore, it is important to obtain separate reports from both partners to isolate the effects of *perceived* compared to *self-reported* responses to sexual rejection and their unique implications for each couple member's sexual and relationship well-being.

Prior studies examining partner responses to another sexual dysfunction in women—genito-pelvic pain/penetration disorder—which is associated with low sexual desire, have examined facilitative partner responses specific to painful intercourse (i.e., encouraging adaptive coping and expressing affection) as well as more global understanding, validating, and empathic partner responses, for example during discussions of their sexual dysfunction. In these studies, when women perceived greater facilitative and empathic partner responses, both couple members reported greater sexual satisfaction, sexual function, and relationship satisfaction (Bergeron et al., 2021; Bois et al., 2016; Rosen et al., 2016; Rosen et al., 2015). Additionally, when women perceived and partners reported more negative partner responses (e.g., hostility and frustration) to women's painful intercourse, both women and partners reported poorer sexual functioning, and women reported lower sexual and relationship satisfaction (Rosen et al., 2010; Rosen et al., 2014; Rosen et al., 2015). In couples coping with SIAD, when affected women perceived more positive (e.g., understanding, warm) relative to negative (e.g., hostile, judgmental) partner responses to their low sexual interest/arousal, they reported greater relationship satisfaction (Rosen, Corsini-Munt, et al., 2020). When partners of women with SIAD reported greater positive relative to negative responses, they also reported greater sexual and relationship satisfaction, and lower sexual distress and anxiety. However, this study assessed partners' general responses to women's low sexual desire/arousal, and not responses to sexual rejection.

Given the frequency with which sexual rejection occurs in couples coping with sexual dysfunctions, it is a striking omission that researchers have neglected to examine

how partners respond when an individual with SIAD declines their partner's sexual advances. It is possible that the associations between responses to sexual rejection and sexual and relationship well-being will be stronger for individuals with SIAD and their partners than those in the community sample, as there are significant negative beliefs, emotions, and behaviours associated with low sexual desire and sexual rejection for individuals with SIAD (Frost & Donovan, 2019). However, it is also possible that a higher frequency of sexual rejection in couples coping with SIAD may lead both members to become more accustomed to the rejection interaction, including how a partner responds to sexual rejection, thereby resulting in effects that are weaker or equal to effects in community couples. In short, comparing the frequency of responses to sexual rejection and the strength of their associations with sexual and relationship well-being, within and between couples, may highlight the relative importance of these responses for individuals in these two samples, and indicate a novel target for intervention.

2.2.3 The Current Study

In the present cross-sectional study, we examined the potential implications of responses to sexual rejection, a relevant interpersonal factor. Specifically, in light of some preliminary analyses (see pre-registration on OSF: https://doi.org/10.17605/OSF.IO/6W2UM) and prior research, we aimed (1) to test the prediction that individuals with SIAD would perceive, and their partners would report, higher understanding, resentful, insecure, and enticing responses to sexual rejection compared to their community counterparts, community women and/or individuals assigned female at birth (AFAB; individuals assigned female at birth, or AFAB, includes

non-binary participants who were assigned female at birth) and community partners, respectively. Each individual within a couple may perceive and report rejection responses at varying frequencies, which may shape couples' sexual and relationship well-being in different ways. We therefore also aimed to assess differences between members within couples (i.e., comparing individuals with SIAD to their partners and comparing community partners to each other) in an exploratory manner, as prior research on responses to sexual rejection has not assessed *perceptions* of responses to sexual rejection (Kim et al., 2019).

Our next aim (2) was to examine the hypothesis that, for all participants, higher understanding and lower insecure and resentful responses to sexual rejection would be associated with an individual's own and their partner's higher sexual satisfaction, sexual desire, sexual frequency, and relationship satisfaction, and lower sexual distress. Given previous mixed findings, the testing of associations with enticing sexual rejection responses was exploratory. In our final aim (3), we assessed whether the strength of these associations would differ by sample (i.e., SIAD vs. community) in an exploratory manner.

2.3 Method

2.3.1 Participants and Common Procedure Across Samples

Couples were recruited separately for the SIAD and community samples. The data for both the SIAD and community samples in the present study were drawn from two larger studies (for other projects utilizing data from the community sample see this study's pre-registration on OSF: https://doi.org/10.17605/OSF.IO/6W2UM). Couples

coping with SIAD and community couples were recruited from Canada (n = 231 and n = 91, respectively) and the US (n = 10 and n = 14, respectively) through print and online advertisements (e.g., Facebook, Instagram). Specific efforts were made, through weekly discussions, to recruit non-WEIRD (i.e., Western, Educated, Industrialized, Rich, and Democratic; Henrich et al., 2010) participants. Participants in both studies were required to be 18 years or older, in a committed relationship for at least one year, fluent in English (or English and/or French for the SIAD study) and have access to a personal email account. Couples in both samples were ineligible to participate if one or both members self-reported a mental or physical illness that was severe and untreated (e.g., untreated psychotic disorder), or if they were undergoing fertility treatment, pregnant, breastfeeding, or within one-year postpartum (i.e., transition to parenthood; Rosen, Dawson, et al., 2020). In both samples, interested participants completed an initial structured telephone screening interview with a member of our research team to assess eligibility and confirm the couple's interest in participating (see specific sample descriptions below for details). Once couples were enrolled and informed consent was obtained, participants were emailed individualized links to the baseline survey via Qualtrics Research Suite. Couple members were instructed to complete their surveys independently. The surveys took approximately 40 to 60 minutes to complete, and survey links expired after four weeks.

We conducted an a priori power analysis based on the Actor-Partner Interdependence Model (Cook & Kenny, 2005) using Kenny and Ackerman's (2014) online *APIM Power App.* With a moderate actor effect (.24; Rosen, Corsini-Munt, et al.,

2020), a small partner effect (.12; Kim et al., 2018), a moderate correlation between partners' reported and perceived responses to low sexual interest/arousal (.34; Rosen, Corsini-Munt, et al., 2020), 85% power, and an alpha of .05, we determined a necessary sample size of 103 couples in each group to assess our first and second aims, with our final aim being exploratory. The final sample included 241 couples coping with SIAD, and 105 community couples. More participants were recruited for the SIAD sample than required because the current study was embedded within a larger ongoing study.

2.3.1.1 SIAD Sample

Couples coping with SIAD ($N = 241$) were recruited for a larger study from November 2020 to May 2022 (see Figure 2.8.1 for flow of participant inclusion; Dalhousie *REB # 2020-5207* and Université de Montréal *REB # CEREP-20-078-P*). The larger study included three longitudinal time-points (baseline, 6-, and 12-months) and a 56-day daily survey component. The current study only used the baseline survey data. To participate, one couple member had to be a woman and/or AFAB and meet DSM-5/DSM-5-TR (American Psychiatric Association, 2013, 2022) criteria for Female Sexual Interest and Arousal Disorder, as determined by a semi-structured clinical interview (see details below). While couples coping with SIAD were not required to cohabitate, they were required to have at least four in-person contacts (i.e., time together) per week over the past month to ensure opportunities for in-person sexual activity. Participants were excluded if they were currently undergoing treatment for sexual challenges or were

trying to become pregnant. These factors were assessed in an initial telephone screening

interview. For couples who met the study's base eligibility criteria, a semi-structured 30- to 45-minute clinical interview was scheduled with the partner experiencing low sexual desire. The clinical interview was conducted via Zoom video conferencing or by telephone by a member of the research team trained in assessing sexual difficulties in accordance with DSM-5/DSM-5-TR. Per DSM-5/DSM-5-TR criteria, the individual's symptoms could not have been attributed to medication, substance use, or a medical condition (including ongoing sexual challenges secondary to the transition to parenthood), and the onset or persistence of the problem could not be due to severe relationship distress. Prior to the clinical interview, the partner experiencing low sexual desire was sent a consent form via Qualtrics for both the clinical assessment and the study. The partner of the individual with SIAD provided informed consent at the beginning of their survey. Each participant was compensated $15 CAD (or USD equivalent), paid through their preference of gift card or e-transfer (available for those with a Canadian bank account) after completing the survey.

2.3.1.2 Community Sample

Community couples (*N* = 105; see Figure 2.8.1) were partially recruited for a larger study from February to July 2021 (Dalhousie University *REB # 2020-5415*). The larger study included two longitudinal time-points (baseline and 4-months follow-up) and 28 days of daily surveys. The current study used data from the baseline survey only. Additional couples were recruited from December 2021 to January 2022 for the current study only (i.e., a single survey) after data cleaning revealed more couples were needed to meet the sample size requirements. No differences were found between the original

sample and the additionally recruited couples on age, education, income, or length of relationship. In addition to the previously detailed inclusion and exclusion criteria, all participants in the community sample were required to be cohabitating for at least six months. There were no specific requirements regarding the quantity of their in-person contacts each week. Eligible couples completed the informed consent form prior to completing their survey. Participants received $9 CAD (or USD equivalency), paid via gift card or e-transfer (available for those with a Canadian bank account) after completing the survey.

2.3.2 Measures

2.3.2.1 Demographics

Participants reported their age, gender, sexual orientation, culture, education, length of SIAD symptoms (reported by individuals with SIAD), relationship status and length (averaged between couple members) and combined annual income (averaged between couple members).

2.3.2.2 Frequency of Sexual Rejection

Participants reported how often they declined their partners for sex and how often their partners declined them for sex using two items (i.e., *On average, how often [do you/does your partner] decline your [partner for sex/sexual advances]? In other words, how often [is your partner/are you] interested in sex, but [you are/your partner is] not interested at that time?*). Responses were measured on a scale of 1 – Never to 5 – Daily. Couple members' reported frequencies of sexual rejection (i.e., how often individuals with SIAD and community women and/or AFAB reported rejecting their partners, and

how often partners perceived being rejected) were moderately correlated ($r_{SIAD}(239) = .40, p = .01$; $r_{Community}(103) = .49, p < .001$).

In a pilot sample of couples coping with SIAD ($N = 130$), we found that 95.4% of individuals with SIAD reported that they rejected their partners' sexual advances more often than "Never", whereas only 23.8% of partners reported rejecting individuals with SIAD more often than "Never" (Rosen, 2019). Thus, in the interest of reducing participant burden, individuals with SIAD completed the *Perceptions* of Responses to Sexual Rejection Scale and their partners received the Responses to Sexual Rejection Scale. However, if the individual with SIAD reported declining sex "Never" or left the item blank, or their partner reported being declined for sex "Never" or left the item blank, that individual did not receive their respective measure. In these cases, if either member did not complete a measure of responses to sexual rejection, the couple was excluded from the analyses (i.e., regardless of what the other partner reported; $n = 22$ excluded; see Figure 2.8.1 for flow of participant inclusion).

In the community sample, an individual's responses to the frequency of sexual rejection items determined which responses to sexual rejection measures (i.e., perceived and/or reported) they received. Couple members who reported declining sex or being declined for sex more often than "Never" received the associated scale (i.e., if they reported *ever declining sex* with their partner, they reported on their perceived responses to sexual rejection, and/or if they reported *ever being declined* by their partner for sex, they reported on their responses to sexual rejection). As a result, community participants may have completed none, one, or both scales. To be compared to couples in the SIAD

sample, only community couples in which a woman and/or AFAB partner completed the *perceptions* of responses to sexual rejection and whose partner completed the responses to sexual rejection were included (*n* = 49 excluded; see Figure 2.8.1).

2.3.2.3 Responses to Sexual Rejection

Responses to sexual rejection were assessed with two versions of the 16-item Responses to Sexual Rejection Scale (RSRS; Kim et al., 2019). The original version of the scale assesses an individual's own responses to sexual rejection, and an adapted version was created to assess the rejector's *perceptions* of their partner's responses to sexual rejection. The RSRS includes four, 4-item subscales: understanding (e.g., "*I let my partner know I still love them/My partner lets me know they still love me*"), insecure (e.g., *"I am upset or sad/My partner is upset or sad"*), resentful (e.g., *"I act cold towards my partner/My partner acts cold towards me"*), and enticing (e.g., *"I try initiating sex with my partner again/My partner tries initiating sex with me again*"). For each item, participants rate how often in general they engaged, or perceived their partner to engage, in each behaviour when sexual rejection occurred on a 5-point Likert scale (1 – Never to 5 – Very frequently). Total scores are calculated by averaging across the four items within each subscale and higher scores indicate higher reported or perceived occurrences of that response to sexual rejection (e.g., understanding). Each RSRS had acceptable internal reliability (Taber, 2018): understanding (individuals with SIAD, α = .75; partners of individuals with SIAD, α = .67; community women and/or AFAB, α = .63; and community partners, α = .65), resentful (α = .68, α = .62, α = .69, and α = .72), insecure (α = .80, α = .80, α = .80, and α = .80), and enticing (α = .77, α = .78, α = .81, and α =

.83).

2.3.2.4 Sexual Satisfaction

Sexual satisfaction was examined with the 5-item Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995) using 7-point bipolar scales (e.g., very bad to very good; very unpleasant to very pleasant). Participants were asked to report on their overall sexual relationship with their partner. Total scores range from 5 to 35, with higher scores indicating higher sexual satisfaction. The GMSEX has good 3-month test-retest reliability (r = .78; Lawrance & Byers, 1995), and showed high internal consistency in our sample (individuals with SIAD, α = .86 ; partners of individuals with SIAD, α = .86; community women and/or AFAB, α = .94; and community partners, α = .94).

2.3.2.5 Sexual Desire for Partner

Sexual desire was measured using the seven partner-focused items from the 14-item Sexual Desire Inventory-2 (SDI-2; Spector et al., 1996). Example items include: "*During the last month, how often would you have liked to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?*" (scale of 0 – Not at all to 7 – More than once a day) and "*When you have sexual thoughts, how strong is your desire to engage in sexual behaviour with a partner?*" (scale of 0 – No desire to 8 – Strong desire). Total scores range from 0 to 28, with higher scores indicating higher sexual desire for a partner. The partner-focused sexual desire subscale had good to high internal consistency (individuals with SIAD, α = .74; partners of individuals with SIAD, α = .83; community women

and/or AFAB, α = .93; and community partners, α = .84).

2.3.2.6 Sexual Distress

Sexual distress was measured using the 5-item version of the Female Sexual Distress Scale-Revised (FSDS-R; Derogatis et al., 2008), the Sexual Distress Scale-Short Form (SDS-SF; Santos-Iglesias et al., 2020). Participants responded to items examining how often they felt concerns about their sexuality or a sexual problem (e.g., *"How often did you feel stressed about sex?"*) over the past 30 days on a 5-point Likert scale (0 – Never to 4 – Always). Total scores range from 0 to 20, with higher scores indicating greater sexual distress. The abridged, 5-item version of the FSDS-R (SDS-SF) has shown excellent internal reliability previously (ω = .88 in women, and .96 in men; Santos-Iglesias et al., 2020), and in our sample (individuals with SIAD, α = .86; partners of individuals with SIAD, α = .87; community women and/or AFAB, α = .89; and community partners, α = .90).

2.3.2.7 Sexual Frequency

Sexual frequency was assessed using one face-valid item asking how often over the past four weeks the participant engaged in sexual activity (i.e., oral sex, manual stimulation to genitals, intercourse with vaginal penetration, intercourse with anal penetration) with their partner, on a scale of 0 – Not at all, 1 – Once or twice a month, 2 – Once a week, 3 – 2 to 3 times a week, 4 – 4 to 5 times a week, 5 – Once a day, and 6 – More than once a day. Couple members' reported sexual frequencies were strongly correlated ($r_{SIAD}(237) = .73$, $p = .01$; $r_{Community}(103) = .78$, $p = .01$). The reported frequencies were averaged, and the resulting value was considered a couple-level

variable, with higher scores indicating greater sexual frequency.

2.3.2.8 Relationship Satisfaction

Relationship satisfaction was examined using the 4-item Couples Satisfaction Index (CSI-4; Funk & Rogge, 2007). The items examine positive and negative indicators of relationship quality (e.g., "*How rewarding is your relationship with your partner?*") over the last four weeks. Three items are measured on a 6-point scale (0 – Not at all to 5 – Completely) and one item is measured on a 7-point scale (0 – Extremely unhappy to 6 – Perfect). Total scores range from 0 to 21, with higher scores indicating greater relationship satisfaction. Scores on the CSI-4 have strong convergent and construct validity, in addition to high reliability previously (Funk & Rogge, 2007), and in our sample (individuals with SIAD, $\alpha = .92$; partners of individuals with SIAD, $\alpha = .92$; community women and/or AFAB, $\alpha = .93$; and community partners, $\alpha = .93$).

2.3.3 Data Analysis

Analyses were guided by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) for distinguishable dyads. The individuals with SIAD and the community women and/or AFAB (vs. their respective partners) were the distinguishable variables within the couples. *IBM SPSS Statistics* (Version 28) was used to assess descriptive statistics and correlations. The de-identified data and syntax can be found in the online supplemental materials on OSF: https://osf.io/snv4d/.

2.3.3.1 Comparing Frequency of Responses to Sexual Rejection Across Samples

Our first aim was to test whether individuals with SIAD and their partners would report greater responses to sexual rejection than community sample couple members.

This aim was assessed using a linear mixed model fit by restricted maximum likelihood in *jamovi.* Participant 'Role' (i.e., individual with SIAD, partner of individual with SIAD, community women and/or AFAB, and community partner) was the explanatory variable, and the four subscales of the Responses to Sexual Rejection measure (i.e., understanding, resentful, insecure, and enticing) were the outcome variables. Additionally, sexual frequency and frequency of sexual rejection were included separately as covariates in two follow-up models. As participants were nested within couples, the 'Couple' variable was included as a clustering variable, to account for interdependence of couple members' data. Four separate models were run—one for each of the response types. For each of the models, if the overall F-test of the model was significant ($p < .05$), this suggested that the participants' Role had a statistically significant effect on the respective reported or perceived response to sexual rejection. The potential significant differences between Roles—as outlined in our aim—were explored through post-hoc comparisons (e.g., individuals with SIAD compared to community women and/or AFAB). The Bonferroni-Holm correction for multiple comparisons was applied to post-hoc tests, within each type of response to sexual rejection (Holm, 1979).

2.3.3.2 Associations Between Responses to Sexual Rejection and Sexual and Relationship Well-Being, and Moderation by Group

Our second aim was to assess whether greater understanding and lower insecure and resentful responses would be associated with greater sexual and relationship well-being for all participants, and our third aim was to determine whether strength of the associations differed by sample. These aims were assessed using multigroup analysis

with two groups (i.e., SIAD and community couples) in *R* using *the lavaan() package*, following the recommendations outlined by Garcia and colleagues (2015). Due to power considerations, separate models were created for each of the outcome variables (i.e., sexual satisfaction, sexual desire, sexual distress, sexual frequency, and relationship satisfaction). For each outcome, an unconstrained model (i.e., all path coefficients allowed to freely vary across the two groups) and a constrained model (i.e., all path coefficients set to be equal across the two groups) were created. In total, there were 10 separate models. Each model included all four independent variables as predictors (i.e., perceived/reported understanding, resentful, insecure, and enticing responses to sexual rejection).

To select which model (constrained vs. unconstrained model) best fit the data for each outcome, the models' Bayesian Information Criterion (BIC) values were compared (Raftery, 1995). For each outcome, the model with the smaller BIC was selected. If model fits were comparable (e.g., $\Delta BIC < 2$; Raftery, 1995), the more parsimonious model (i.e., constrained) was selected. If the unconstrained model was determined to fit the data better, this indicated that the two groups differed from one another, and a moderation was present for that outcome variable. If the unconstrained model was deemed to fit the data best for an outcome variable, partial invariance testing was used to evaluate specific paths (e.g., actor effect of individual with SIAD's perceived understanding response to sexual rejection on their own sexual satisfaction). The paths were constrained one at a time in new models and the new model's BIC was compared to the BIC of the fully constrained model to isolate whether a group difference existed for

that path. If the BIC value of the new model was smaller than that of the fully constrained model, then this indicated that the two groups differed significantly on that path (i.e., to test our third aim). Once the required model constraints were identified for a particular outcome, significant associations ($p < .05$) were reported for each group (i.e., to assess our second aim). Alternatively, if the constrained model was deemed to best fit the data, then significant associations between the predictors and outcomes were reported as the same for both groups as no differences would have been identified between the two groups (i.e., to assess our second aim).

2.4 Results

2.4.1 Sample Descriptives

Descriptive statistics for participant demographics and all variables are in Table 2.7.1. Each samples' correlations between and within-individuals for all variables can be found in Supplemental Tables A.1 and A.2 or the supplemental documents on OSF: https://osf.io/snv4d/. The SIAD and community samples did not differ significantly in couple members' genders, relationship duration, or income. The two groups differed significantly as a function of their age, sexual orientation, culture, and years of education. For each model comparison (i.e., constrained vs. unconstrained) the constrained model was considered the best fit for the data. Thus, given that the groups were evaluated as equivalent in the analyses, we did not include these variables as covariates.

2.4.2 Comparing Frequency of Responses to Sexual Rejection Across Samples

The descriptive statistics for each of the responses to sexual rejection are found in Table 2.7.2. Comparisons of the SIAD and community sample revealed significant effects

by role for understanding, $F(3,370) = 3.45$, $p = .02$, resentful, $F(3,362) = 12.0$, $p < .001$, insecure, $F(3,363) = 25.4$, $p < .001$, and enticing responses, $F(3,368) = 7.08$, $p < .001$. Specifically, individuals with SIAD perceived lower understanding responses than their own partners reported, $t(345) = -3.03$, $p_{holm} = .01$; there were no differences between individuals with SIAD and their partners in the frequency of resentful, insecure, or enticing responses. Individuals with SIAD perceived greater resentful, $t(545) = 5.16$, $p_{holm} < .01$, insecure, $t(556) = 8.08$, $p_{holm} < .01$, and enticing responses, $t(579) = 4.49$, $p_{holm} < .01$, than community women and/or AFAB perceived, but no differences in understanding responses were found. Partners of individuals with SIAD reported greater resentful, $t(545) = 3.77$, $p_{holm} < .01$, insecure, $t(555) = 2.77$, $p_{holm} < .01$, and enticing responses, $t(579) = 2.93$, $p_{holm} < .05$, than community partners, with no differences in understanding responses. Finally, community women and/or AFAB perceived less resentful, $t(345) = -2.77$, $p_{holm} = .01$, and insecure responses, $t(344) = -3.24$, $p_{holm} < .01$, than community partners reported; there were no differences in enticing or understanding responses.

Controlling for sexual frequency, there were no changes in the significant effects. After controlling for frequency of sexual rejection ($M_{SIAD} = 3.61$, $SD = 0.76$; $M_{Community} = 2.71$, $SD = 0.77$), the following four effects remained significant: individuals with SIAD perceived lower understanding responses than their partners reported, individuals with SIAD perceived greater insecure responses than community women and/or AFAB individuals, and partners of individuals with SIAD reported greater resentful and insecure responses than community partners.

2.4.3 Associations Between Responses to Sexual Rejection and Sexual and Relationship Well-Being, and Moderation by Group

The BIC values for the constrained and unconstrained models can be found in Supplemental Table A.3 or the supplemental documents on OSF: https://osf.io/snv4d/. For each of the outcomes, the constrained model best fit the data, suggesting that there were no significant differences between the effects of the predictor variables on each of the outcomes between the SIAD and community samples. Therefore, the significant associations will be reported as the same for both groups (Table 2.7.3).

2.4.3.1 Understanding Responses to Sexual Rejection

When individuals with SIAD and community women and/or AFAB perceived greater understanding responses, they reported greater relationship satisfaction and their partners reported greater partner-focused sexual desire. When partners of individuals with SIAD and community partners reported greater understanding responses, they also reported greater relationship satisfaction. Understanding responses perceived by individuals with SIAD and community women/AFAB and reported by SIAD and community partners were not significantly associated with their own or their partner's sexual satisfaction, sexual distress, or couple sexual frequency, their own partner-focused sexual desire, nor their partner's relationship satisfaction. Further, SIAD and community partners' reported understanding responses were not significantly associated with individuals with SIAD and community women/AFAB individuals' partner-focused sexual desire.

2.4.3.2 Resentful Responses to Sexual Rejection

When individuals with SIAD and community women and/or AFAB perceived greater resentful responses, they also reported lower relationship satisfaction. When partners of individuals with SIAD and community partners reported greater resentful responses, their partners (individuals with SIAD and community women and/or AFAB) reported lower partner-focused sexual desire. Resentful responses perceived by individuals with SIAD and community women/AFAB and reported by SIAD and community partners were not significantly associated with their own or their partner's sexual satisfaction, sexual distress, or couple sexual frequency, their own partner-focused sexual desire, or their partner's relationship satisfaction. Individuals with SIAD and community women/AFAB's perceived resentful responses were not associated with their partner's partner-focused sexual desire. Finally, SIAD and community partners' reported resentful responses were not significantly associated with their own relationship satisfaction.

2.4.3.3 Insecure Responses to Sexual Rejection

When individuals with SIAD and community women and/or AFAB perceived greater insecure responses, they also reported greater sexual distress. When partners of individuals with SIAD and community partners reported greater insecure responses, they reported lower sexual satisfaction, greater sexual distress, and lower relationship satisfaction. Insecure responses perceived by individuals with SIAD and community women/AFAB and reported by SIAD and community partners were not significantly associated with their own or their partner's partner-focused sexual desire or couple sexual

frequency, nor their partner's sexual satisfaction, sexual distress, or relationship satisfaction. Additionally, individuals with SIAD and community women/AFAB's perceived insecure responses were not associated with their own sexual or relationship satisfaction.

2.4.3.4 Enticing Responses to Sexual Rejection

When partners of individuals with SIAD and community partners reported greater enticing responses, they also reported higher sexual satisfaction and higher partner-focused sexual desire, and the couple reported greater sexual frequency. Enticing responses perceived by individuals with SIAD and community women/AFAB and reported by SIAD and community partners were not significantly associated with their own or their partner's sexual distress or relationship satisfaction, nor their partner's sexual satisfaction or partner-focused sexual desire. Further, individuals with SIAD and community women/AFAB's perceived enticing responses were not associated with their own sexual satisfaction, partner-focused sexual desire, or couple sexual frequency.

2.5 Discussion

This study examined whether responses to sexual rejection differ between and within couples coping with SIAD and community couples, as well as the associations between responses to sexual rejection and sexual and relationship well-being in the two samples. Overall, after accounting for the frequency of sexual rejection, individuals with SIAD perceived, and their partners reported, greater resentful and insecure responses to sexual rejection than those in the community sample, and individuals with SIAD perceived less understanding responses than their own partners reported. Further, greater

understanding and enticing responses, and lower resentful and insecure responses, were associated with higher sexual and relationship well-being for individuals in both the SIAD and community samples. These results are consistent with the *Interpersonal Emotion Regulation Model* (Rosen & Bergeron, 2019), which suggests that interpersonal factors such as responses to sexual rejection are key to coping with sexual difficulties.

2.5.1 Frequency of Sexual Rejection

Consistent with our first hypothesis, after controlling for the frequency of sexual rejection, individuals in the SIAD sample perceived and reported greater resentful and insecure responses than those in the community sample. These results are in line with qualitative research in which couples reported frequent negative emotions and behaviours, such as anger, frustration, and increased conflict (i.e., resentful), and feeling hurt, sad, and having lower self-esteem (i.e., insecure) in response to low sexual desire and frequent rejection (Frost & Donovan, 2019). Inconsistent with our hypothesis, no significant differences were found between the SIAD and community samples for understanding or enticing responses. Thus, despite couples coping with SIAD reporting negative emotions and experiences in regards to sexual initiation and rejection (Frost & Donovan, 2019), they appear to still be able to draw on adaptive responses to rejection (i.e., understanding) to the same extent as community couples.

However, within the SIAD sample only, individuals with SIAD perceived less understanding responses than their partners reported. One possibility for this difference is that individuals with SIAD may feel intense negative emotions (e.g., guilt, frustration) when declining their partner for sex, and these emotions may spill over to their

perceptions of their partners' responses (Clark et al., 2017; Kouros & Papp, 2019), independent of what their partners are communicating or how they are behaving. Indeed, distressed individuals are more likely to recall their partners' negative, neutral, and positive behaviours as more negative than non-distressed individuals (Carrère et al., 2000). It is also possible that women and/or AFAB's socialization towards prioritizing their partner's pleasure may elicit the belief that their partner will not be understanding in the face of sexual rejection (van Anders et al., 2022).

On the other hand, partners of individuals with SIAD may report that they are responding in a more understanding way than they truly are. For example, they may verbally communicate an understanding response while non-verbally communicating frustration or disappointment; non-verbal cues are often less filtered than verbal cues (Guerrero & Floyd, 2006). After controlling for frequency of sexual rejection, no other significant differences were observed within-couples regarding frequency of enticing, resentful or insecure responses, suggesting that couples' experiences of these responses are relatively similar to each other. However, the correlations between perceived and reported responses to sexual rejection between couple members coping with SIAD are weak (see Supplemental Table A.1). In comparison, the correlations between community couple members are moderate to strong (see Supplemental Table A.2). In line with prior research, these correlations may reflect greater challenges in sexual communication experienced by couples coping with SIAD compared to community couples (Rosen et al., 2019).

2.5.2 Associations Between Sexual Rejection and Well-Being

In both samples, when individuals with SIAD and community women and/or AFAB perceived greater understanding responses, they reported greater relationship satisfaction and their partners reported greater sexual partner-focused sexual desire. When partners of individuals with SIAD and community partners reported greater understanding responses, they also reported greater relationship satisfaction. These results are in line with previous research in couples coping with SIAD, which found that greater perceived or reported positive partner responses—which include understanding, but also other affective responses such as being loving and sensitive—to women's low sexual interest/arousal were associated with their own greater relationship satisfaction (Rosen, Corsini-Munt, et al., 2020). Understanding responses to sexual rejection may foster a more secure relational environment for both couple members, promoting more adaptive emotion regulation, and, in turn, relationship satisfaction (Reis & Clark, 2013; Rosen & Bergeron, 2019). As the results are correlational, it is also possible that partners who report greater relationship satisfaction may be more likely to display understanding responses to sexual rejection (Barnes et al., 2007).

When individuals with SIAD and community women and/or AFAB perceived greater resentful and insecure responses, they reported lower relationship satisfaction and greater sexual distress, respectively. When partners of individuals with SIAD and community partners reported greater insecure responses, they also reported lower sexual and relationship satisfaction, and greater sexual distress. When partners reported greater resentful responses, their partners (i.e., individuals with SIAD and community women

and/or AFAB) reported lower partner-focused sexual desire. These results are consistent with previous findings that greater negative responses (e.g., hostility, frustration) were associated with poorer sexual and relationship well-being for women coping with sexual dysfunctions (Rosen et al., 2010; Rosen et al., 2014), and lower relationship satisfaction in community samples (Falconier et al., 2015; Holman & Jarvis, 2003). Additionally, negative emotions (e.g., those elicited by perceiving resentful partner responses) have been linked to reduced sexual desire, especially for women (Scimeca et al., 2011). Regarding insecure responses, it is possible that individuals who display greater insecure responses to sexual rejection may have an overall insecure attachment style. Research has shown that insecure attachment styles are associated with one's own and one's partner's lower sexual satisfaction (Brassard et al., 2012; Valdez et al., 2021), and one's own poorer sexual functioning and greater sexual distress (Dang et al., 2018). Taken together, resentful and insecure responses may heighten sensitivity and reactivity from both couple members to current and possible future sexual rejection, eliciting less effective emotion regulation strategies such as avoidance or emotional outbursts that are associated with poorer sexual and relationship outcomes (Rosen & Bergeron, 2019).

Finally, when partners reported attempting to initiate sex again following rejection (i.e., enticing responses), they also reported greater sexual satisfaction and partner-focused sexual desire, and the couple reported greater sexual frequency. Given the correlational nature of these findings, it may be that partners who experience greater sexual satisfaction, partner-focused sexual desire, and sexual frequency are more likely to be sexually assertive and re-initiate sexual activity following rejection (Santos-Iglesias et

al., 2013). Importantly, however, enticing responses have been associated with trait narcissism (Kim et al., 2019). Additionally, within our findings, there were no observed benefits for individuals with SIAD and community women/AFAB of their partners engaging in enticing responses. It is possible that partners who report engaging in more enticing responses do so to meet their own needs while not considering those of their partners (consistent with narcissistic behaviors; Bushman et al., 2003; Zeigler-Hill et al., 2013). Further investigation is necessary regarding the motivations for enticing responses and how these responses are experienced by their partners (e.g., coercion) before any conclusions can be drawn regarding their implications for couples.

2.5.3 No Differences Between Samples in the Associations Between Sexual Rejection Responses and Well-Being

Regarding our final aim, we did not identify any significant differences between the SIAD and community samples when comparing the strength of the effects of responses to sexual rejection on sexual and relationship well-being. It is possible that relationship-promoting (e.g., understanding), relationship-interfering (e.g., resentful, insecure), and enticing responses to sexual rejection have similar implications for well-being, independent of a diagnosis of SIAD. Thus, although partners affected by SIAD may feel frustration or hopelessness following repeated sexual rejection (Frost & Donovan, 2019), our findings suggest that the implications of how partners respond to that rejection are similar to community couples. It could also be that we did not find differences due to limited power. As our final aim was exploratory, our sample size was determined for the first and second aims only. Further, individuals in the community

sample were not screened for clinically significant difficulties with low sexual desire. Given the prevalence of sexual desire difficulties (8% to 23%; West et al., 2008; Witting et al., 2008), as well as other sexual problems in the general population, it is possible that potential differences between the samples were diluted.

Still, our results indicate that responses to sexual rejection have important implications for couples coping with SIAD. Researchers have previously recommended shifting the clinical perspective from one couple member's low sexual desire to the dyadic level, viewing the individuals with low sexual desire within the context of their relationship and socialized gender norms rather than pathologizing them (Davies et al., 1999; Girard & Woolley, 2017; Prekatsounaki et al., 2022; van Anders et al., 2022). Further, partners of individuals with low sexual desire have reported feeling distressed about the challenges they have encountered in trying to help their partner increase their sexual desire (Frost & Donovan, 2019). Responses to sexual rejection can provide a novel avenue by which clinicians may shift focus from individuals with SIAD and engage their partners in treatment, while building partners' self-efficacy regarding their contributions to the couples' sexual and relationship well-being.

2.5.4 Strengths, Limitations, and Future Directions

To our knowledge, this was the first study to compare the frequency of responses to sexual rejection among couples coping with SIAD and community couples, and to assess their associations with sexual and relationship well-being. Key strengths of this study were its focus on how *partners'* responses to sexual rejection have implications for both members of the couples, and the dyadic analysis which accounted for the

interdependence of couple members' responses. Our results contribute to a shift away from placing the burden of SIAD on the individual with SIAD, and towards a couple-based approach. Additionally, all couple members presenting with complaints of low sexual desire in the SIAD sample were assessed by trained clinical researchers and received diagnoses of SIAD. While the SIAD diagnosis has been critiqued as a pathologization of desire differences (e.g., Thomas & Gurevich, 2021), receiving a diagnosis indicates the presence of clinically significant distress (Meana et al., 2015) and facilitates access to treatment (Parish & Hahn, 2016). This is an important strength as a previous study of women living with low sexual desire determined that over two-thirds of participants were not aware that distressing low sexual desire was treatable and had never mentioned their sexual challenges to a health care provider (Kingsberg, 2014). Requiring our sample with low desire to meet diagnostic criteria also enhanced our study's internal validity. Further, we captured data from couples without majoritized identities (i.e., individuals identifying as non-heterosexual [22-40%] and in diverse gender/sex relationships [16-17%]), who are often excluded and/or underrepresented in dyadic studies.

Our results may be less applicable to individuals in lower income brackets and from cultural minorities, including those with less access, or ability, to complete an advanced online survey. Given cultural variations in the values, expectations, and priorities assigned to couple members' sexual pleasure, rights, and gender norms and expectations (Hall, 2019; van Anders et al., 2022), future research should examine responses to sexual rejection within individuals with cultural beliefs that include differing

views of sexuality and norms. Additionally, we did not have information about whether the participants in the SIAD sample were in monogamous relationships, which may have implications for the value and importance placed on their sexual relationship with the participating partner.

Our study data are correlational, and we cannot confirm directionality. Future research should collect longitudinal data and utilize methods that will allow for appropriate tests of causality. While the reliability of the subscale scores for the Responses to Sexual Rejection Scale were acceptable (Taber, 2018), some were lower than those identified in the original validation study. It is possible that within those analyses the relationships between the predictor and outcome variables were underestimated or spurious results were produced. Also, within the *Interpersonal Emotion Regulation Model* (Rosen & Bergeron, 2019), responses to sexual rejection may be considered a proximal factor (i.e., immediately following the initiation attempt). However, with a cross-sectional design, our results may reflect more pervasive relationship patterns stemming from distal factors (e.g., attachment, past trauma, personality traits). Additional work on distal factors may be warranted to better understand the relationship dynamic unfolding in couples coping with SIAD and their impacts on sexual and relationship well-being. Further, the responses to sexual rejection assessed in this study were identified in community samples (Kim et al., 2019). It may be that there are additional responses to sexual rejection that are specific to couples coping with SIAD.

2.6 Conclusion

The present study established how a novel interpersonal factor—responses to sexual rejection—differed in frequency and strength of associations with sexual and relationship well-being among couples coping with SIAD and community couples. This novel factor offers a new target for interventions (e.g., psychoeducation) for couples experiencing SIAD, sexual desire discrepancies, and recurrent sexual rejection, which have been associated with lower sexual and relationship well-being for both couple members (Byers & Heinlein, 1989; Mark, 2015; Rosen et al., 2019). Specifically, interventions may be aimed at informing couples of how more understanding and less resentful and insecure responses to sexual rejection contribute to sexual and relationship well-being. Through the use of emotionally focused or cognitive-behavioural interventions for treating sexual desire discrepancies (e.g., Girard & Woolley, 2017), clinicians may encourage couples to reflect on their emotional responses to experiencing sexual rejection, and consider shifting their interactional patterns to reduce negative (e.g., resentful, insecure) responses to sexual rejection and consider more helpful (e.g., understanding) responses at times.

2.7 Tables

Table 2.7.1

Descriptive statistics for the SIAD (N = 241) and community samples (N = 105)

	SIAD Sample		Community Sample	
	Individuals with SIAD *M* ± *SD* or *N (%)*	Partners *M* ± *SD* or *N (%)*	Women and/or AFAB *M* ± *SD* or *N (%)*	Partners *M* ± *SD* or *N (%)*
Age (years)	33.81 ± 9.58	35.17 ± 10.11	32.50 ± 8.92	33.15 ± 9.13
Gender				
Woman	231 (95.9%)	27 (11.2%)	102 (97.1%)	13 (12.4%)
Man	–	205 (85.1%)	–	89 (84.8%)
Indigenous (e.g., Two-Spirit)	2 (0.8%)	–	–	–
Non-binary	14 (5.8%)	9 (3.7%)	4 (3.8%)	4 (3.8%)
Additional†	3 (1.2%)	3 (1.2%)	2 (1.9%)	3 (2.9%)
Sexual Orientation				
Asexual	4 (1.7%)	–	–	3 (2.9%)
Bisexual	34 (14.1%)	15 (6.2%)	27 (25.7%)	12 (11.4%)
Gay	–	–	3 (2.9%)	5 (4.7%)
Heterosexual	155 (64.3%)	188 (78.0%)	63 (60%)	79 (75.2%)
Lesbian	11 (4.6%)	16 (6.6.%)	9 (8.6%)	7 (6.7%)
Pansexual	17 (7.1%)	8 (3.3%)	11 (10.5%)	3 (2.9%)
Queer	12 (5.0%)	7 (2.9%)	15 14.3%)	9 (8.6%)
Questioning	5 (2.1%)	3 (1.2%)	–	3 (2.9%)
Additional†	3 (1.2%)	2 (0.8%)	4 (3.8%)	3 (2.9%)
Culture				
African	2 (0.8%)	–	2 (1.9%)	–
American	8 (3.3%)	7 (2.9%)	15 (15.2%)	15 (14.3%)
Biracial/Multiracial	5 (2.1%)	5 (2.1%)	4 (3.8%)	2 (1.9%)
Black/African American	2 (0.8%)	6 (2.5%)	–	2 (1.9%)
East Asian	4 (1.7%)	4 (1.7%)	2 (1.9%)	–
English Canadian	101 (41.9%)	100 (41.5%)	69 (65.7%)	73 (69.5%)
European	29 (12.0%)	26 (10.8%)	13 (12.4%)	8 (7.6%)
Hispanic/Latino/Latina/ Latinx	3 (1.2%)	10 (4.1%)	5 (4.8%)	–
Indigenous	8 (3.3%)	6 (2.5%)	2 (1.9%)	3 (2.9%)
Middle Eastern/Central Asian	3 (1.2%)	4 (1.7%)	–	–
Québécois/French Canadian	108 (44.8%)	96 (39.8%)	5 (4.8%)	4 (3.8%)
South Asian	2 (0.8%)	5 (2.1%)	4 (3.8%)	3 (2.9%)
Southeast Asian	3 (1.2%)	3 (1.2%)	–	–
White	72 (29.9%)	70 (29.0%)	51 (48.6%)	46 (43.8%)
Additional cultures‡	6 (2.5%)	7 (2.9%)	4 (3.8%)	6 (5.7%)

Table 2.7.1 continued

	SIAD Sample		Community Sample	
	Individuals with SIAD *M* ± *SD* or *N (%)*	Partners *M* ± *SD* or *N (%)*	Women and/or AFAB *M* ± *SD* or *N (%)*	Partners *M* ± *SD* or *N (%)*
Education (years)	16.14 ± 3.10	15.05 ± 3.16	16.74 ± 2.66	15.96 ± 3.00
Length of SIAD (years)	7.16 ± 7.77	–	–	–
Relationship Status				
Married/Common-law	225 (93.4%)		50 (47.6%)	
Dating/Engaged	16 (6.6%)		55 (52.4%)	
Relationship Length (years)	8.61 ± 7.22		8.96 ± 7.50	
Combined Annual Income				
$0-$39,999	37 (15.4%)		11 (10.5%)	
$40,000-$79,999	66 (27.4%)		29 (27.6%)	
$80,000-$119,999	70 (29.0%)		32 (30.5%)	
>$120,000	68 (28.2%)		33 (31.4%)	

Note. Participants could select multiple genders, sexual orientations, and cultures, thus, percentages of participants endorsing each response may not add up to 100%. In order to protect confidentiality, cells containing only one participant are not reported on in this table (these individuals are instead reflected in the additional gender, sexual orientation, or culture categories).
†The additional option provided was an open-ended response.
‡Additional options provided for culture included: Australian, Native Hawaiian/Other Pacific Islander, and an open-ended response.

Table 2.7.2

Predictor and outcome variable means (M ± SD) and significant differences of predictor variables across SIAD and community samples

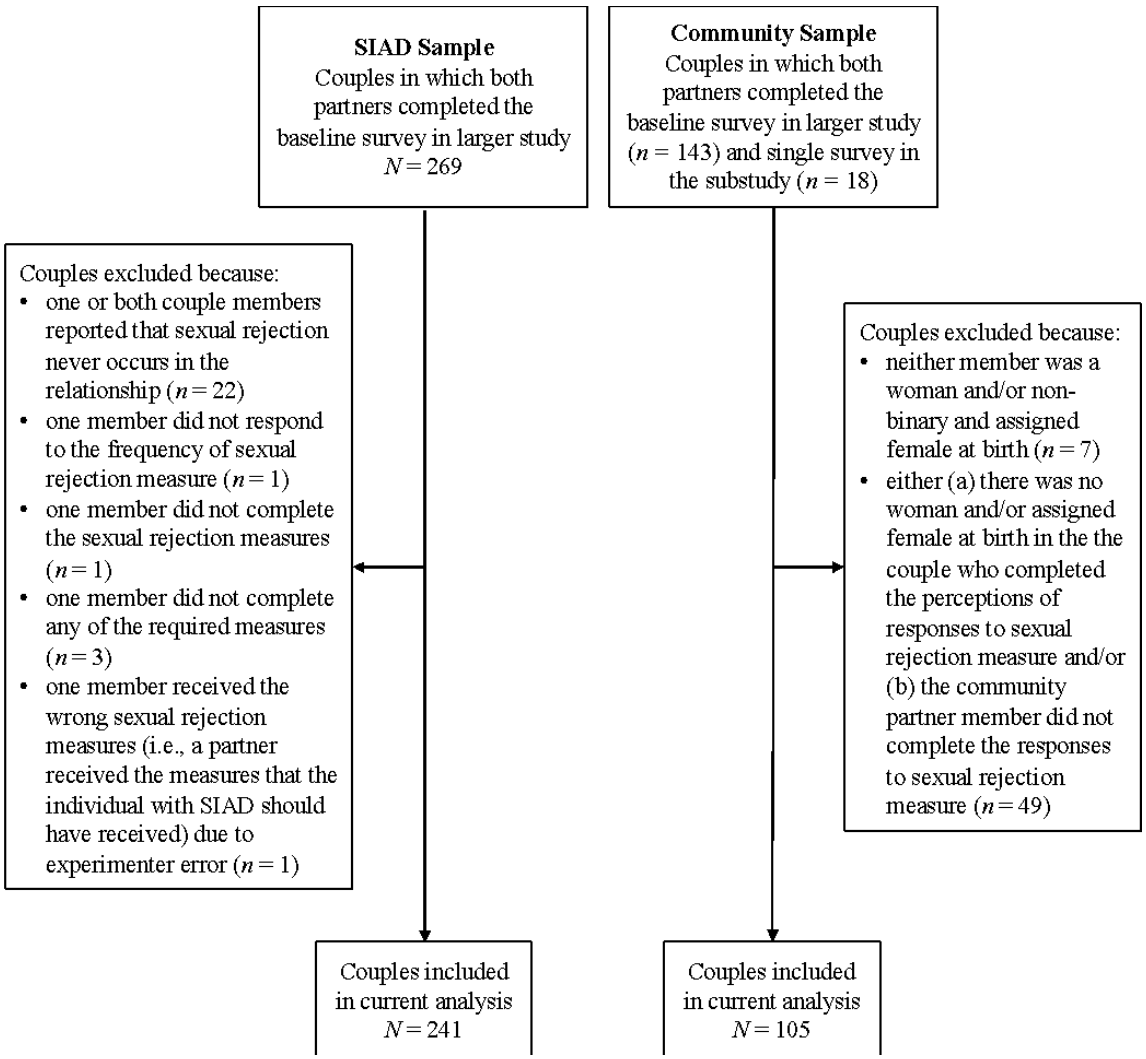
	SIAD Sample		Community Sample	
	Women and individuals with SIAD	Partners	Women and/or AFAB	Partners
Independent variables				
Understanding responses	$3.75 \pm 0.87_{\underline{a}}$	$3.91 \pm 0.64_{\underline{a}}$	3.92 ± 0.85	3.92 ± 0.74
Resentful responses	$1.63 \pm 0.75_{b}$	$1.69 \pm 0.65_{\underline{c}}$	$1.23 \pm 0.48_{bd}$	$1.40 \pm 0.60_{\underline{c}d}$
Insecure responses	$2.68 \pm 1.03_{\underline{e}}$	$2.74 \pm 1.00_{\underline{f}}$	$1.77 \pm 0.80_{\underline{e}g}$	$2.07 \pm 0.91_{\underline{f}g}$
Enticing responses	2.69 ± 0.92	$2.62 \pm 0.87_{h}$	$2.22 \pm 0.84_{i}$	$2.32 \pm 0.82_{hi}$
Covariate				
Sexual rejection frequency†	3.53 ± 0.91	3.69 ± 0.89	1.52 ± 0.71	2.85 ± 0.98
Dependent variables				
Sexual satisfaction	21.97 ± 6.36	24.32 ± 6.37	28.31 ± 6.53	28.35 ± 6.47
Sexual desire for partner‡	13.16 ± 7.50	39.42 ± 7.76	30.54 ± 12.31	38.06 ± 8.17
Sexual distress	12.12 ± 4.37	8.06 ± 4.68	7.20 ± 4.65	6.49 ± 4.61
Sexual frequency	1.24 ± 1.00		2.15 ± 1.20	
Relationship satisfaction	13.98 ± 4.11	13.84 ± 4.11	16.70 ± 3.57	16.22 ± 3.85

Note. For the independent variables, means with the same subscript letter indicate a significant difference corresponding to the effects reported for our first hypothesis in the results section (e.g., the subscript "a" indicates a significant difference between individuals with SIAD and community women and/or AFAB partners' perceived understanding responses). For the independent variables, underlined subscript letters indicate differences that remained significant after controlling for frequency of sexual rejection.
† Individuals with SIAD and community women and/or AFAB's reported frequency of rejecting their partners, and partners' perceived frequency of being rejected.
‡ Broadly speaking, all samples' perceived and reported resentful, insecure, and enticing responses were positively skewed, while understanding responses, and sexual and relationship satisfaction were negatively skewed. Sexual frequency was positively skewed for couples coping with SIAD, and negatively skewed for community couples. The opposite was seen for frequency of sexual rejection. Individuals with SIAD had positively and negatively skewed data for partner-focused sexual desire and sexual distress, respectively, while all other samples skewed in the opposite direction for those two variables.

2.8 Figure

Figure 2.8.1

Flow of participant inclusion in the SIAD (N = 241) and community (N = 105) samples from the respective larger studies and community sample sub-study



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2.10 Transition to Study 2

2.10.1 Overview of Study 1: Findings, Implications, and Limitations

In my first study, I cross-sectionally and dyadically examined partner responses to sexual rejection in couples coping with SIAD and community couples. Specifically, I tested whether these responses differed in frequency between (i.e., individuals with SIAD vs. community women and AFAB; partners of individuals with SIAD vs. community partners) and within (i.e., couple members compared to one another) couples in the two samples. I also assessed if each of the four types of responses to sexual rejection were associated with one's own and their partner's sexual well-being—sexual satisfaction, sexual desire, sexual distress, sexual frequency—and relationship satisfaction, and explored if the associations differed in strength among the two samples. After controlling for frequency of sexual rejection, I found that individuals with SIAD perceived, and their partners reported, greater resentful and insecure responses than their community counterparts, and individuals with SIAD perceived fewer understanding responses than their partners reported. Regarding associations with sexual and relationship outcomes, no differences in strength were found between the two samples. Across both samples, greater understanding responses, and lower resentful and insecure responses, were typically associated with higher sexual well-being and relationship satisfaction for individuals in both the SIAD and community samples. There were mixed findings for enticing responses (discussed in greater detail in Section 2.10.1.1 below).

Importantly, my work provided the first assessment of the frequency of these four distinct types of sexual rejection in couples coping with SIAD, along with the first examination of the associations between these responses and sexual well-being and

relationship satisfaction in couples coping with SIAD and community couples. Examining partner responses to sexual rejection offers insights by which partners may increase their self-efficacy for coping and promote both their own and their partner's sexual and relationship well-being in the context of a common, distressing sexual challenge. My findings suggested that responses to sexual rejection—understanding, resentful, and insecure, in particular—may prove a helpful target for intervention with couples experiencing challenges with sexual rejection, such as those coping with SIAD or desire discrepancies.

My study also had notable limitations. First, while my study was inclusive of individuals with diverse identities—and had numerous participants with minoritized sexual orientations (22% to 40%) and relationship configurations (16% to 17%)—the samples primarily consisted of individuals who were from majority cultures and had high combined household incomes. This reduces the generalizability of these findings to the general population. Second, the Responses to Sexual Rejection Scale (Kim et al., 2019) was developed based on data from community populations. As a result, there may be responses to sexual rejection that are more common in couples coping with SIAD in long-term relationships, such as distraction or withdrawing from a partner, that are not captured with this scale. Finally, this study was based on cross-sectional data. While this method may offer insight into more pervasive patterns of responses to sexual rejection, it is also subject to recall bias, which may have resulted in under- or over-estimation of the variables assessed. Further, cross-sectional data does not allow for examination of how variables change over time or within-person fluctuations, limiting understanding of potential directionality or dynamic relationships between the variables.

2.10.1.1 Mixed Findings for Enticing Responses

In Study 1, the only significant associations found for enticing responses were between partners' perceived greater enticing responses and their own greater sexual satisfaction and partner-focused sexual desire, and couple-level sexual frequency. Although these results suggest that enticing responses may be beneficial for partners' sexual well-being, I was cautious in interpreting these findings. As discussed in Section 1.2.2, enticing responses have been linked to both trait narcissism and sexual communal strength (Kim et al., 2019). As a result, it is possible that partners who reported engaging in greater enticing responses were doing so as a way to seek intimacy with their partner that they saw as mutually-beneficial (Bockaj et al., 2019). However, it may also be that these partners were approaching re-initiation attempts from a place of entitlement regarding their sexual pleasure, common in individuals with high trait narcissism (Klein et al., 2024; McNulty & Widman, 2013). Given that there were no significant effects of enticing responses for the individuals with SIAD's sexual or relationship outcomes, except for couple-level sexual frequency (which could be positive or indicative of successful coercive behaviours; see Section 2.10.2.1), it was challenging to interpret the role of enticing responses in couples' well-being.

2.10.2 Planning Study 2: Addressing Limitations and Exploratory Analyses of Enticing Responses

The sample included in Study 2 came from the same larger study as Study 1. As a result, I was unable to wholly address the first two limitations described above in my second study. For example, I continued to lead weekly meetings with our recruitment team that focused on strategies for promoting the larger study to a wide-ranging audience,

prioritizing diversity. The limitations of my sample are discussed in more depth in this dissertation's General Discussion (see Section 4.1.1.2). Regarding the Responses to Sexual Rejection Scale, since the larger study was underway by the time I had analysed the results of Study 1 (with many couples having already completed the daily diary and 6-month follow-up surveys), and because responses to sexual rejection are the main variables in my dissertation, I was unable to adapt the scale to include additional responses to sexual rejection. This includes responses that may be theoretically common in couples coping with SIAD, such as engaging in a distraction, a regulation strategy preferred by individuals in high-intensity negative situations like frequent sexual rejection (Leary et al., 1998; Sheppes et al., 2011; Theiss & Estlein, 2014). Further, using this validated measure provided important construct validity for the responses to sexual rejection variable.

The final limitation described above referenced the cross-sectional nature of Study 1. In Study 2, I examined the associations between partner responses to sexual rejection and sexual and relationship outcomes using daily and over time analyses. Examining these associations with multiple methods (i.e., cross-sectional, daily, over time) not only enables triangulation and replication of the results, but also facilitates understanding of how these associations may (or may not) vary temporally (e.g., day-to-day vs. short-term vs. longer-term). In addition, the daily methods allowed for insight into within-person variability, and captured participants' experiences closer in time to when they occurred (i.e., before going to sleep each night), enhancing ecological validity and reducing recall bias. Whereas the analyses conducted over time provided initial support of directionality within the associations.

Although the inclusion of sexual frequency in Study 1 was not a limitation, I chose not to include it as a component of sexual well-being in Study 2 for statistical, clinical, and evidence-based reasons. Statistically, the daily and over time analyses I conducted in my second study were complex. Each of the models included one of the responses to sexual rejection (e.g., understanding) and all of the outcome variables (i.e., sexual satisfaction, dyadic sexual desire, sexual distress, and relationship satisfaction) for both couple members, in addition to controlling outcomes from the previous day (daily analyses) or at baseline (prospective analyses). Thus, removing an outcome variable that previously showed low correlations with the other outcome variables (see Supplemental Table A.1) would reduce model complexity and potentially allow for greater power to estimate the other associations in the model. Further, there would likely be insufficient power to examine associations between responses to sexual rejection and sexual frequency at the daily level, as theoretically, there would not be sufficient days where these factors would co-occur. Indeed, in a post-hoc exploratory analysis, I found that couples only reported partnered sexual activity on 10% of the days that they also reported sexual rejection.

More importantly though, the clinical and research experiences I had with couples coping with SIAD between Study 1 and 2 shifted my conceptualization of sexual well-being in this population to no longer include sexual frequency. During the clinical interviews I conducted, I recognized how often women and gender diverse individuals experiencing distressing low desire engaged in sexual activity with their partner to avoid negative outcomes (i.e., avoidance sexual goals), such as conflict or a partner's disappointment, rather than due to interest or seeking positive outcomes (i.e., approach

sexual goals), such as intimacy. In qualitative research, women with distressing low sexual desire often describe similar motivations for engaging in partnered sexual activity (Akbari et al., 2018; Elliott & Umberson, 2008; Fahs et al., 2020; Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). Cross-sectional research also supports these descriptions. Women with SIAD, compared to their own partners and control women, report more avoidance goals and lower approach goals for engaging in sex with a partner (Bockaj et al., 2019), which have been linked to one's own and their partner's lower sexual and relationship satisfaction (Muise et al., 2013). Thus, taking the above factors together, I determined that sexual frequency may not be an effective indicator of sexual well-being in couples coping with SIAD, at least not without an understanding of the motives behind sexual activity (and this was beyond the scope of my dissertation). Moreover, the frequency of sexual activity and frequency of sexual rejection were included in Study 1's models as covariates to control for theorized differences in these variables between the SIAD and community samples. However, I did not include these variables as covariates in Study 2, because: (1) controlling for the frequency of sexual activity did not change the results of Study 1; (2) Study 2's sample only included couples coping with SIAD, where frequent sexual rejection is a characteristic of the sample, leading me to theorize that there would be low variability in the frequency of sexual rejection in this sample; and (3) for the daily analyses, as mentioned, theoretically, partnered sexual activity and sexual rejection would not co-occur on sufficient days for reliable covariate analyses.

As discussed in Section 2.10.1.1, the associations found between enticing responses and couples' sexual and relationship outcomes were challenging to interpret.

Consequently, I wanted to clarify whether the associations with enticing responses reflected more helpful (e.g., seeking intimacy) or less helpful (e.g., entitlement) motivations for attempting to re-initiate sexual activity. Unfortunately, because elucidating the implications of enticing responses was not a goal when initially planning the larger study, I did not include measures of sexual communal strength or trait narcissism. However, the larger study contained a measure of sexual coercion (i.e., behaviour intended to compel someone to engage in unwanted sexual activity; Straus et al., 1996). Sexual coercion has been positively linked to trait narcissism in women and men (Lyons et al., 2022), and been associated with poorer sexual satisfaction for both the receiver and enactor (Sáez et al., 2019). As a result, in Study 2, I chose to examine sexual coercion as a potential moderator and covariate in both daily and over time analyses of the associations of enticing responses. Given the previous mixed findings of enticing responses in Study 1, I approached the moderation and covariate analyses exploratorily. To align with how I examined responses to sexual rejection, I assessed sexual coercion that was *received* by individuals with SIAD and *reported* by partners.

2.10.2.1 Exploring Sexual Coercion as a Moderator and Covariate of Enticing Responses: Challenges and Decision

There were a number of challenges that arose when I sought to conduct the moderation and covariate analyses with sexual coercion. First, sexual coercion was only measured on days when sexual activity occurred, whereas responses to sexual rejection were only measured on days when sexual advances were declined. As previously mentioned, couples in our sample only reported partnered sexual activity on 10% of the days that they also reported sexual rejection. Therefore, I decided to create new variables

of the average response to each sexual coercion item, for each participant, across the diary period.

Further, I had originally planned to examine two types of sexual coercion, physical (i.e., use of physical force to coerce unwanted sexual activity) and non-physical (i.e., use of insistence or pressure to coerce unwanted sexual activity that does not include physical force). However, upon conducting descriptive analyses, I found that there was very limited variability in the sexual coercion data, both at baseline and daily (see Supplemental Figures B.1 through B.2). For example, at baseline, 61% and 96% of individuals with SIAD reported never having received non-physical or physical sexual coercion, respectively, from their current partner, and 69% and 98% of partners reported never having enacted non-physical or physical coercion, respectively, towards their current partner. As a result, I proceeded with the non-physical sexual coercion (NPSC) data only. Next, due to the limited variation in the frequency of NPSC—and as recommended by the authors of the measure of sexual coercion (i.e., the revised Conflicts Tactics Scale, or CTS2; Straus et al., 1996)—I dichotomized the averaged daily and baseline variables into whether the behaviour had ever occurred (1) or had never occurred (2). Importantly, the NPSC items showed low to moderate correlations ($r = 0.14$ to $r = 0.39$) with enticing responses daily and at baseline, respectively, suggesting appropriate discriminant validity (Rönkkö & Cho, 2022).

I then proceeded to conduct the exploratory follow-up analyses to examine the associations between enticing partner responses to sexual rejection and sexual well-being and relationship satisfaction. Dichotomized NPSC was included as a moderator and as a covariate, each in a separate model, at both the daily level and over time (i.e., four

separate models total). However, in collaboration with my dissertation committee, we determined that the moderation analyses faced limitations that inhibited reliable interpretations of the results. For example, because the NPSC analyses were exploratory, I was under-powered to examine moderations at the daily level and over time. Further, for the daily analyses, the NPSC data was only available at the between-person level, whereas the predictors and outcomes were assessed at the daily level. Thus, I present a summary of the moderation analyses below, and note that—given the limitations of these analyses—all findings should be interpreted with caution. The results of the covariate analyses can be found in the second manuscript of my dissertation (Chapter 3).

2.10.2.1.1 Exploratory Moderation of Non-Physical Sexual Coercion in Associations of Enticing Responses. To explore the potential moderating role of NPSC in the associations between enticing responses and sexual and relational outcomes at the daily level, I built upon the base models of the daily (see Section 3.3.4.1) and prospective (see Section 3.3.4.2) analyses described in Study 2. For the syntax of these base models, see OSF: https://osf.io/vxh58/?view_only=8c7fcae0b788493983d604941a8d9b35.

In the daily diary moderation model, I examined NPSC as predictors of the slopes between enticing responses and sexual and relationship outcomes (Preacher et al., 2016; Vaillancourt-Morel et al., 2020). Due to the base model's complexity, and the limited power to explore moderations, I examined each couple member's respective reported NPSC (i.e., individuals with SIAD's reported *ever-experiencing* and partners reported *ever-enacting*) as moderators of their own actor effects slopes (i.e., own reports of enticing responses on own sexual and relationship outcomes), and both couple members' NPSC variables as moderators of all significant effects found in the base model. For

significant moderation effects, I used simple slope tests to determine the association for each NPSC group (i.e., 0 - reportedly never occurred vs. 1 - occurred). I found two significant moderations, both for partners' sexual outcomes. First, partners' reported NPSC moderated the association between their own reported greater enticing responses and higher sexual distress (β = -0.18, SD = 0.06, $p < 0.001$, 95% CI = -0.28, -0.05). Simple slopes tests determined that this association was stronger in partners who reported not enacting NPSC over the daily diary period. It is possible that partners who enacted NPSC during the diary period were less likely to report greater sexual distress on days when they reported greater enticing responses than usual because their attempts at re-initiating were more insistent, and, as a result successful (i.e., they engaged in partnered sexual activity). It could also be that partners who reported enacting NPSC experienced less distress on these days because they conceptualized any challenges resulting from low desire, such as repeated rejection, as their partner's (i.e., woman or gender diverse individual with SIAD) problem, and not a relational challenge, due to lower levels of empathy or greater perceptions of themselves in a more favourable light than warranted (i.e., self-enhancement; DeGue & DiLillo, 2005; Grijalva & Zhang, 2016).

Second, individuals with SIAD's perceptions of enticing responses on partners' sexual desire was moderated by individuals with SIAD's NPSC ($\beta = 0.12$, SD = 0.05, $p < 0.01$, 95% CI = 0.02, 0.22). Specifically, perceiving greater enticing responses than usual was more strongly correlated with partners' greater sexual desire that same day when individuals with SIAD reported NPSC occurred during the diary period. This result suggests that on days when partners who have enacted NPSC (as reported by individuals

with SIAD) experience greater desire, they may be more likely to engage in behaviours (e.g., greater attempts to re-initiate sexual activity) that are perceived as enticing responses by individuals with SIAD. This may reflect lower responsiveness to their partner's (individual with SIAD) needs, and/or a greater sense of entitlement to their own sexual pleasure, both of which have been linked to poorer sexual and relational outcomes for their partners in community samples (Klein et al., 2024; McNulty & Widman, 2013; Muise & Impett, 2015). Indeed, there was a significant negative relationship found between individuals with SIAD's perceived NPSC and their own relationship satisfaction (β = -1.44, SD = 0.62, $p < 0.01$, 95% CI = -2.69, -0.28).

For the exploratory over time analyses, I applied a multi-group approach in two separate models using the dichotomized NPSC variables (Asparouhov & Muthén, 2012; Kuha, 2013). Both models examined the same associations as the base model of enticing responses over time. However, in the first model, the grouping variable was individuals with SIAD's NPSC variable (has occurred, n = 65, and has never occurred, n = 104), and in the second model, the grouping variable was partners' NPSC variable (has occurred, n = 52, and has never occurred, n = 118). In both models, I found no effect of group differences, indicating that the associations were not moderated by whether individuals did or did not report an ever-presence NPSC. There were also no significant associations in either model. As a result, while it is possible that a moderation exists and that the models were underpowered to examine these effects, it may also be that NPSC measured closer in time to the predictors and outcomes—such as within the daily diary period—are more effective analysis variables than NPSC that occurred at any point within a relationship.

Overall, the results of the moderation analyses provided some preliminary insights into the association between enticing responses and partner's own sexual desire and distress at the daily level. Unfortunately, however, these analyses did not elucidate the role enticing responses play in the sexual well-being or relationship satisfaction of women and gender diverse individuals with SIAD.

CHAPTER 3: DAILY AND PROSPECTIVE ASSOCIATIONS BETWEEN RESPONSES TO SEXUAL REJECTION AND SEXUAL WELL-BEING AND RELATIONSHIP SATISFACTION IN COUPLES COPING WITH SEXUAL INTEREST/AROUSAL DISORDER

The manuscript prepared for this study is presented below. Readers are advised that Gracielle C. Schwenck, under the supervision of Dr. Natalie O. Rosen, was responsible for the preparation and execution of this study. Gracielle was the lead on the initial draft of the manuscript and received and incorporated feedback from her coauthors. The manuscript was submitted for publication on April 24, 2024. The full reference for this manuscript is:

Schwenck, G. C., Bergeron, S., Huberman, J. S., Impett, E. A., Oliveira, H., & Rosen, N. O. (under review). Daily and prospective associations between responses to sexual rejection and sexual well-being and relationship satisfaction in couples coping with sexual interest/arousal disorder.

3.1 Abstract

Prior cross-sectional research established that four distinct responses to sexual rejection are associated with sexual and relationship well-being among couples affected by Sexual Interest/Arousal Disorder (SIAD). Examining these associations daily and prospectively will provide insight into within-person variations, temporality, and directionality. Women and gender diverse individuals with SIAD and their partners (N = 232 couples) completed a baseline survey, 56-day diary, and 6-month follow-up survey of responses to sexual rejection, sexual satisfaction, dyadic sexual desire, sexual distress, relationship satisfaction, and non-physical sexual coercion (covariate). Generally, on days when individuals with SIAD perceived, or their partners reported, higher understanding and lower resentful and insecure responses than usual, they both reported greater sexual well-being and relationship satisfaction. Unexpectedly, on days with greater understanding responses than usual, both couple members reported greater sexual distress. Greater enticing responses than usual were associated with both greater sexual distress and sexual desire that day; however, after controlling for sexual coercion, individuals with SIAD's greater sexual desire was no longer significant. For individuals with SIAD, perceiving greater understanding, and lower resentful and enticing responses at baseline predicted their own greater sexual and relationship satisfaction, and perceiving greater insecure responses predicted their partners' greater sexual satisfaction, six months later. For partners, greater insecure responses at baseline predicted their own lower sexual satisfaction and greater sexual distress six months later. Results suggest that partner responses to sexual rejection may be useful intervention targets aimed at promoting the sexual well-being and relationship satisfaction of couples coping with SIAD.

3.2 Introduction

Sexual Interest/Arousal Disorder (SIAD[7]; i.e., clinically low sexual desire) is the most common sexual problem reported by women and one of the concerns most frequently reported by couples seeking therapy (Péloquin et al., 2019; Witting et al., 2008). Population-based studies indicate that an estimated 7% to 23% of women endorse symptoms consistent with SIAD (Witting et al., 2008). Per the *5th Edition of the Diagnostic and Statistical Manual of Mental Disorders – Text Revision* (DSM-5-TR), the core symptoms include absent or low levels of sexual interest and/or arousal that persist for six months or longer, are distressing to the individual, and are not better accounted for by a non-sexual mental disorder, a medical condition, effects of a substance or medication, or severe relationship distress (American Psychiatric Association, 2022). Findings from a controlled study suggest that women with SIAD and their partners report lower sexual and relationship satisfaction and greater sexual distress compared to community couples, though only women with SIAD report lower sexual desire than their community counterparts (Rosen et al., 2019). Since women and gender diverse individuals with SIAD are often in relationships with partners who have higher desire (Rosen et al., 2019), it is unsurprising that couples coping with SIAD report more frequent occurrences of sexual rejection—declining a partner's sexual advances—than community couples (see Table 2.7.2). Being sexually rejected by a partner is associated with lower sexual and relationship satisfaction in community couples, with effects

[7] This disorder is named 'Female Sexual Interest/Arousal Disorder' in the DSM-5-TR; however, we use the term 'SIAD' to accurately represent both women and gender diverse individuals who were assigned female at birth in our study. When referring to our participants, we use gender additive language such as "women and gender diverse individuals with SIAD" and "men, women, and gender diverse partners" to promote inclusion and prevent erasure of experiences (Brotto & Galea, 2022). We also refer to participants as "individuals with SIAD" and "partners" to promote readability and clarity.

enduring over multiple days (Byers & Heinlein, 1989; Dobson et al., 2020). Both women with distressing low desire and their partners describe sexual rejection as a significant source of distress in qualitative studies; they note that frequent sexual rejections leads to avoidance of intimacy (e.g., physical affection) in anticipation of enacting or receiving rejection, increased conflict, and lower sexual self-esteem (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). Moreover, clinical and theoretical models conceptualize desire discrepancies as a relationship dynamic that requires consideration of each couple members' socialized expectations and interactions (Girard & Woolley, 2017; Prekatsounaki et al., 2022; van Anders et al., 2022). In our initial cross-sectional research, we established links between responses to sexual rejection and couples' sexual and relationship well-being (see Chapter 2). However, daily and prospective analyses are necessary to capture within-person variability in partner responses due to factors (e.g., stress, mood) that fluctuate over time. Such information is crucial to informing interventions that focus on responses to sexual rejection as a novel therapeutic target to promote the sexual well-being and relationship satisfaction of couples coping with SIAD.

Clinical and theoretical frameworks have emphasized the significance of interpersonal factors and dyadic interactions in couples' sexual and relationship well-being in the context of sexual desire difficulties. For example, the *Interpersonal Emotion Regulation Model* of women's sexual dysfunction (IERM; Rosen & Bergeron, 2019) posits that interpersonal factors impact couples' capacity for emotion regulation and managing challenges related to sexual difficulties, and consequently influence couples' sexual and relationship well-being. These interpersonal factors are found at both distal (i.e., relational experiences preceding the sexual difficulty, such as intimacy,

attachment, and sexual communication) and proximal (i.e., factors that occur during, immediately prior to, or following sexual activity, such as affection or a partner's response to a sexual problem) levels. The *Dyadic Interactions Affecting DyadIC Sexual desire* (i.e., DIADICS) model (Prekatsounaki et al., 2022) conceptualizes partnered sexual desire as a dyadic, interdependent process, in which both individuals impact and are impacted by one another. Thus, both an individual's *reported* actions and their partner's *perceptions* of these actions concurrently affect, and are affected by, one another's actions and dyadic desire. Further*, The Heteronormativity Theory of Low Sexual Desire in Women Partnered with Men* (van Anders et al., 2022) indicates that couples' sexual interactions and expectations are influenced by heteronormative interpersonal dynamics (i.e., inequitable divisions of household labor, blurring of partner and mother roles) and consequences of socialization (i.e., objectification of women and gender norms surrounding sexual initiation). Taken together, these theories suggest that it is essential to consider SIAD at the dyadic level, and to examine the role of both members' interdependent interpersonal factors in couples' well-being.

Prior cross-sectional studies in couples coping with SIAD have identified interpersonal factors that are associated with both couple members' greater sexual and relationship well-being (e.g., sexual communication, motivations to engage in sex; Hendrickx et al., 2019; Hogue et al., 2019), but have rarely examined partners' responses to the low desire. One exception by Rosen and colleagues (2020), found that when women perceived, and partners reported, more positive (e.g., compassionate) partner responses to women's low sexual/desire arousal relative to negative (e.g., hostile) responses, both couple members reported greater relationship satisfaction, and partners

reported greater sexual satisfaction and lower sexual distress. The study was limited by the partner responses measure—which assessed responses on a positive-negative bipolar scale. This measurement prevented more nuanced interpretations, such as positive and negative responses that may occur simultaneously and comparisons of the effects of positive vs. negative responses, and it also focused only on affective responses and neglected behavioural indices (e.g., affection; attempting to re-initiate sex; Rosen, Corsini-Munt, et al., 2020). This study also examined partner responses to low sexual/desire arousal in general, rather than the more specific and common occurrence of sexual rejection.

Schwenck and colleagues (2023) addressed the aforementioned limitations in a cross-sectional study. They assessed four established responses to sexual rejection (Kim et al., 2019): *understanding* (e.g., responsiveness, reaffirming positive regard towards a partner)*, resentful* (e.g., expressing anger, guilt-inducing)*, insecure* (e.g., responding with feelings of sadness or hurt), and *enticing* (e.g., attempting to re-initiate sex or change a partner's mind). They found that when individuals with SIAD perceived, or their partners reported, greater understanding and lower resentful and insecure responses to sexual rejection, both members of the couple had greater sexual well-being and relationship satisfaction. As outlined in the IERM (Rosen & Bergeron, 2019), more understanding—and less resentful and insecure—responses may promote a secure relational environment and support effective emotion regulation, thus, fostering couples' greater sexual well-being and relationship satisfaction. These findings are consistent with prior research in partner responses to sexual difficulties, indicating that more positive responses (e.g., facilitative, empathic, understanding) to sexual difficulties and less

negative responses (e.g., hostile, frustrated, judgmental), are associated with greater sexual and relationship well-being (e.g., Bois et al., 2016; Rosen et al., 2014; Rosen, Corsini-Munt, et al., 2020; Rosen et al., 2015).

Schwenck and colleagues' (2023) results for enticing responses were mixed. There were no significant associations for individuals with SIAD, however, when partners reported greater enticing responses, they reported greater sexual satisfaction and partner-focused sexual desire, and the couple reported greater sexual frequency. Prior research has linked a greater frequency of enticing responses to both greater trait narcissism and responsiveness to a partner's sexual needs (Kim et al., 2019). Together, these results suggest that, while in certain instances, enticing responses may be rooted in entitlement (Zeigler-Hill et al., 2013), in other instances they may signify an interest to fulfill sexual communal needs—indicating that the implications of enticing responses require further exploration and may vary depending on daily context.

Indeed, as posited in the IERM (Rosen & Bergeron, 2019), it is possible that responses to sexual rejection are best conceptualized as a proximal factor given that they are expected to vary day-to-day alongside other fluctuating variables (e.g., mood, affection; Byers & Heinlein, 1989; Luginbuehl et al., 2024). For example, greater daily couple-level stress (e.g., conflict) is linked to greater sexual desire problems in women (Bodenmann et al., 2006). Schwenck and colleagues' (2023) study was limited by its cross-sectional nature, which is subject to recall bias, and does not provide information regarding within-person fluctuations in the variables, temporal dynamics, or directionality of associations. Thus, use of daily and prospective analyses may add new and valuable insights into the associations between responses to sexual rejection and couples' sexual

and relationship outcomes.

3.2.1 Current Study

The goal of the present study was to examine daily and prospective (i.e., 6-month follow-up) associations between responses to sexual rejection and the sexual well-being (i.e., sexual satisfaction, sexual desire, and sexual distress) and relationship satisfaction of women and gender diverse individuals with SIAD and their men, women, and gender diverse partners. The daily experience design occurs in participants' natural environments and captures their relational experiences closer in time to when they occurred, reducing recall biases and enhancing ecological validity. Daily analyses also provide unique insight into within-person fluctuations, while accounting for potential changes in the associations over the daily diary period. In addition, through prospective analyses, our results can provide some evidence to support the direction of the associations between our predictor and outcome variables.

The interpersonal dynamics of sexual rejection that cause significant distress for couples with SIAD reflect circumstances in which the individuals with SIAD are the ones frequently declining sex, and hence their partners frequently experience the rejection (e.g., Frost & Donovan, 2019). We therefore examined individuals with SIAD's *perceptions* of partner responses to sexual rejection and partners' *reported* responses to sexual rejection. Taken together with our cross-sectional findings from Study 1 (see Chapter 2) and clinical and theoretical models highlighting the interdependence of couple members' experiences, we hypothesized—for analyses both daily and prospectively—that individuals with SIAD's perceptions, and partners' reports, of greater understanding, and lower resentful and insecure responses, would be associated with their

own (i.e., actor effects) and their partner's (i.e., partner effects) greater sexual well-being and relationship satisfaction (see pre-registration of daily hypotheses on OSF: https://doi.org/10.17605/OSF.IO/9CTHK).

Given our previous mixed findings for enticing responses, we approached these analyses exploratorily. The actor and partner effects examined are displayed in Figure 3.8.1. In a deviation from our pre-registration, and to further explore the associations for enticing responses, we included non-physical sexual coercion (i.e., insistence or pressure to engage in unwanted sexual activity that does not include physical force; Straus et al., 1996) as a covariate. Sexual coercion is associated with trait narcissism in men and women (Lyons et al., 2022), and compared to a community sample, individuals who engage in non-physical sexual coercion have shown more egocentricity and empathy deficits (DeGue & DiLillo, 2004). Moreover, sexual coercion has been linked to lower sexual satisfaction for both the receiver and enactor (Sáez et al., 2019).

3.3 Method

3.3.1 Participants

Couples were recruited from the same larger study as the couples in the SIAD sample of Study 1 (Chapter 2). The current study included data from the baseline, daily diary, and 6-month surveys. See Figure 3.8.2 for the flow of participant inclusion in the daily (N = 200 couples) and prospective (N = 170 couples) analyses. Participants were recruited across Canada and the United States by two research teams, in Halifax and Montreal, from November 2020 to May 2022 via print and online sources. We held weekly meetings to identify, implement, and troubleshoot specific efforts to promote the recruitment of participants from under-represented groups.

Participants were required to be 18 years of age or older, speak English and/or French fluently, and have access to a personal e-mail account. One member of the couple, a woman or gender diverse individual who was assigned female at birth, was required to meet DSM-5-TR criteria for Female Sexual Interest/Arousal Disorder (American Psychiatric Association, 2022), determined during the screening process through a semi-structured clinical interview. To ensure opportunity for sexual activity and/or sexual rejection, couples were required to have a minimum four in-person contacts weekly in the prior month. Couples were ineligible to participate if they were undergoing treatment for sexual challenges or fertility treatment, actively trying to conceive, pregnant, breastfeeding, within one-year postpartum, or if one or both members self-reported a severe and untreated mental or physical illness.

3.3.2 Procedure

This study was approved by the ethics review boards at Dalhousie University (*REB # 2020-5207*) and Université de Montréal (*REB # CEREP-20-078-P*). The eligibility of interested couples was assessed through a structured screening interview completed via telephone with one of our research team members. During screening, individuals with low desire who reported being gender diverse (e.g., gender fluid, non-binary) and assigned female at birth were informed that the study was originally designed to focus on the experiences of women with low desire, and that they were welcome to participate, provided they would be comfortable with being grouped together with mostly women in our analyses. Participants were then invited to indicate whether they would like to participate in the study. If a couple was deemed eligible following the initial screening call, and was interested in participating, the member experiencing low

desire was invited to independently complete a 30- to 45-minute clinical interview via Zoom video conferencing or telephone. When the clinical interview was scheduled, the individual attending the interview was sent a consent form via Qualtrics Research Suite for both the clinical interview and participation in the study. During the semi-structured clinical interview, a research team member trained in assessing sexual difficulties confirmed that the individual's symptoms were in line with Female Sexual Interest/Arousal Disorder (per the DSM-5/DSM-5-TR criteria; American Psychiatric Association, 2022), and, if so, the couple was invited to enroll in the larger study.

3.3.2.1 Baseline and 6-Month Surveys

Following enrollment, couple members were sent individualized links to their baseline surveys through Qualtrics. Partners of women and gender diverse individuals with SIAD provided their consent at the beginning of the baseline survey. Six months after receiving the baseline survey, participants received the 6-month survey, independently of when the baseline survey or daily diary period were completed, and participants did not need to complete the daily diaries to receive the 6-month survey. The baseline and 6-month surveys each took approximately 40 to 60 minutes to complete and links for these surveys expired after four weeks. Participants received reminder telephone calls and emails to encourage completion. Following completion of the baseline and 6-month surveys, participants were compensated $15 and $18 CAD (or USD equivalent), respectively, via their preferred gift card or by e-transfer (available to participants with a Canadian bank account).

3.3.2.2 Daily Diary Surveys

Once both couple members completed the baseline survey, each couple was

assigned a research team member as a contact person for the 56-day daily diary portion of the study. This team member provided a daily diary orientation phone call, enrolled the couple in the daily surveys, and conducted weekly check-ins via phone or email throughout the daily diary period. These retention strategies were adapted from Dillman's (2007) tailored method and the overall diary completion rate was 80%. During the diary period, participants received a link to their email each day at 5 p.m. in their respective time zone, which expired at 4 a.m. the following day. Couple members were instructed to complete the survey independently from their partner and prior to going to sleep to capture their experiences that day. A reminder link was sent nightly at 9 p.m. for individuals who had not yet completed the survey. The surveys required an estimated 8 to 15 minutes to complete. Compensation was pro-rated across the daily diary period, and each participant was eligible to receive up to $120 CAD (or USD equivalent).

3.3.3 Measures

Differences in daily and prospective measurements of predictor and outcome variables are presented within subheadings below. In the daily surveys, participants were asked to report on their experiences over the previous 24-hour period or, if they missed the previous day's survey, for the day of their most recent sexual experience (the days couple members had reported on were matched during data cleaning). In the baseline and 6-month surveys participants were asked to reflect on their experiences over the past four weeks. All measures can be found on OSF: https://osf.io/vxh58/?view_only=8c7fcae0b788493983d604941a8d9b35.

3.3.3.1 Demographics

At baseline, participants reported their age, gender, sexual orientation, culture,

years of education, and length of SIAD symptoms (reported by individuals with SIAD). Reports were averaged across both members for relationship status and length and combined annual income.

3.3.3.2 Responses to Sexual Rejection

Individuals with SIAD's perceived, and partners' reported, responses to sexual rejection were assessed at baseline and daily with adaptations of the *Responses to Sexual Rejection Scale* (RSRS; Kim et al., 2019). The RSRS assesses four types of responses to sexual rejection (i.e., understanding, resentful, insecure, and enticing). Higher scores for each response type indicate greater frequency of the response. We used two versions of the scale at both the daily and prospective timepoints: one measuring an individual's own responses to being sexually rejected (using items from the original measure), reported RSRS, and one version that included the same items adapted to be from the point of view of the rejector, perceived RSRS. Thus, scores for responses to sexual rejection for individuals with SIAD are based on the perceived RSRS, and partners' scores are from the reported RSRS.

3.3.3.2.1 Baseline and 6-Month Follow-up. Responses to sexual rejection were examined using the original (i.e., reported RSRS for partners) and adapted (i.e., perceived RSRS for individuals with SIAD) versions of the 16-item RSRS, composed of four 4-item subscales, one for each of the four sexual rejection response types. Example items for each of the subscales include: understanding (original: "*I let my partner know I still love them*", and adapted: "*My partner lets me know they still love me*"), resentful ("*I ignore my partner*" and "*My partner ignores me*"), insecure ("*I think something is wrong in the relationship*" and "*My partner thinks there is something wrong in the*

relationship"), and enticing ("*I ask if there is anything I can do to get my partner in the mood*" and "*My partner asks if there is anything they can do to get me in the mood*"). Participants rated the frequency of each item on a scale of *1 – Never* to *5 – Very frequently*. The score for each response type was the average of the subscale's four items. The RSRS subscales displayed acceptable to high internal reliability (Taber, 2018): understanding (individuals with SIAD, α = .72; partners, α = .61), resentful (α = .87, α = .76), insecure (α =.88, α =.86), and enticing (α = .79, α = .81).

3.3.3.2.2 Daily. On days when participants indicated that sexual rejection had occurred (yes/no), perceived and reported responses to sexual rejection were examined using two 4-item scales adapted from the RSRS. Each item on the adapted scales represented one of the four responses to sexual rejection (e.g., for reported understanding: "*One way that people can respond when their partner expresses sexual disinterest is by being understanding and accepting, and letting their partner know they still love them and are attracted to them. To what extent did you respond in this way when your partner expressed sexual disinterest today?*"). Participants reported the frequency of the behaviours described in each item on a scale of *1 – Not at all* to *7 – A lot*, such that the total score for each response type ranged from 1 to 7.

3.3.3.3 Non-Physical Sexual Coercion

Non-physical sexual coercion was examined at baseline using two face-valid items adapted from the revised Conflicts Tactics Scale (CTS2; Straus et al., 1996). The CTS2 measures intimate partner violence, including coercive sexual behaviours in romantic relationships. Individuals with SIAD reported the frequency they *received* non-physical sexual coercion (i.e., *"My partner insisted on sex when I did not want to*

(but did not use physical force)") and partners reported on the frequency they *enacted* non-physical sexual coercion (i.e., *"I insisted on sex when my partner did not want to (but did not use physical force)"*). For both the daily and prospective measurements, participants' responses were dichotomized according to an "ever prevalence" of the behaviour (i.e., *1 – The behaviour has occurred at some point with their current partner* and *0 – The behaviour has never occurred*). The "ever prevalence" dichotomization is recommended due to heavily skewed results observed in the general population, with the majority of individuals indicating that they have never engaged in, or experienced, sexual coercion (Straus et al., 1996).

3.3.3.3.1 Baseline. Participants were asked to reflect on the lifetime prevalence of non-physical sexual coercion behaviours with their current partner.

3.3.3.3.2 Daily. On days of sexual activity, participants indicated how frequently non-physical sexually coercive behaviours had occurred that day. We created a dichotomous score based on whether non-physical sexual coercion was ever reported across the diary period.

3.3.3.4 Sexual Satisfaction

In the baseline, daily, and 6-month surveys, sexual satisfaction was measured using the 5-item Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1995). The GMSEX items are measured on 7-point bipolar scales (e.g., from *1 – very unpleasant* to *7 – very pleasant*) and participants were asked to reflect on their sexual relationship with their partner. Total scores range from 5 to 35, with higher scores indicating higher sexual satisfaction. The GMSEX showed very high internal consistency (i.e., reliability of change; Bolger & Laurenceau, 2013) in our sample for individuals with

SIAD and partners in the daily (R_C = .93 and R_C = .94, respectively) and follow-up (α = .93 and α = .93) surveys.

3.3.3.5 Dyadic Sexual Desire

Partner-focused sexual desire was assessed with the Sexual Desire Inventory-2 (SDI-2; Spector et al., 1996), with higher scores indicating higher desire for one's partner.

3.3.3.5.1 Daily. Dyadic sexual desire was examined with a face-valid item from the SDI-2, "*How much did you feel sexual desire for your partner today?*", rated on a scale of *1 – Not at all* to *7 – A lot*. Thus, total scores range from 1 to 7.

3.3.3.5.2 Baseline and Follow-up. Seven partner-focused desire items from the SDI-2 were used to assess dyadic sexual desire. An example item is: *"When you have sexual thoughts, how strong is your desire to engage in sexual behaviour with a partner?"*, rated on a scale of *0 – No desire* to *8 – Strong desire.* Total summed scores range from 0 to 54. These partner-focused items had high internal consistency for both individuals with SIAD (α = .87) and partners (α = .89).

3.3.3.6 Sexual Distress

Sexual distress was examined using adaptations of the Female Sexual Distress Scale-Revised (FSDS-R; Derogatis et al., 2008) that have shown strong internal validity in samples of women and men (Santos-Iglesias et al., 2020; Santos-Iglesias et al., 2018). Higher summed scores indicated more concerns about one's sex life (e.g., *"How often did you feel stressed about sex?"*, rated on a scale of *0 – Never* to *4 – Always*).

3.3.3.6.1 Daily. Three items from the FSDS-R assessed daily sexual distress (Pâquet et al., 2018). Total scores range from 0 to 12. Items showed good consistency for individuals with SIAD (R_C = .87) and partners (R_C = .76).

3.3.3.6.2 Baseline and Follow-up. Sexual distress was measured over time using the 5-item Sexual Distress Scale-Short Form (SDS-SF; Santos-Iglesias et al., 2020). Total scores range from 0 to 20. The SDS-SF displayed high internal reliability for individuals with SIAD (α = .92) and partners (α = .88).

3.3.3.7 Relationship Satisfaction

Relationship satisfaction was assessed using the 4-item Couples Satisfaction Index (CSI-4; Funk & Rogge, 2007) in the baseline, daily, and 6-month surveys. The CSI-4 includes items measuring positive and negative indicators of relationship quality (e.g., *"Please indicate the degree of happiness, all things considered, of your relationship."* rated on a scale of *0 – Extremely unhappy* to *6 – Perfect*). Total scores range from 0 to 21, with higher scores indicating higher relationship satisfaction. The CSI showed high internal consistency when measured daily (R_C = .89 for individuals with SIAD, R_C = .88 for partners) and follow-up (α = .95 and α = .94).

3.3.4 Data Analysis

Descriptive statistics and bivariate correlations were analyzed through *IBM SPSS Statistics* (Version 28). Analyses were informed by the Actor-Partner Interdependence Model (Cook & Kenny, 2005) and conducted in *Mplus* (Version 8). The women and gender diverse individuals with SIAD (vs. partners) were the distinguishing variable within the couples. To reduce complexity, for both the daily and prospective analyses, a separate model was created for each type of partner response to sexual rejection (i.e., understanding, resentful, insecure, and enticing), examining its association with all outcome variables (i.e., sexual satisfaction, desire, distress, and relationship satisfaction). To explore the associations between enticing responses and our outcome variables, we

included non-physical sexual coercion as a covariate in secondary models for the daily and prospective analyses. Example model diagrams (Supplemental Figures C.1 and C.2) and the syntax and outputs for each model are on OSF: https://osf.io/vxh58/?view_only=8c7fcae0b788493983d604941a8d9b35[8].

3.3.4.1 Daily

To examine the daily associations between each response to sexual rejection and the sexual and relationship outcome variables, we conducted residual dynamic structural equation modeling (RDSEM; Asparouhov et al., 2018). In RDSEM, concepts from time-series analyses, multilevel modeling, and structural equation modeling are integrated, along with estimating within-person autoregressive and cross-lagged regressions through residuals to account for the autocorrelation in residual errors (Asparouhov et al., 2018; McNeish & Hamaker, 2020). In RDSEM, two levels of variations are modelled: within-person (Level 1) and between-person (Level 2; McNeish & Hamaker, 2020). In line with our hypotheses, we tested the daily models at the within-person level, and we calculated correlations at the between-subject level to ensure model fit. Each of the four models included a Bayes estimator—a full-information estimator which uses all available data for modeling and is unbiased by missingness—and 5,000 Markov chain Monte Carlo iterations thinned to include every 10th iteration (Asparouhov & Muthén, 2010; Wang & Wang, 2019). We evaluated convergence using the Proportional Scale Reduction (PSR) value, with good convergence indicated by values equal to or close to one (Muthén, 2010). The models accounted for within-person stability through auto-regression (i.e., regressing daily predictors and

[8] Some participants opted out of having their de-identified data published on OSF. Consequently, interested individuals may contact the corresponding author to inquire about obtaining the de-identified dataset for this study.

outcomes on the previous day's respective predictors and outcomes; Bolger & Laurenceau, 2013) and, to account for possible trends in the outcomes as a factor of time, we also regressed daily outcomes on time since beginning the diaries (McNeish & Hamaker, 2020). Latent mean centering is implemented in RDSEM to partition within- and between-subject variance among predictors, lagged predictors, and outcomes (Asparouhov & Muthén, 2019), and is considered a more accurate centering approach because it accounts for the Nickell's bias introduced in observed mean centering (Asparouhov et al., 2018).

Through our models, we assessed actor (i.e., the association between an individual's predictor and their *own* outcome) and partner (i.e., the association between an individual's predictor and their *partner's* outcome) effects. We examined whether day-to-day differences in an individual's reported predictor score compared to their own mean predictor score were associated with daily differences in their own and their partner's outcomes. We estimated covariances between the predictor variables of women and gender diverse individuals with SIAD and men, women, and gender diverse partners, and between their outcome variables (i.e., within-person effects).

3.3.4.2 Prospective

We used path models to assess the prospective associations between each response to sexual rejection at baseline and the sexual well-being and relationship satisfaction outcomes six months later. Each model included regressions of outcome variables six months later and at baseline on predictor variables, and regressions between outcome variables at six months and the same variables at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later regressed on their own and one

another's sexual satisfaction at baseline). Correlations (e.g., within outcomes at baseline and six months later) were included for each model based on the Model Modification Indices reported by *Mplus*. The additive value of each correlation was determined by evaluating the model's fit using the acceptable thresholds of the RMSEA (< 0.07), CFI (> 0.95), and TLI (> 0.95) fit indices (Hooper et al., 2008). We added correlations until the model met or approached the aforementioned fit thresholds (see Supplemental Table C.1 for a detailed list of the correlations included in each model). Once acceptable model fit was determined, we completed bootstrapping for each model across 5,000 samples to obtain accurate standard errors. Estimates were standardized based on the variance of predictor, outcome, and latent variables (Kelloway, 2014). There was very little scale-level missingness in the baseline and 6-month data (average missingness across study variables: women and gender diverse individuals with SIAD = 0.003%, men, women, and gender diverse partners = 0.002%).

3.4 Results

3.4.1 Descriptives

Descriptive statistics for participants' demographic information can be found in Table 3.7.1. Overall, 232 couples were included across our daily and prospective analyses. Of the 232 couples, 138 couples were included in both analyses, 62 couples were included in the daily analyses only, and 32 couples were included in the prospective analyses only. The couples in the daily and prospective analyses did not significantly differ across any of the demographic variables examined, and as a result we calculated the demographic descriptives for the full sample (N = 232). Descriptives for all variables in the daily and prospective analyses are in Table 3.7.2. Correlations for all variables,

between couples and within individuals with SIAD and partners, at the daily level and over time can be found in Supplemental Tables C.2, C.3, and C.4 or the supplemental documents on OSF: https://osf.io/vxh58/?view_only=8c7fcae0b788493983d604941a8d9b35.

3.4.2 Daily and Prospective Associations

The sample size recruited was powered for the larger study, thus, we used G*Power (Version 3.1; Faul et al., 2007) to conduct a sensitivity analysis (i.e., nEffective; Wiley & Wiley, 2019) to determine the effect sizes we would have the power to detect in our daily and prospective analyses. The sensitivity analysis considered the observed standard deviations of the predictor and outcome variables and corrected the sample size for non-independence in the data (Wiley & Wiley, 2019). We determined that the smallest standardized effects we could detect were .12 (daily, N = 200) and .17 (prospective, N = 170) with 80% power and α (two-sided) = .05.

The results of the daily and prospective analyses can be found in Tables 3.7.3 and 3.7.4, respectively.

3.4.2.1 Understanding Responses to Sexual Rejection

3.4.2.1.1 Daily. In line with our hypothesis, on days when individuals with SIAD perceived, and partners reported, greater understanding responses compared to their average across all days, both they and their partners reported greater relationship satisfaction. On days when partners reported greater understanding responses, they also reported greater desire. In contradiction with our expectations, when individuals with SIAD perceived greater understanding responses, they reported greater sexual distress, and on days when partners reported greater understanding responses, both they and their

partners (individuals with SIAD) reported greater sexual distress. There were no significant daily effects of perceived or reported greater understanding responses on either couple member's sexual satisfaction or individuals with SIAD's sexual desire. The effect sizes for the significant associations of daily understanding responses were small to medium.

3.4.2.1.2 Prospective. When individuals with SIAD perceived greater understanding responses at baseline, they reported greater relationship satisfaction six months later. There were no significant prospective effects of individuals with SIAD's perceived greater understanding responses on their own sexual well-being or their partners' sexual well-being or relationship satisfaction. There were also no significant effects of partners' reported greater understanding responses at baseline on their own or individuals with SIAD's sexual well-being or relationship satisfaction six months later. The significant actor effect of individuals with SIAD's relationship satisfaction was small.

3.4.2.2 Resentful Responses to Sexual Rejection

3.4.2.2.1 Daily. Consistent with our predictions, on days when individuals with SIAD perceived, and their partners reported, greater resentful responses than usual, both they and their partners reported lower sexual and relationship satisfaction that day. When individuals with SIAD perceived greater resentful responses than usual, they reported greater sexual distress. On days when partners reported greater resentful responses than they typically did, they also reported greater sexual distress, and—in contradiction to our hypotheses—greater sexual desire. We did not find any significant daily effects of greater resentful responses on individuals with SIAD's sexual desire. Notably, the size of the

actor effect on partners' greater sexual desire was small, whereas the other significant associations of daily resentful responses had a medium to large effect size.

3.4.2.2.2 Prospective. When individuals with SIAD perceived greater resentful responses at baseline, they reported lower sexual and relationship satisfaction six months later. We did not find any significant effects of greater resentful responses on individuals with SIAD's sexual desire and distress, nor partners' sexual well-being and relationship satisfaction. The significant prospective associations of resentful responses had small effect sizes.

3.4.2.3 Insecure Responses to Sexual Rejection

3.4.2.3.1 Daily. As hypothesized, compared to their respective averages across all days, on days when individuals with SIAD perceived, and partners reported, greater insecure responses, both they and their partners reported lower sexual and relationship satisfaction, and partners reported greater sexual distress. In addition, individuals with SIAD's greater perceived insecure responses than usual were associated with their own lower sexual desire and greater sexual distress that day. In contradiction to our predictions, on days when partners reported greater insecure responses, they reported greater sexual desire. There were no significant partner effects of insecure responses for either couple members' sexual desire, or for individuals with SIAD's sexual distress. Generally, the significant association of daily insecure responses had medium to large effect sizes, except for the significant actor effects on dyadic sexual desire, which were small.

3.4.2.3.2 Prospective. When partners reported greater insecure responses at baseline, they also reported lower sexual satisfaction and greater sexual distress six

months later. Unexpectedly, when individuals with SIAD perceived greater insecure responses at baseline, their partners reported greater sexual satisfaction six months later. No significant actor or partner prospective effects were found for individuals with SIAD's own sexual well-being and relationship satisfaction, or partners' sexual desire and relationship satisfaction. The significant prospective associations of insecure responses had small to medium effect sizes.

3.4.2.4 Enticing Responses to Sexual Rejection

3.4.2.4.1 Daily. On days when individuals with SIAD perceived, and partners reported, greater enticing responses than they typically did, they reported greater sexual desire and sexual distress that day (actor effects). On days when individuals with SIAD perceived greater enticing responses, their partners reported greater sexual desire. On days when partners reported greater enticing responses, individuals with SIAD reported lower sexual satisfaction. We did not find any significant daily effects of perceived or reported enticing responses on individuals with SIAD's and partners' relationship satisfaction, or partners' sexual satisfaction. After controlling for sexual coercion, we found the same significant effects as we had prior to including the covariate, with one exception: the association between individuals with SIAD's greater perceived enticing responses and their own reported greater sexual desire was no longer significant. Overall, the significant associations of daily enticing responses had medium effect sizes, which increased slightly after controlling for non-physical sexual coercion. The exceptions were the actor and partner effects on individuals with SIAD's dyadic sexual desire, which were small.

3.4.2.4.2 Prospective. When individuals with SIAD perceived greater enticing

responses at baseline, they reported lower sexual satisfaction six months later, and this effect was maintained when controlling for sexual coercion. We did not find any additional significant effects between perceived or reported enticing responses at baseline and either couple members' sexual or relationship well-being outcomes six months later. However, a new, unexpected, significant effect emerged when controlling for sexual coercion. When partners reported greater enticing responses at baseline, individuals with SIAD reported greater sexual satisfaction six months later. After including the sexual coercion covariate, there were no additional significant effects of perceived or reported enticing responses at baseline on either couple members' sexual well-being factors or relationship satisfaction. The significant prospective associations of enticing responses had small to medium effect sizes.

3.5 Discussion

This study assessed daily and prospective associations between partners' responses to sexual rejection (i.e., understanding, resentful, insecure, and enticing) and sexual well-being and relationship satisfaction in couples coping with SIAD. Results generally aligned with our hypotheses: when women and gender diverse individuals with SIAD perceived, and their men, women, and gender diverse partners reported, greater understanding and lower resentful and insecure responses, both partners reported greater sexual satisfaction, partner-focused sexual desire, and relationship satisfaction, and lower sexual distress. After controlling for non-physical coercion, greater perceived and reported enticing responses were associated with poorer sexual outcomes for individuals with SIAD at the daily level and prospective outcomes were mixed. For partners, the results were mixed at the daily level and there were no significant prospective results.

Notably, the daily results that aligned with our hypotheses generally had medium to large effect sizes with narrower credible intervals, while the expected prospective results showed small to medium effect sizes and larger confidence intervals. Thus, the daily diary results may provide more precise insight into these associations.

Taken together, findings correspond with clinical and theoretical frameworks that conceptualize challenges with desire discrepancy at the dyadic level and emphasize the importance of interpersonal factors—such as responses to sexual rejection—in navigating sexual difficulties (e.g., Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; van Anders et al., 2022).

3.5.1 Understanding Responses

Consistent with the findings of Study 1 (see Chapter 2), on days when individuals with SIAD perceived, and partners reported, greater understanding responses, they each reported greater relationship satisfaction that day—an effect that was maintained six months later for individuals with SIAD—and partners' reports were also associated with their own greater sexual desire. Similarly, prior research found that partners' greater positive and validating responses to women's low sexual desire/arousal were associated with both couple members' more positive views of their relationship (Rosen, Corsini-Munt, et al., 2020). Per the IERM (Rosen & Bergeron, 2019), understanding responses in the context of a sexual challenge may promote effective emotion regulation (e.g., acceptance, reappraisal) and buffer against daily interpersonal stressors—factors which have been linked to greater relationship satisfaction and sexual desire (Bodenmann et al., 2006; Dubé et al., 2019). Our results suggest that a partner's understanding responses to rejection predict longer-term relationship satisfaction in individuals with

SIAD, supporting the directionality of our hypotheses. Coping with SIAD long-term provokes many negative emotions (e.g., guilt, sadness), particularly for women and gender diverse individuals with distressing low desire, and can strain relationships (Frost & Donovan, 2019). Thus, perceiving a more understanding partner may be a protective factor in relationship maintenance for individuals with SIAD (Birnbaum, 2023).

Contrary to our hypotheses, for both individuals with SIAD and their partners, perceiving or reporting greater understanding responses was associated with greater sexual distress at the daily level, but these associations were not significant over time. Prior daily diary research of partner responses to other types of sexual dysfunctions, such as genito-pelvic pain, determined that providing a lot of sympathy and support in response to the sexual difficulty was associated with poorer sexual outcomes for both couple members (e.g., N. O. Rosen et al., 2012; Rosen et al., 2013; Rosen et al., 2015). In SIAD, understanding responses may function similarly by reinforcing avoidance of sexual activity and/or sexual communication around SIAD, resulting in higher sexual distress that day. For partners, our results are similar to a previous cross-sectional study (Hogue et al., 2019), in which partners who reported being motivated to meet their partner's sexual needs at the expense of their own needs reported greater sexual distress. Clinically, the mixed results associated with understanding responses at the daily level suggest that attention should be paid to couples' needs, distress, and intent when engaging in these responses. However, these results should be interpreted with caution as the effect sizes of these associations were small, whereas the daily associations of the other response types and sexual distress had medium to large effect sizes. Further, we did not see associations between greater understanding responses and greater sexual distress

six months later. Thus, our findings over time suggest that we may expect more long-term benefits than drawbacks of promoting understanding responses. Finally, there were no significant associations daily or over time between understanding responses and individuals with SIAD's sexual desire. Understanding responses may reduce pressure to engage in sexual activity to avoid a negative outcome (e.g., relationship conflict), while also not being inherently perceived as a sexual stimulus (Hogue et al., 2019; Toates, 2009).

3.5.2 Resentful and Insecure Responses

As we expected, on days when individuals with SIAD perceived, and partners reported, greater resentful and insecure responses, they both reported lower sexual and relationship satisfaction that day, and partners also reported greater sexual distress. When individuals with SIAD perceived greater daily resentful and insecure responses than usual, they also reported greater daily sexual distress, and lower sexual desire (for insecure responses, only) that day. Negative responses (e.g., critical, hostile, avoidant) to women's genito-pelvic pain during sexual activity have previously been linked to poorer sexual and relationship outcomes for both couple members in daily diary studies (e.g., Rosen et al., 2014; Rosen et al., 2015). Consistent with the IERM (Rosen & Bergeron, 2019), when partner responses to rejection are marked by resentment and insecurity, it may signal their own—and prompt their partner's—less effective emotion regulation (e.g., emotional outbursts, catastrophizing) and stronger negative emotions such as anger and anxiety, which are associated with couples' lower sexual well-being and relationship satisfaction, especially for women's sexual outcomes (Rosen & Bergeron, 2019; Scimeca et al., 2011; Van Minnen & Kampman, 2000).

Unexpectedly, on days when partners reported greater resentful and insecure responses than usual, they also reported greater sexual desire. It may be that on days when partners experienced greater sexual desire, they are more likely to become frustrated with their unmet sexual needs and/or are more sensitive to rejection, engage in less effective emotion regulation strategies, and feel more angry and resentful and/or hurt and insecure in response to rejection (Birnbaum, 2010; Rosen & Bergeron, 2019). It is also possible that partners who reported greater insecure responses to sexual rejection may report greater desire for partnered sexual activity that day because they are seeking assurance of their partner's love and commitment through sexual intimacy (Birnbaum, 2010). Yet, these effect sizes were small, indicating potentially fewer practical implications compared to the medium to large effect sizes observed in the other significant daily associations of resentful and insecure responses.

Over time, the links between greater perceived resentful responses and lower sexual and relationship satisfaction persisted for individuals with SIAD, but not for their partners. Resentful sexual rejection responses have been linked to trait narcissism (Kim et al., 2019), and these results may reflect partners' beliefs of their own greater—and their partners' (individuals with SIAD) lesser—entitlement to sexual pleasure, which has been linked to their partners' poorer sexual and relational outcomes (Klein et al., 2024; McNulty & Widman, 2013). It is possible that for partners engaging in greater resentful responses, these links with narcissism and entitlement could buffer against long-term declines in sexual and relationship outcomes, for example, through greater self-enhancement (i.e., perceiving of oneself in a more favourable light than warranted; Grijalva & Zhang, 2016). Alternatively, research suggests that negative experiences tend

to be more easily recalled (Williamson et al., 2019) and negative behaviours (e.g., conflict, withdrawal) within couples are considered strong predictors of relationship decline (Gottman & Levenson, 1992). As a result, perceiving resentful responses may have longer-lasting implications for individuals with SIAD's sexual and relationship satisfaction than enacting these behaviours has for their partners' outcomes.

No effects persisted at six months for insecure responses and individuals with SIAD's own outcomes. For partners, their reported greater insecure responses at baseline predicted their own increased sexual distress and lower sexual satisfaction six months later. However, in contrast, when individuals with SIAD perceived greater insecure responses at baseline, their partners reported increased sexual satisfaction six months later. Partners' insecure responses may be indicative of an insecure attachment style, which has been linked to couples' greater sexual dissatisfaction and poorer sexual functioning due to factors such as hypersensitivity to rejection, or poorer abilities to communicate their sexual needs (Brassard et al., 2012; Dang et al., 2018; Davis et al., 2006; Valdez et al., 2021). Yet, our contrasting findings suggest that when individuals with SIAD perceived their partners' trait levels of insecurity in response to rejection, they may have engaged in more relationship-promoting behaviours (e.g., affection, reassurance, gratitude) over time to reduce partners' feelings of insecurity, which promoted partners' sexual satisfaction (Davis et al., 2006; Overall et al., 2022).

3.5.3 Enticing Responses

After controlling for non-physical sexual coercion, on days when women and gender diverse individuals with SIAD perceived, and men, women, and gender diverse partners reported, greater enticing responses, they reported greater sexual distress (actor

effects), and partners reported greater sexual desire. Partners' greater daily enticing responses were also associated with individuals with SIAD's lower sexual satisfaction. These results may indicate that on days when partners are experiencing higher desire, they are more likely to persist with initiating, and the probable repeated rejection following these attempts to re-initiate is linked to greater sexual distress for both couple members (Hendrickx et al., 2019). These interactions may be experienced as a partner's unresponsiveness to the individual with SIAD's sexual needs, resulting in their poorer sexual satisfaction (Hogue et al., 2019). Moreover, it is possible that the original actor effect of individuals with SIAD's greater sexual desire reflected individuals who, in response to insistent or pressuring verbal initiation attempts, felt they had to engage in sexual activity to meet a partner's needs, improve relationship dynamics, or avoid unwanted consequences (O'Sullivan, 2005). These potential consequences were not present, or became less salient, when a partner's attempts to re-initiate were not experienced as sexually coercive.

Over time, when individuals with SIAD perceived greater enticing responses at baseline, they reported a decrease in sexual satisfaction six months later. After controlling for non-physical sexual coercion, this effect remained significant and a second, seemingly contradictory effect emerged: when partners reported greater enticing responses, individuals with SIAD reported greater sexual satisfaction. A potential explanation is that individuals with SIAD who perceived more enticing responses at baseline may have been more distressed (e.g., guilty, frustrated) due to their frequent rejections, and thus, may be primed to interpret neutral interactions as a partner's attempts to initiate sexual activity and, as a result, perceive persistent partner unresponsiveness (Brassard et al., 2012;

Carrère et al., 2000; Hogue et al., 2019). However, when partners reported greater enticing responses, these intentional, non-coercive interactions may have made the individuals with SIAD feel sexually desirable and, consequently, enhanced their sexual satisfaction (Frederick et al., 2017; Metz & McCarthy, 2007). Finally, there were no significant daily or prospective effects of enticing responses for either partners' relationship satisfaction. It may be that enticing responses primarily relate to sexual needs—as opposed to the emotional and relational needs theoretically associated with understanding responses—and are inherently perceived as a sexual stimulus (Hogue et al., 2019; Toates, 2009).

3.5.4 Strengths and Limitations

This study was the first to examine the daily and longer-term implications of partners' responses to sexual rejection for both couple members' sexual well-being and relationship satisfaction in couples coping with SIAD. Although sexual rejection occurs frequently, is highly distressing for couples coping with SIAD, and has detrimental effects for their well-being, it has rarely been a focus of research (Frost & Donovan, 2019; Ling & Kasket, 2016; Moor et al., 2021). By dyadically exploring the implications of partners' responses, our findings support a transition away from attributing the burden of SIAD to women and gender diverse individuals with SIAD, favoring instead an approach that focuses on addressing dynamics within the relationship (Girard & Woolley, 2017; Prekatsounaki et al., 2022). Our methods offered a comprehensive understanding of these associations, with the daily diaries capturing within-person variability while limiting recall bias, and our prospective results building upon these correlational findings by allowing us to draw more temporal conclusions.

While our study sample included data from couples with non-majoritized identities, most individuals with SIAD were women (96.6%), most partners were men (87.1%), and most participants were heterosexual (74.1%), Euroamerican (81.6%), and had a high combined annual income (i.e., >$80,000; 56.9%), thus limiting the generalizability of our results. Indeed, there may be sociocultural dynamics surrounding sexual rejection and responses to sexual rejection that this study does not have sufficient data to address. Within the daily diaries, questions exploring sexual rejection responses were branched from an initial question determining if sexual rejection occurred that day. Research in daily diary methods suggests that participants may indicate that an activity did not occur—although it did—to avoid follow-up questions and reduce burden (Gochmann et al., 2022). Thus, our results may not reflect all occurrences of sexual rejection experienced by participants in the daily diary sample. Finally, the measure of responses to sexual rejection was developed in community samples (Kim et al., 2019), and there may be additional responses to sexual rejection that are more common in couples coping with SIAD and should be examined in future research (e.g., distraction; Sheppes et al., 2011).

3.6 Conclusion

Our study examined the daily and prospective associations of four distinct partner responses to sexual rejection and the sexual well-being and relationship satisfaction of women and gender diverse individuals with SIAD and their men, women, and gender diverse partners. Responses to sexual rejection may provide a treatment target by which clinicians can engage partners of individuals with low desire in couple-based interventions, while cultivating partners' self-efficacy in the context of sexual challenges

(Girard & Woolley, 2017). Therapeutic interventions may include psychoeducation regarding the daily and long-term implications of responses to sexual rejection. Clinicians are encouraged to collaborate with couples to explore how partners may engage in responses that result in favourable outcomes while respecting their own sexual needs—noting that preferred response styles may differ across couples, and between couple members. Specifically, clinicians might assess and discourage resentful responses, cultivate understanding responses—while discussing potential avoidance and negative cognitive appraisals that may co-occur—and explore any feasible long-term benefits of effectively communicating one's insecurities to a partner (i.e., insecure responses) or attempting to reinitiate sexual activity (i.e., enticing responses) following sexual rejection.

3.7 Tables

	Women and gender diverse individuals with SIAD	Men, women, and gender diverse partners
Age (years)	34.67 ± 9.98	36.13 ± 10.51
Gender		
Woman	224 (96.6%)	22 (9.5%)
Man	–	202 (87.1%)
Indigenous (e.g., Two-Spirit)	2 (0.8%)	–
Non-binary	10 (4.3%)	7 (3.0%)
Additional†	4 (1.7%)	3 (1.3%)
Sexual Orientation		
Asexual	4 (1.7%)	–
Bisexual	31 (13.4%)	13 (5.6%)
Gay	–	2 (0.9%)
Heterosexual	157 (67.7%)	187 (80.6%)
Lesbian	10 (4.3%)	15 (6.5%)
Pansexual	13 (5.6%)	5 (2.2%)
Queer	12 (5.2%)	6 (2.6%)
Questioning	3 (1.3%)	3 (1.3%)
Additional†	2 (0.9%)	2 (0.9%)
Culture		
African	2 (0.9%)	–
American	7 (3.0%)	4 (1.7%)
Biracial/Multiracial	5 (2.2%)	6 (2.6%)
Black/African American	2 (0.9%)	7 (3.0%)
East Asian	5 (2.2%)	4 (1.7%)
English Canadian	96 (41.4%)	95 (40.9%)
European	27 (11.6%)	24 (10.3%)
Hispanic	–	3 (1.3%)
Indigenous	5 (2.2%)	5 (2.2%)
Latin American/Latino/a/x	5 (2.2%)	7 (3.0%)
Middle Eastern/Central Asian	3 (1.3%)	3 (1.3%)
Québécois/French Canadian	111 (47.8%)	98 (42.2%)
South Asian	–	5 (2.2%)
Southeast Asian	2 (0.9%)	3 (1.3%)
White	65 (28.0%)	69 (29.7%)
Additional cultures‡	7 (3.0%)	6 (2.6%)
Education (years)§	16.15 ± 3.02	15.12 ± 3.21
Length of SIAD (years)	7.12 ± 7.76	–
Relationship Status		
Cohabitating	131 (56.5%)	
Married	88 (37.9%)	
Not cohabiting	13 (5.6%)	
Relationship Length (years)	9.32 ± 7.74	
Combined Annual Income		
$0-$39,999	35 (15.1%)	
$40,000-$79,999	65 (28.0%)	
$80,000-$119,999	70 (30.2%)	
>$120,000	62 (26.7%)	

Table 3.7.1

Descriptive statistics (M ± SD or N [%]) of the cumulative sample's (N = 232) demographic variables

Note. Participants could select multiple genders, sexual orientations, and cultures, thus, percentages of participants endorsing each response may not add up to 100%. In order to protect confidentiality, cells

containing only one participant are not reported on in this table (these individuals are instead reflected in the additional gender, sexual orientation, or culture categories).
†The additional option provided was an open-ended response.
‡Additional options provided for culture included: Australian, Native Hawaiian/Other Pacific Islander, and an open-ended response.
§Starting from first grade.

Table 3.7.2

Study variables' descriptive statistics (M ± SD or N [%])

	Daily (N = 200)		Prospective (N = 170)	
	Women and gender diverse individuals with SIAD	Men, women, and gender diverse partners	Women and gender diverse individuals with SIAD	Men, women and gender diverse partners
Predictors				
Understanding responses	2.61 ± 1.26	2.80 ± 1.25	3.79 ± 0.84$_{e}$	3.92 ± 0.61$_{e}$
Resentful responses	1.36 ± 0.55	1.35 ± 0.61	1.60 ± 0.77	1.67 ± 0.62
Insecure responses	1.51 ± 0.67$_{a*}$	1.75 ± 0.92$_{a*}$	2.61 ± 1.06	2.71 ± 0.97
Enticing responses	1.72 ± 0.76	1.62 ± 0.78	2.65 ± 0.95	2.66 ± 0.89
Covariate				
Sexual coercion†	61 (30.5%)$_{b}$	46 (23.0%)$_{b}$	65 (38.2%)	52 (30.6%)
Outcomes				
Sexual satisfaction	19.85 ± 5.43	20.43 ± 6.01	21.04 ± 7.07$_{f}$	22.43 ± 7.59$_{f}$
Sexual desire	1.81 ± 0.76$_{c*}$	4.09 ± 1.36$_{c*}$	16.35 ± 9.53$_{g*}$	35.14 ± 10.21$_{g}$
Sexual distress	3.91 ± 2.59$_{d*}$	2.49 ± 2.36$_{d*}$	9.90 ± 4.97$_{h*}$	6.70 ± 4.63$_{h*}$
Relationship satisfaction	12.96 ± 3.53	13.27 ± 3.53	13.44 ± 4.65	13.51 ± 4.57

Note. Statistics with the same subscript letter indicate a significant difference (p < .05) in scores between individuals with SIAD and partners. Subscript letters with * indicate significance of p < 0.001.
†Participants who reported receiving (individuals with SIAD) or enacting (partners) non-physical sexual coercion.

	1 – Sexual satisfaction			2 – Sexual satisfaction			1 – Dyadic sexual desire			2 – Dyadic sexual desire		
	B	SD	95% CI	*B*	SD	95% CI	*B*	SD	95% CI	*B*	SD	95% CI
ponses												
	0.06	0.04	-0.02, 0.15	-0.04	0.08	-0.19, 0.11	0.02	0.01	-0.01, 0.04	-0.01	0.02	-0.05, 0.04
	-0.70*	**0.08**	**-0.82, -0.49**	**-0.72***	**0.15**	**-1.01, -0.43**	-0.02	0.02	-0.06, 0.02	-0.06	0.05	-0.15, 0.02
	-0.53*	**0.07**	**-0.64, -0.35**	**-0.81***	**0.14**	**-1.08, -0.54**	**-0.06***	**0.02**	**-0.09, -0.02**	-0.08	0.04	-0.16, 0.01
	-0.02	0.06	-0.11, 0.12	-0.02	0.12	-0.24, 0.21	**0.03***	**0.02**	**0.01, 0.06**	**0.10***	**0.03**	**0.03, 0.16**
n-physical	-0.02	0.11	-0.24, 0.20	0.02	0.12	-0.22, 0.26	0.04	0.08	-0.12, 0.20	**0.10***	**0.04**	**0.03, 0.17**
on covariate												

ple 3.7. SEQ Table * ARABIC \r 33

ily within-person effects of responses to sexual rejection and sexual well-being and relationship

isfaction (N = 200 couples)

	-0.01											
	-0.65*											
	-0.45*											
	-0.38*	**0.11**	**-0.60, -0.17**	0.03	0.07	-0.07, 0.20	0.03	0.03	-0.03, 0.08	**0.21***	**0.02**	**0.17, 0.25**
n-physical	**-0.41***	**0.12**	**-0.63, -0.17**	0.05	0.13	-0.20, 0.29	0.02	0.03	-0.04, 0.08	**0.26***	**0.09**	**0.09, 0.44**
on covariate												

	1 – Sexual distress			2 – Sexual distress			1 – Relationship satisfaction			2 – Relationship satisfaction		
	B	SD	95% CI	*B*	SD	95% CI	*B*	SD	95% CI	*B*	SD	95% CI
ponses												
	0.13*	**0.02**	**0.09, 0.17**	-0.02	0.03	-0.07, 0.03	**0.20***	**0.03**	**0.14, 0.27**	**0.11***	**0.05**	**0.02, 0.20**
	0.38*	**0.04**	**0.31, 0.45**	**0.15***	**0.05**	**0.05, 0.25**	**-0.66***	**0.06**	**-0.78, -0.55**	**-0.51***	**0.09**	**-0.69, -0.35**
	0.42*	**0.03**	**0.35, 0.48**	**0.23***	**0.05**	**0.13, 0.32**	**-0.52***	**0.05**	**-0.62, -0.42**	**-0.42***	**0.08**	**-0.58, -0.27**
	0.27*	**0.03**	**0.21, 0.32**	0.01	0.04	-0.07, 0.08	-0.02	0.04	-0.11, 0.06	0.06	0.07	-0.07, 0.19
n-physical	**0.32***	**0.09**	**0.14, 0.50**	0.02	0.04	-0.06, 0.10	0.04	0.10	-0.15, 0.23	0.09	0.07	-0.06, 0.23
on covariate												
ponses												
	0.07*	**0.03**	**0.01, 0.14**	**0.04***	**0.02**	**0.01, 0.07**	**0.10***	**0.05**	**0.01, 0.19**	**0.15***	**0.03**	**0.09, 0.20**
	0.03	0.08	-0.12, 0.19	**0.28***	**0.03**	**0.22, 0.34**	**-0.57***	**0.11**	**-0.78, -0.35**	**-0.42***	**0.05**	**-0.51, -0.32**
	0.02	0.05	-0.09, 0.12	**0.26***	**0.02**	**0.22, 0.31**	**-0.26***	**0.08**	**-0.41, -0.11**	**-0.34***	**0.04**	**-0.42, 0.26**
	0.03	0.06	-0.08, 0.14	**0.18***	**0.03**	**0.14, 0.23**	-0.11	0.08	-0.27, 0.04	0.02	0.04	-0.07, 0.10
n-physical	-0.02	0.06	-0.14, 0.09	**0.24***	**0.09**	**0.06, 0.42**	-0.11	0.09	-0.29, 0.06	0.05	0.11	-0.16, 0.26
on covariate												

. 1 represents women and gender diverse individuals with SIAD who *perceived* responses to sexual rejection, 2 represents men, women, and gender se partners of individuals with SIAD who *reported* responses to sexual rejection. Each response to sexual rejection was tested in a separate model four models total for daily analyses) that included all the sexual well-being and relationship satisfaction outcomes.

l bolded font denote results significant at $p < 0.05$

nstandardized beta; SD = posterior standard deviation; CI = credible interval ADDIN

	1 – Sexual satisfaction			2 – Sexual satisfaction			1 – Dyadic sexual desire			2 – Dyadic sexual desire		
	Est	SE	95% CI	*Est*	SE	95% CI	*Est*	SE	95% CI	*Est*	SE	95% CI
onses												
	0.10	0.07	-0.04, 0.24	-0.01	0.08	-0.15, 0.14	-0.10	0.06	-0.23, 0.02	0.04	0.05	-0.06, 0.13
	-0.16*	**0.08**	**-0.32, -0.01**	-0.02	0.08	-0.18, 0.14	-0.01	0.07	-0.15, 0.13	-0.04	0.06	-0.15, 0.07
	-0.06	0.08	-0.21, 0.09	**0.18***	**0.08**	**0.02, 0.35**	-0.12	0.07	-0.25, 0.02	0.08	0.05	-0.03, 0.18
	-0.17*	**0.09**	**-0.24, -0.01**	-0.04	0.10	-0.23, 0.15	-0.01	0.09	-0.18, 0.16	0.04	0.06	-0.07, 0.15
n-physical	**-0.18***	**0.09**	**-0.35, -0.01**	-0.08	0.10	-0.27, 0.11	-0.01	0.10	-0.20, 0.19	0.06	0.06	-0.05, 0.18
on covariate												

ble SEQ Table * ARABIC \r 33.7.4

spective effects of responses to sexual rejection and sexual well-being and relationship satisfact

=170 couples)

onses												
	0.07											
	0.06											
	-0.09											
	0.13											
n-physical	**0.20***	**0.09**	**0.03, 0.38**	0.10	0.10	-0.09, 0.28	0.17	0.09	-0.01, 0.35	-0.03	0.07	-0.16, 0.10
on covariate												

	1 – Sexual distress			2 – Sexual distress			1 – Relationship satisfaction			2 – Relationship satisfaction		
	Est	SE	95% CI	*Est*	SE	95% CI	*Est*	SE	95% CI	*Est*	SE	95% CI
onses												
	-0.09	0.07	-0.22, 0.05	0.05	0.07	-0.08, 0.18	**0.13***	**0.06**	**0.01, 0.25**	0.02	0.07	-0.11, 0.15
	0.04	0.08	-0.11, 0.19	-0.07	0.07	-0.21, 0.07	**-0.17***	**0.07**	**-0.30, -0.04**	-0.06	0.07	-0.19, 0.07
	0.08	0.07	-0.07, 0.22	-0.11	0.08	-0.27, 0.05	-0.13	0.07	-0.26, 0.01	0.01	0.07	-0.12, 0.13
	0.10	0.08	-0.06, 0.26	0.01	0.08	-0.14, 0.15	-0.09	0.08	-0.24, 0.05	0.01	0.07	-0.13, 0.14
n-physical	0.17	0.09	-0.01, 0.34	0.02	0.08	-0.14, 0.18	-0.09	0.08	-0.24, 0.06	0.02	0.07	-0.12, 0.16
on covariate												
onses												
	0.01	0.07	-0.13, 0.15	0.05	0.07	-0.07, 0.18	0.03	0.06	-0.09, 0.15	0.10	0.06	-0.02, 0.23
	-0.12	0.08	-0.27, 0.04	0.06	0.07	-0.09, 0.21	0.08	0.07	-0.05, 0.20	-0.05	0.07	-0.18, 0.09
	-0.06	0.08	-0.23, 0.10	**0.21***	**0.09**	**0.05, 0.38**	0.10	0.08	-0.05, 0.24	-0.08	0.07	-0.23, 0.06
	-0.11	0.09	-0.28, 0.06	-0.06	0.07	-0.21, 0.08	0.01	0.07	-0.12, 0.14	0.01	0.07	-0.12, 0.14
n-physical	-0.13	0.09	-0.31, 0.04	-0.07	0.08	-0.22, 0.09	0.01	0.07	-0.11, 0.14	0.03	0.07	-0.10, -0.17
on covariate												

27

. 1 represents women and gender diverse individuals with SIAD who *perceived* responses to sexual rejection, 2 represents men, women, and gender se partners of individuals with SIAD who *reported* responses to sexual rejection. Each response to sexual rejection was tested in a separate model four models total for prospective analyses) that included all the sexual well-being and relationship satisfaction outcomes.

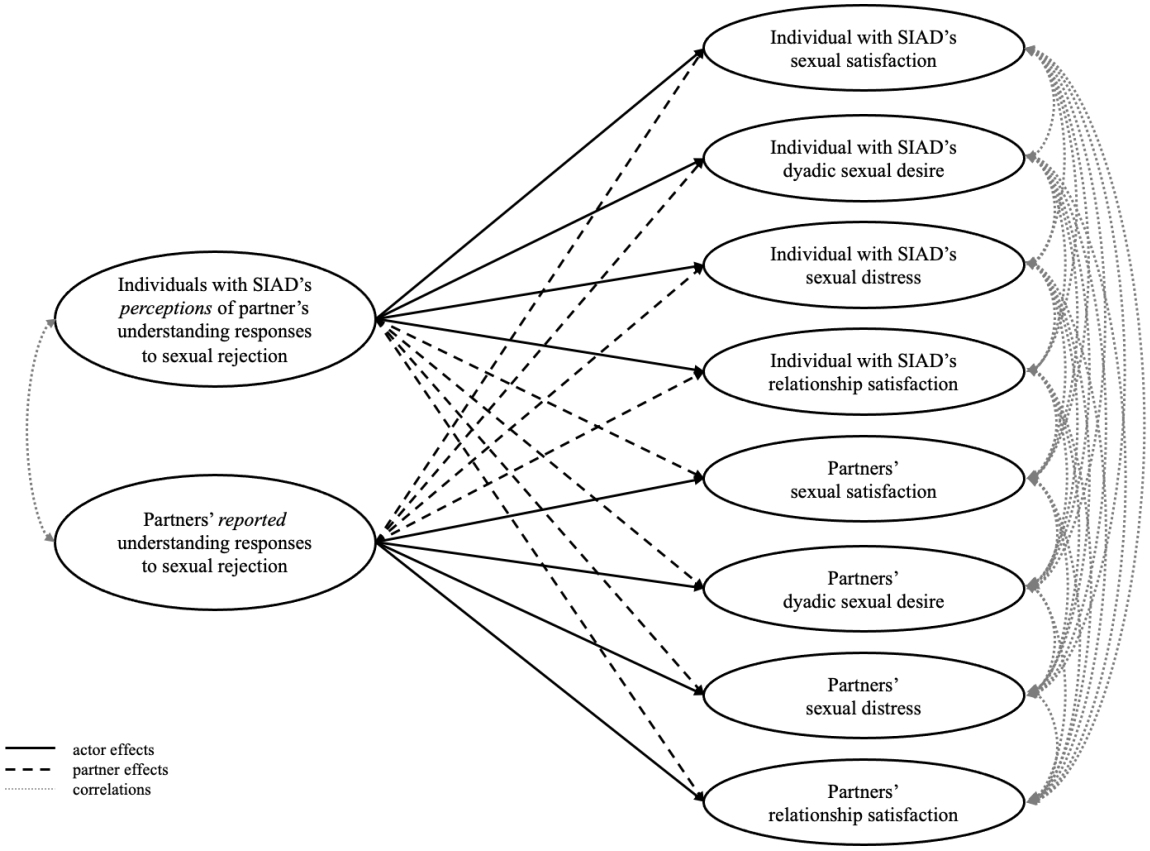
l bolded font denote results significant at $p < 0.05$

standardized model estimate; SE = standard error; CI = confidence interval ADDIN

3.8 Figures

Figure 3.8.1

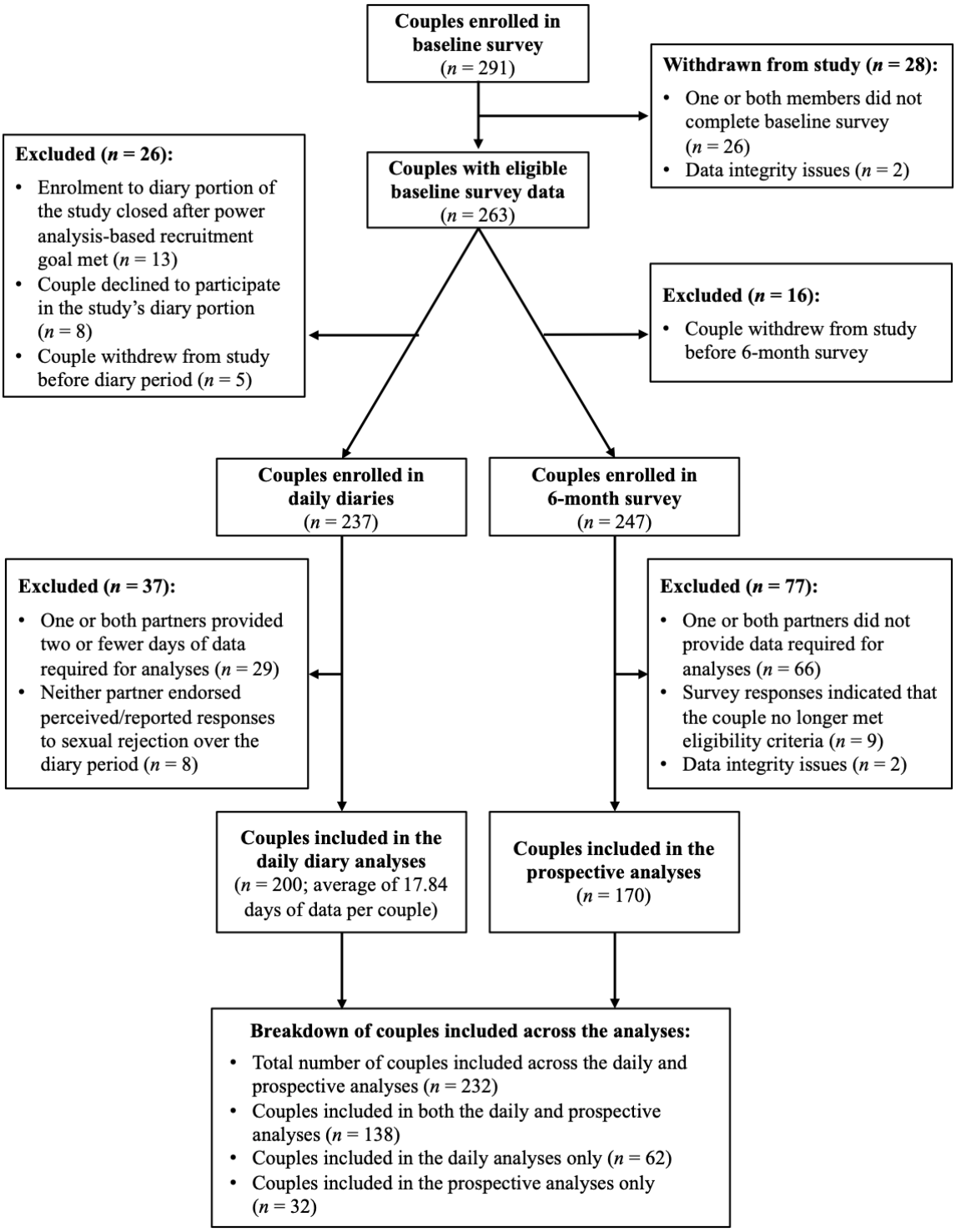
Conceptual diagram of actor and partner effects referred to in the hypotheses



Note. This is an example diagram displaying the actor and partner effects referred to in the hypotheses, using understanding responses as an example. These effects were examined for each of the four responses to sexual rejection daily and prospectively. For more comprehensive example diagrams of the daily and prospective analyses conducted, see Supplemental Figures C.1 and C.2 or the Supplemental Materials on OSF: https://osf.io/vxh58/?view_only=8c7fcae0b788493983d604941a8d9b35.

Figure 3.8.2

Flow of participant inclusion to daily (N = 200) and prospective (N = 170) analyses



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CHAPTER 4: DISCUSSION

The main objective of my dissertation was to understand the relationship between four distinct partner responses to sexual rejection and sexual well-being and relationship satisfaction in the context of SIAD. I examined these associations through two dyadic studies. In the first study (described in Chapter 2), I examined whether the frequency of partner responses to sexual rejection differed when comparing couple members coping with SIAD and their community counterparts and when comparing members within a couple to one another, while controlling for the frequency of sexual rejection. I also assessed the associations between responses to sexual rejection and sexual and relationship outcomes, and if these associations varied in strength across the two samples. The results indicated that couple members coping with SIAD reported more frequent resentful and insecure responses than their community counterparts, and individuals with SIAD perceived less understanding responses than their partners reported. I found no difference in the strength of the associations with outcomes across the two samples. Generally, greater understanding responses, and lower resentful and insecure responses, were associated with greater sexual well-being and relationship satisfaction. There were mixed findings for enticing responses.

In my second study (described in Chapter 3), I addressed the limitations of Study 1's cross-sectional design by examining the associations between responses to sexual rejection and sexual and relationship outcomes daily (i.e., 56 days of diaries) and prospectively (i.e., 6-month follow-up) in couples coping with SIAD. I also explored the associations between enticing responses and outcomes by including sexual coercion as a covariate in separate daily and longitudinal follow-up analyses. Moreover, as described in

Section 2.10.2.1 (Exploring Sexual Coercion as a Moderator and Covariate of Enticing Responses: Challenges and Decision), while not included in my Study 2 manuscript, I assessed sexual coercion as a moderator (results presented in Section 2.10.2.1.1). The outcomes of Study 2 were largely consistent with our hypotheses and the findings of Study 1. Although the effect sizes of Study 1's findings were larger, the daily analyses in Study 2 provided stronger and more precise evidence for the associations of responses to sexual rejection. Study 2 yielded a greater number of significant results with narrower credible intervals compared to the cross-sectional and prospective analyses. In Study 2, both daily and over time, when individuals with SIAD perceived, and their partners reported, greater understanding responses, and lower resentful and insecure responses, both they and their partner reported greater sexual well-being and relationship satisfaction. Unexpectedly, at the daily level, greater understanding responses were also associated with an individual's own greater sexual distress, perhaps because these responses inadvertently reinforce avoidance of sex and intimacy, which, in turn, may promote sexual distress (Mitchell et al., 2011). The other notable result that contradicted our hypotheses was that individuals with SIAD's greater perceived insecure responses predicted their partners' greater sexual satisfaction six months later, possibly because these perceptions prompt individuals with SIAD to engage in behaviours (e.g., affection) aimed at reducing partners' feelings of insecurity, thus promoting partners' sexual satisfaction (Davis et al., 2006; Overall et al., 2022).

Regarding enticing responses, after controlling for non-physical sexual coercion (NPSC), for individuals with SIAD, greater perceived enticing responses were associated with poorer daily outcomes and mixed prospective outcomes. Specifically, individuals

with SIAD's greater perceived enticing responses at baseline predicted their own lower sexual satisfaction six months later, while partners' greater reported enticing responses at baseline predicted individuals with SIAD's greater sexual satisfaction at six months. This opposing pattern may be due to individuals with SIAD perceiving neutral interactions as a partner's unresponsiveness to their sexual needs versus a partner's intentional attempts that promote feelings of desirability, respectively (Brassard et al., 2012; Carrère et al., 2000; Frederick et al., 2017; Hogue et al., 2019; Metz & McCarthy, 2007). For partners, greater enticing responses had no significant prospective associations and mixed daily associations (i.e., own greater dyadic sexual desire and sexual distress), possibly because partners engage in more enticing responses on days when they experience greater dyadic sexual desire, and the likely repeated rejection may exacerbate their sexual distress. For further discussion of the results of Study 2, see the Discussion in Chapter 3 (Section 3.5).

Overall, the findings from both studies support the potential role of responses to sexual rejection as a target for interventions with couples navigating frequent sexual rejection, such as those coping with SIAD or desire discrepancies. Specifically, it may be helpful to discourage resentful responses and foster understanding responses—while directing couples to pay attention to any emerging or increasing avoidance behaviours. The study's findings also underscored the need to better understand the contexts and mechanisms by which responses to sexual rejection are associated with sexual and relationship outcomes; particularly for insecure and enticing responses.

4.1 Strengths and Limitations

The strengths and limitations of each study are detailed in their respective manuscripts (see Sections 2.5.4 and 3.5.4, respectively). In the following sections I

review the broader strengths and limitations of my studies' samples and research designs.

4.1.1 Sample

4.1.1.1 Strengths

There are several strengths of my dissertation studies' samples, including the recruitment of both clinical and community populations, the assessment of partners in addition to affected individuals within mixed-gender/sex and gender/sex diverse couples, an ethical and equitable approach to inclusivity, and the confirmation that individuals with SIAD met diagnostic criteria through a clinical interview. First, the recruitment of a clinical sample provided the opportunity to assess the relevance of a novel interpersonal factor—responses to sexual rejection—in a population that experiences frequent challenges with sexual rejection (Frost & Donovan, 2019). Couples coping with SIAD are also navigating one of the primary sexual difficulties that couples seek therapeutic support for, namely, desire-related concerns; thus, increasing the potential pertinence of our findings for interventions (Emond et al., 2024; Péloquin et al., 2019). Further, by including a comparison community sample in Study 1, I was able examine whether differences existed across the SIAD and community samples in the frequency of responses to sexual rejection and in the strength of the associations between the responses to sexual rejection and sexual well-being and relationship satisfaction. As a result, the findings of Study 1 have implications for both samples.

A notable second strength of my studies' samples was the inclusion of both couple members and engaging in targeted efforts to recruit couples that were gender/sex diverse. Given that sexual dysfunctions most often occur in the context of a relationship (Rosen et al., 2009), it is essential to understand the role of interpersonal dynamics in

their maintenance and exacerbation (Dewitte, 2014). Yet, research in SIAD samples has primarily focused on the individual with distressing low desire; specifically, affected women partnered with men. By examining couples, I was able to elucidate the associations between partner responses to sexual rejection and each couple member's sexual and relationship outcomes. Through targeted recruitment efforts across my studies, we successfully included a considerable population of non-heterosexual individuals (30% and 26% in Studies 1 and 2, respectively), a group often excluded or underrepresented in the existing literature (van Anders et al., 2022), thereby increasing the generalizability of the findings to non-heterosexual individuals.

Third, in the initial screening of interested participants, if the couple member with low desire indicated that they were gender diverse (e.g., gender fluid, non-binary) and assigned female at birth, they were informed that the study was originally designed to focus on the experiences of women with low desire. They were then assured that they were welcome to participate provided they were comfortable being grouped with a sample largely composed of women in our analyses. Thus, although the individuals with SIAD in my studies were primarily women (96% and 97% in Studies 1 and 2, respectively), the gender diverse individuals in my affected samples provided consent to being grouped with them. In order to accurately reflect my samples, I also implemented the term 'SIAD' rather that 'FSIAD' (i.e., Female Sexual Interest/Arousal Disorder). In Study 1, I referred to participants as 'individuals with SIAD', to reflect that the sample was not restricted to women with SIAD, and 'partners'. However, in Study 2, I adapted this language based on my evolving learning to 'women and gender diverse individuals with SIAD' and 'men, women, and gender diverse partners' to promote inclusion and

prevent erasure of participant's experiences (Brotto & Galea, 2022). I also included footnotes in both of my manuscripts and this dissertation to explain my use of 'SIAD' and language referring to the studies' participants. These approaches reduced sampling bias and reflected my own and the Couples and Sexual Health laboratory's values regarding ethical and equitable research practices. These practices include clear communication with participants, meaningful inclusion (i.e., ensuring eligibility criteria do not unintentionally exclude potential participants with minoritized identities), intellectual humility, and transparency (Lowik et al., 2022a, 2022c).

Finally, all the couple members with SIAD in my samples were diagnosed through a clinical interview conducted by trained members of the research team, enhancing the internal validity of the studies. It is important to note that the SIAD diagnosis has been critiqued as a pathologization of normative changes in the sexual desire of women and gender diverse individuals over the course of their lives and in long-term relationships, which are argued to be primarily driven by relational and sociocultural factors (e.g., Thomas & Gurevich, 2021). I recognize, and have reviewed (see Section 1.1.3.3), how relational and sociocultural factors play a crucial role in sexual desire. Moreover, as acknowledged by a member of the DSM-5 Sexual Dysfunctions sub-workgroup (Graham, 2016), the current diagnostic criteria for SIAD are limited in their capacity to assess sociocultural factors due to the scarcity of research available from non-Western countries when the diagnosis was being developed (Meana, 2010). However, the diagnostic criteria for SIAD specify that the individual must report clinically significant distress related to the low desire, above and beyond relational concerns (e.g., significant conflict within the couple related to desire discrepancy;

American Psychiatric Association, 2022; Meana et al., 2015). Population-based studies indicate that while nearly 60% of women experience clinically low sexual desire in their lifetime, notably fewer, approximately 10%, also report associated distress (Briken et al., 2020; Burri & Spector, 2011; Hendrickx et al., 2014; Rosen et al., 2009). As a result, inclusion of clinically significant distress among the SIAD diagnostic criteria safeguards against the pathologization of normative desire experiences that do not negatively affect the individual, while facilitating access to treatment for distressed individuals (Meana et al., 2015; Parish & Hahn, 2016). Indeed, female sexuality remains heavily stigmatized worldwide, including in Western cultures, and the majority of women often avoid discussing their sexual health with others, such as healthcare providers, due to shame or lack of awareness of treatments (Atallah et al., 2016; Atallah & Redón, 2023; Kingsberg et al., 2019). A study investigating reasons for delaying or not seeking help for HSDD found that 51.6% of participants believed that distressing low sexual desire was a normal part of aging or being in a long-term relationship, while 41.0% believed that treatments did not exist (R. C. Rosen et al., 2012). These findings were reflected in my clinical interviews as most participants I assessed and diagnosed with SIAD reported a sense of isolation in their symptoms, were not aware of the disorder or its prevalence, and described feeling validated and hopeful after receiving the diagnosis.

4.1.1.2 Limitations

My study samples were primarily limited in terms of their diversity, reducing generalizability and considerations of sociocultural factors in interpreting the findings. Despite targeted recruitment efforts, participants in my studies were primarily non-BIPOC (Black, Indigenous, and People of Colour), API (Asian/Pacific Islander),

and/or Latine individuals (18% in both studies were BIPOC, API, and/or Latine), in long-term (averaging 9 years in both studies) and mixed-gender/sex relationships (83% in both studies), with high household incomes (i.e., greater than $80,000; 59% and 58%, respectively) and education levels (averaging 16 years in both studies, beginning from first grade). Thus, my findings may be less pertinent to BIPOC, API, and/or Latine individuals, gender/sex diverse dyads, less established couples, individuals with diverse relationship styles (e.g., consensual non-monogamy), and those from lower socioeconomic backgrounds. Further, my samples were vulnerable to self-selection bias as participants willingly engaged in studies of sexuality, which required reflecting on distressing sexual challenges. Study 2 also constituted a significant time commitment (i.e., 56 days of diaries and 6-month follow-up). Consequently, my results may not reflect the experience of individuals who are more distressed, as they may exhibit increased avoidance, feel overwhelmed, and/or be less motivated to participate due to the study content and time commitment (Corsini-Munt et al., 2017).

The limitations of diversity within my samples are especially pertinent concerning sociocultural factors, as they are imperative to consider when examining low desire (as described in Section 1.1.3.3). Although not explicitly studied previously, responses to sexual rejection are theoretically linked to sociocultural differences through variations in sexual norms, expectations, and communication. For example, the frequency and impact of responses to sexual rejection likely vary across cultures depending on norms and expectations, such as expecting women to be obedient to their husbands, accepting polygyny as a common practice, entitling women to sexual pleasure, openness to sexual communication, and viewing sex as an obligation primarily motivated by reproduction or

as a man's privilege in a relationship (Atallah et al., 2016; Brendler, 2012; Gardiner, 2017; Melendez et al., 2012; Zargooshi et al., 2012). An individual's engagement in, and experience of, responses to sexual rejection may also be impacted by the levels at which they endorse culturally-bound values, such as hypermasculinity, *marianismo* (i.e., emphasis on women's purity, selflessness, and devotion; common in Latin America), *kusala* (i.e., emphasis on being wholesome and virtuous; from Buddhism), and conservatism (Bunnag, 2019; Kelly & Shelton, 2012; Melendez et al., 2012; Morales & Pérez, 2020; Ramanathan & Weerakoon, 2012). Thus, to clarify the role of sociocultural factors in responses to sexual rejection and sexual and relationship well-being, future studies may benefit from examining individuals' levels of endorsement of various norms and values in samples with greater diversity or in culture-specific samples.

4.1.2 Research Design

4.1.2.1 Strengths

My research design had a number of strengths, such as its clinical and theoretical grounding, dyadic multi-method approach and analyses, effective recruitment and retention strategies, and implementation of open science practices. Regarding the design's clinical and theoretical grounding, the DIADICS (Prekatsounaki et al., 2022) and IERM (Rosen & Bergeron, 2019) theoretical models, in combination with clinical recommendations (e.g., Gambescia & Weeks, 2019; Girard & Woolley, 2017), underscored the need to identify relevant interpersonal factors that may play a role in couples' sexual and relationship outcomes in the context of SIAD, and the importance of examining these associations through a dyadic lens. Including both couple members in my research, and focusing on *partner* responses to sexual rejection, is in line with the

recommended shift away from placing the burden of SIAD on affected women and gender diverse individuals, and towards conceptualizing desire difficulties as a relational dynamic in partnered individuals (Dewitte, 2014; Girard & Woolley, 2017; van Anders et al., 2022). Moreover, my studies were some of the first to explicitly focus on the role of partners' behaviours in couples coping with SIAD. Thus, selecting partner responses to sexual rejection as the primary variable of my dissertation research creates an opportunity for my findings to provide a novel avenue by which to engage partners in interventions.

Theoretical and clinical models also guided my dyadic multi-method approach and advanced analyses. By examining associations between the predictor and outcome variables dyadically, I accounted for the interdependence in couple members' experiences by testing for the effects of each member's perspective (i.e., reported vs. perceived responses to sexual rejection) while controlling for the other's perspective (Cook & Kenny, 2005). Additionally, the IERM highlights how distal interpersonal factors (i.e., relational experiences, contexts, or styles that predate a sexual challenge, such as insecure attachment) and proximal interpersonal factors (i.e., experiences during, or immediately preceding or following sexual behaviour, such as a partner's response to sexual rejection) may influence couples' capacity to regulate their emotions following a sexual challenge (e.g., persistent sexual rejection), shaping their sexual and relationship outcomes. Few daily diary studies exist examining couples coping with SIAD, yet daily analyses are the best way to assess the effects of proximal factors, such as responses to sexual rejection. Thereby, my multi-method design allowed for examining the links between responses to sexual rejection and couples' outcomes at the proximal level (i.e., daily analyses), as well as the effects associated with a more pervasive pattern of responding (i.e., cross-sectional

and prospective analyses).

In addition to providing a preliminary understanding of the role of responses to sexual rejection in couples' outcomes, each type of analysis employed in my studies has its own strengths. In the cross-sectional analyses in Study 1, by conducting an exploratory two-group multigroup moderation analysis, and constraining paths one at a time, I was able to investigate whether there were group-specific effects between couples coping with SIAD and community couples. Moreover, responses to sexual rejection had never been examined in couples prior to my research. Thus, my results also provided the first estimates of the frequency of distinct responses to sexual rejection and their associations with sexual and relationship outcomes in both a SIAD and community sample. In Study 2, I examined the same associations daily and prospectively. The daily diary method reduced recall bias and enhanced the ecological validity of my results by allowing for assessment of daily fluctuations in participants' variables closer in time to when they were experienced. It also provided information regarding within-person variability. I analysed the daily data through residual dynamic structural equation modeling (RDSEM). RDSEM offers notable advantages, including the integrated modeling of reciprocal relationships between variables while accounting for the temporal dependencies inherent in daily diary data (see Supplemental Figure C.1), as well as its effective handling of measurement error and missing data (Asparouhov et al., 2018; McNeish & Hamaker, 2020). I employed path models to conduct the prospective analyses. A considerable benefit of path models is their flexibility in specifying complex associations between variables (see Supplemental Figure C.2), enabling me to control for variables at baseline, correlations between couple members' data, and conduct a covariate analysis, while also

ensuring model fit (Cohen et al., 2015; Hooper et al., 2008).

A couple of major assets of my research design were the effective recruitment and retention strategies developed in the Couples and Sexual Health laboratory, which resulted in my studies having the some of the largest samples in the existing dyadic SIAD research. These large samples provided sufficient power to conduct the aforementioned complex analyses and offer significant contributions to the literature on interpersonal factors in couples coping with SIAD. The ability to recruit these large samples was, in part, augmented by the remote nature of my studies (e.g., telephone, Zoom, online surveys). Conducting my studies remotely afforded greater accessibility, the opportunity to reach a wider participant pool, and potentially more candid responses due to the relative anonymity and comfort associated with this method, reducing social desirability bias (Gosling & Mason, 2015). Additionally, the strong retention strategies (e.g., scheduled reminders, providing a contact person that communicated with couples weekly, pro-rated compensation) ensured a high overall diary completion rate of 80% (Stalgaitis & Glick, 2014). Recruitment and retention were further improved by involving community partners (i.e., four individuals with SIAD) in the development phase of the larger study. The community partners' feedback on the study's recruitment approach, methods, and compensation, markedly improved the quality of this research by ensuring its overall feasibility, accessibility, and inclusivity.

A final noteworthy strength of my research design was my application of open science practices, which align with recent calls to action regarding best practices in sexuality research (Gervais et al., 2021; Lorenz, 2020; Matsick et al., 2021; Sakaluk, 2020; Sakaluk & Graham, 2022). This practice included pre-registering both of my

studies on the Open Science Framework (OSF). Each study's pre-registration clearly stated: (1) a description of the study, (2) identified any formal or preliminary analyses, publications, and presentations that had been conducted with the data, (3) information regarding the status of, or plans for, data preparation, (4) delineations between confirmatory (i.e., testing of pre-specified hypotheses) and exploratory analyses (the exception being the addition of non-physical sexual coercion as a covariate in Study 2, which was disclosed in the respective manuscript; see Section 3.2.1), (5) the study's variables and how they were measured, (6) a description of the planned analyses, and (7) how the sample size was determined. For Study 1, I also uploaded two amendments to the pre-registration to reflect the amended analysis plan and my reasoning for the change prior to conducting the analyses, and an update regarding a project that had utilized the data from one of my samples. After conducting my analyses, my syntax and outputs were uploaded to OSF. Since some of the participants in our samples did not consent to having their data uploaded to OSF, individuals were instructed (i.e., through a note on OSF for Study 1 and within the manuscript for Study 2) to contact the corresponding author if they were interested in the deidentified dataset. Finally, within the manuscripts, I noted which analyses were pre-registered and confirmatory versus exploratory and I referenced relevant supplementary materials (e.g., correlation tables, measures, example analysis diagrams) that are available on OSF. Further, the National Academy of Sciences, Engineers, and Medicine's (2019) *Report on Reproducibility and Replicability in Science* stated that "innovative research will likely produce inconsistent results as it pushes the boundaries of knowledge" and underscored the importance of transparency and not misinterpreting or overstating the meaning of study results. Thus, across both studies, I appropriately qualified and contextualized my results. In this dissertation, I also offered a

roadmap of the decisions I made regarding the exploratory analysis of enticing responses and presented the results of the moderation analyses that were not included in the Study 2 manuscript (see Sections 2.10.1.1 through 2.10.2.1.1). In addition to contributing to addressing the "replication crisis" in sexuality research (Lorenz, 2020)—thus, enhancing its credibility—these practices are in line with my values of transparency, collaboration, supporting education and training, and ethical conduct.

4.1.2.2 Limitations

My study design was limited by its inability to draw robust causal conclusions and its measurement approaches, including specific measures, measurement frequencies, and use of self-report surveys. Although the daily and prospective analysis methods I employed allowed me to investigate associations between variables in the hypothesized directions, while controlling for relevant factors (e.g., time, prior day's outcomes, baseline variables), the results were ultimately still correlational in nature and did not provide strong evidence regarding the directionality of the relationships. Regarding my prospective analyses in particular, researchers have argued that two time-points provide insufficient data to capture accurate trajectories of change and discern the change from measurement error or confounding factors (Newsom, 2013; Ployhart & Ward, 2011). As a result, my findings offer a preliminary understanding of the associations between responses to sexual rejection and couples' sexual and relationship outcomes in SIAD and community samples, which should be further replicated in future research.

My research design was also limited by the measurement approaches used. As previously described in the transition section (2.10) between my two studies, the Responses to Sexual Rejection Scale (RSRS; Kim et al., 2019) was developed in

community samples and may not reflect all of or other relevant responses employed in couples coping with SIAD. For example, qualitative research suggests that following rejection, some partners attempt to openly discuss the pattern of sexual rejection and its impact on their relationship (Frost & Donovan, 2019), which is not effectively captured in the response types measured by the RSRS. Another measurement limitation may have impacted the accuracy by which I described my sample characteristics in Study 2. Specifically, by only collecting demographic variables at baseline, I failed to consider potential shifts in participants' identities (e.g., gender) over time (i.e., identity temporality; Lowik et al., 2022b, 2022c).

Additional constraints on the validity and reliability of my findings resulted from conducting my studies through self-report surveys. Self-report surveys are subject to response biases, such as social desirability bias (i.e., tendency to present a favourable image of oneself; Van de Mortel, 2008) and bias towards selecting extreme survey responses (e.g., strongly disagree or strongly agree; Paulhus & Vazire, 2007). Further, research suggests that the use of branching in daily diary studies may lead participants to falsely report that a behaviour did not occur to preclude follow-up questions and reduce burden (Gochmann et al., 2022). Thus, I may have inadvertently reduced the power of my study by only presenting the RSRS measure to participants in the daily diaries after they indicated that sexual rejection had occurred that day.

4.2 Future Research Directions

Considering the novelty of research in responses to sexual rejection, particularly in couples coping with SIAD or desire difficulties, there are various avenues for future research. In the following sections, I provide an overview of some directions for

advancement in this burgeoning area of study, including specific recommendations regarding future research in enticing responses.

4.2.1 Uncovering New Insights

One possible method by which to develop a better understanding of the subjective experiences, perspectives, and emotional responses to sexual rejection in couples coping with SIAD is to employ qualitative methods. For example, interviews or open-ended surveys can offer insight into the multi-faceted ways in which couple members interpret, cope with, and respond to sexual rejection. Indeed, my own clinical experiences and qualitative research (e.g., Frost & Donovan, 2019) played an important role in developing and adapting my study design, and contextualizing my studies' findings. Qualitative research provides an opportunity to explore the complex sociocultural factors associated with responses to sexual rejection, such as the role of values, beliefs, and expectations (Gough & Lyons, 2016). Further, by qualitatively exploring the perceived impact of responses to sexual rejection on the sexual and relationship well-being of couples coping with SIAD, researchers may identify themes and patterns in the factors that influence and are influenced by responses to sexual rejection. As highlighted by Busetto and colleagues (2020, p. 1), qualitative research is especially helpful in "discover[ing] reasons for observed patterns, especially the invisible or surprising ones". For example, qualitative research may shed light on responses to sexual rejection that are more common or specific to couples coping with SIAD and can offer insights into how non-verbal cues influence the perception of these responses. By implementing a timeline followback procedure—a structured method for retrospectively assessing an individual's behaviours, over a specified period using a calendar to aid accurate recall—which has previously

been used to reliably track sexual behaviours (e.g., Schick et al., 2016; Weinhardt et al., 1998), researchers can benefit from detailed recounts of participants' thoughts, feelings, and experiences following sexual rejection. Overall, the crucial insights from qualitative studies may inform the development of theories, measures, and research questions to be explored on a broader level, thereby fostering subject-driven and relevant outcomes (Kelle, 2006).

4.2.2 Establishing Directionality and Causality

The prospective results from Study 2 offer initial support for directionality between couple members' predictor and outcome variables. However, establishing causality would require a research plan that includes sufficiently powered longitudinal analyses over multiple time-points and/or experimental studies (Newsom, 2013; Ployhart & Ward, 2011). A research design combining longitudinal and experimental approaches to examine the role of responses to sexual rejection in couples' sexual and relationship well-being may recruit couples coping with SIAD to participate in a staggered randomized control trial with delayed treatment. The treatment would be a short-term intervention, such as a brief psychoeducational video, which has shown benefits for sexual well-being in community and new parent samples (e.g., Dawson et al., 2022; Rosen et al., 2021). Couples would be alternatingly randomized to receive a short-term psychoeducational intervention regarding challenges with desire *and* responses to sexual rejection (condition 1), or regarding challenges with desire only (condition 2 - controls). Relevant variables, such as frequency of responses to sexual rejection, sexual well-being, relationship well-being, and covariates (e.g., mood), would be measured before the intervention, immediately after, and through longer-term follow-ups (e.g., at 1- and

2-weeks post-intervention). After the final follow-up time-point, the couples in condition 2 would also be given access to psychoeducation regarding responses to sexual rejection. Employing a staggered design with delayed treatment would reduce wait times, result in a larger treatment sample alongside a control sample, ensure that treatment is not unethically withheld from any participants, and make implementation more manageable (e.g., considering resource or infrastructure constraints). The longitudinal findings would allow for evaluation of long-term effects of the intervention, and potentially point to parts of the intervention that were more or less helpful through analyses of participants' trajectories. Further, longitudinal, experimental, and qualitative methods could be combined in order to collect more nuanced information to enhance the efficacy of future interventions (Kelle, 2006).

4.2.3 Investigating Potential Mechanisms

When interpreting my studies' results, I made theoretical and evidence-based speculations about possible mechanisms involved in the associations between responses to sexual rejection and sexual and relationship outcomes. Future studies may investigate these mechanisms utilizing a combination of longitudinal, daily diary, observational, and psychophysiological approaches, thus embracing a holistic biopsychosocial approach (Rosen & Bergeron, 2019). Below, I present some potential mediators and moderators of these associations that could be examined to illuminate the pathway by which responses to sexual rejection may be linked to couples' well-being, with specific mention of how each may help to elucidate the associations of enticing responses. Since the potential role of sociocultural factors have been addressed in other sections of this dissertation (see Sections 1.1.3.3 and 4.1.1.2), I have not included discussion of them here. Nonetheless, I

will re-iterate that it is crucial to examine their influence in these associations.

4.2.3.1 Emotional Intelligence as a Mediator

Emotional intelligence, defined as the ability to perceive, generate, understand, and regulate emotions (Mayer & Salovey, 1997), has been positively associated with couples' sexual and relationship well-being (for reviews, see Casey et al., 2007; Kshirsagar, 2022). Emotional intelligence may be relevant to responses to sexual rejection, particularly in couples coping with SIAD or frequent rejection, as it facilitates the navigation of emotionally charged situations (Casey et al., 2007). Indeed, one of the theories instrumental in the development and interpretation of my dissertation, the IERM (Rosen & Bergeron, 2019), specifically posits an individual's capacity to regulate both their own and their partner's emotions as the mediator through which interpersonal factors affect their sexual well-being. For a detailed description of this model and the potential mediating role of emotion regulation in the associations between responses to sexual rejection and couples' outcomes, refer to Sections 1.1.5 and 1.2.2.1, respectively.

Research into facets of emotional intelligence suggests that engaging in more adaptive coping strategies (e.g., reappraisal, constructive communication, acceptance), and less unhelpful coping strategies (e.g., distraction, avoidance, withholding rumination) is associated with couples' greater relationship satisfaction in SIAD and community samples, and men partners' greater partner-focused sexual desire, and lower sexual distress in couples coping with SIAD (Dubé et al., 2019; Smith et al., 2008). Moreover, in community couples, emotion recognition (i.e., the ability to perceive and interpret each other's emotions) was especially important for accurate perceptions of one another's sexual satisfaction when couples had poorer sexual communication (Fallis et al., 2014).

Taken together, research points to one's greater capacity to perceive, understand, and regulate both their own and their partner's emotions (i.e., emotional intelligence) as an important factor to explore to understand associations between responses to sexual rejection and couples' outcomes. For example, following resentful and insecure responses which may elicit strong negative emotions, an individual's capacity to reflect on the emotions driving these behaviours may lead to greater empathy, and more effective self-disclosure and reconciliation (Prager et al., 2015). Whereas greater avoidance approaches may foster detachment and reduce intimacy (Gottman, 1993; Prager et al., 2015). For enticing responses, an individual's capacity to perceive and understand the emotions driving their partner's attempts to re-initiate sex may determine how they interpret these responses and the couple's ensuing interactions, communication, and sexual and relationship outcomes (Rehman et al., 2011). For partners engaging in enticing responses following sexual rejection, their ability to interpret the rejector's cues of disinterest and to demonstrate empathy and understanding of the rejector's perspective or emotional experience may bolster both couple members' sexual and relationship well-being.

4.2.3.2 Perceived Partner Responsiveness as a Mediator

Perceived partner responsiveness reflects an individual's subjective belief regarding how well their partner understands, validates, and responds to their needs (Reis et al., 2004), and is associated with greater intimacy, and sexual and relationship outcomes in couples (see Birnbaum, 2023 for a review). It may be that responses to sexual rejection that are more understanding are perceived as more responsive and foster intimacy-promoting behaviours (e.g., open and honest conversations), thereby positively

influencing couple members' sexual and relationship outcomes. Whereas the reverse could be true for less helpful responses (e.g., resentful, insecure), which are likely to lead to lower perceived partner responsiveness for both couple members, and, thus, poorer sexual and relationship outcomes. For enticing responses, it may be that they are differentially associated with greater or lower sexual and relationship well-being, depending on how responsive the rejector perceives them to be.

Perceived partner responsiveness has been linked to various relationship- and intimacy-promoting factors, such as greater self-disclosure (Forest & Wood, 2011), emotional openness (Ruan et al., 2020), expressions of gratitude (Algoe & Zhaoyang, 2016), caregiving behaviours (Canevello & Crocker, 2010), forgiveness (Pansera & La Guardia, 2012), and less defensive behaviours (Caprariello & Reis, 2011). It has also been shown to promote partner-focused sexual desire (Birnbaum, 2023; Birnbaum et al., 2016) and to facilitate sexual communication (Merwin & Rosen, 2019). Given these associations, perceived partner responsiveness has been proposed as a unifying principle for organizing factors related to relationship quality, such as responses to sexual rejection (Reis, 2012). Notably, perceived partner responsiveness has been shown to mediate the daily associations between perceived sexual rejection and sexual and relationship satisfaction (Kim et al., 2020). Specifically, when a partner's sexual rejection was perceived as more reassuring, it was seen as more responsive, which, in turn, was associated with greater sexual and relationship satisfaction. Conversely, when rejections were perceived as more hostile, they were associated with lower responsiveness and lower sexual and relationship satisfaction. The same mediation pathway for partner responses to sexual rejection should be examined in future research.

Further, in the context of sexual rejection, it may be especially important to examine the mediating role of perceived partner responsiveness to *one's sexual needs*. Vowels and colleagues' (2022, p. 3743) provide a participant-informed definition of sexual needs responsiveness: "being willing to communicate and listen to a partner's verbal and non-verbal cues of what they want and need sexually and accommodating these wants and needs while retaining the autonomy to make individual decisions, free from pressure, shame, or guilt". Perceived responsiveness to sexual needs has been linked to greater sexual and relationship satisfaction for community couples (Impett et al., 2019; Muise & Impett, 2015) and for anxiously attached partners, in particular (Raposo & Muise, 2021).

4.2.3.3 Attachment Style as a Moderator

The associations between responses to sexual rejection and sexual well-being and relationship satisfaction in SIAD might be influenced by couple members' attachment style. Attachment style refers to how individuals emotionally bond and interact with others, especially in close relationships (Ainsworth et al., 1978/2015). Within adult romantic relationships, individuals' attachment is commonly conceptualized using two dimensions (Fraley & Shaver, 2000; Griffin & Bartholomew, 1994; Roisman, 2009): (1) anxiety (i.e., the extent to which individuals experience emotional distress [high anxiety] versus emotional composure [low anxiety] in attachment-related situations) and (2) avoidance (i.e., the extent to which individuals defensively distance themselves [high avoidance] versus are comfortable embracing [low avoidance] cognitively, emotionally, and physically in attachment-related situations). Individuals who are low in both attachment anxiety and avoidance are considered to have secure attachment. Compared to

individuals with more secure attachment, higher avoidant and anxious attachment has been linked to lower relationship interdependence, commitment, trust, poorer sexual communication, sexual and relationship satisfaction, and higher levels of rejection sensitivity and sexual dysfunction (Goldsmith et al., 2016; Hassani et al., 2022; Simpson, 1990; Stefanou & McCabe, 2012).

Given that securely attached individuals employ more effective communication strategies and are less sensitive to rejection than those who are more anxiously and/or avoidantly attached, they may be more likely to accept more understanding responses due to greater self-compassion and, thus, are more likely to experience the benefits of understanding responses for their sexual well-being and relationship satisfaction (Homan, 2018). For partners who are more securely attached, after enacting a response to sexual rejection, it is possible that they will feel more comfortable having open discussions regarding their concerns and will be more likely to collaborate on finding a mutually satisfying solution than anxiously and/or avoidantly attached partners (Domingue & Mollen, 2009). Consequently, individuals with greater secure attachment may engage in more behaviours that promote their own and their partner's sexual and relationship outcomes than individuals high in anxious and/or insecure attachment (Birnbaum & Reis, 2019).

Compared to those with secure and higher avoidant attachment, individuals with greater attachment anxiety may be more likely to personalize and attempt to appease their partner following more resentful responses, actively seek to offer comfort and reassurance for insecure responses, and be more likely to comply with a partner's enticing responses out of a desire to please or maintain harmony in the relationship and a tendency

for low self-efficacy for sexual negotiations (Campbell & Marshall, 2011; Feeney et al., 1999; Li & Chan, 2012). Partners higher in attachment anxiety may respond to sexual rejection with insecure responses, due to significant emotional distress, or enticing responses aimed at restoring emotional closeness and validating their sense of desirability (Simpson & Rholes, 2017). Overall, the behaviours commonly displayed by individuals with high attachment anxiety (e.g., greater conflict sensitivity, insecurity, intimacy-seeking, affection, and support) may have varying implications for sexual and relationship well-being.

Individuals higher in avoidant attachment may be prone to withdrawing cognitively, emotionally and/or physically when confronted with intense emotions (e.g., anger, sadness) that characterize resentful and insecure responses (Collins et al., 2006; Li & Chan, 2012). In response to re-initiation attempts (i.e., enticing responses), given that individuals high in attachment avoidance often prioritize independence and control, they are likely to re-assert their boundaries and resist engaging in sexual activity until they feel emotionally prepared or comfortable (Simpson & Rholes, 2017). Individuals and partners high in avoidant attachment may experience the poorest outcomes, as they tend to be distressed by closeness and intimacy (Mark et al., 2018). In contrast, individuals high in anxious attachment still desire closeness and intimacy despite sometimes being preoccupied with their own needs (Mark et al., 2018). Indeed, avoidant attachment has been linked to greater sexual distress and been shown to account for more variance in decreased sexual and relationship satisfaction than anxious/ambivalent attachment (Mark et al., 2018; Muise et al., 2024).

4.3 Theoretical Implications

Although theoretical and clinical models underscore the importance of examining interpersonal factors associated with couples' coping in the context of desire difficulties and of conceptualizing these difficulties as a dyadic process, few studies have examined relational predictors of adjustment and fewer still include both couple members (Dewitte, 2014; Rosen & Bergeron, 2019). As a result, my dissertation provides valuable contributions. It lends support to theoretical conceptualizations of dyadic sexual desire, adds to the growing—primarily cross-sectional—literature examining the role of interpersonal factors in couples coping with SIAD, and encompasses the first studies of the associations of responses to sexual rejection in couples' sexual well-being and relationship satisfaction.

4.3.1 Contributions to Theoretical Conceptualizations of Dyadic Sexual Desire

The development of my dissertation was primarily grounded in two theoretical models, the DIADICS (Prekatsounaki et al., 2022) and IERM (Rosen & Bergeron, 2019) and provided important empirical evidence—and some of the first in couples coping with SIAD—in line with these theories. The DIADICS model highlighted that prior models of sexual desire (e.g., the incentive motivation model; Singer & Toates, 1987) predominantly approached desire from an individual perspective, failing to account for the interdependence of sexual desire in romantic relationships. Prekatsounaki and colleagues (2022) assert that the dynamic nature of the DIADICS model allows it to aptly explain the fluctuations in sexual desire inherent to long-term relationships. However, the second study in my dissertation is one of the first to employ daily and prospective analyses to examine the effect of dyadic interactions on couples' outcomes, and is the

first to do so in the context of desire difficulties. Thus, my research provides preliminary evidence for daily variability and long-term effects of interpersonal factors in couples coping with low desire. As proposed by the DIADICS model, my findings also reinforce that a couple member's contributions to dyadic interactions (e.g., responses to sexual rejection) and their partner's *perceptions* of those contributions have implications for both couple member's outcomes, and that these outcomes may vary among couple members.

While the DIADICS model is specific to dyadic sexual desire, the IERM addresses women's sexual dysfunctions more broadly. The IERM was primarily conceptualized based on findings in GPPPD research, as this dysfunction has been the most extensively studied from a dyadic perspective (Rosen & Bergeron, 2019). Rosen and Bergeron (2019) noted that research in SIAD aligned with where research in GPPPD had been twenty years ago, primarily focused on biomedical etiology and treatments, cross-sectional, atheoretical, with limited interpersonal examinations that focused on broad factors (e.g., relationship satisfaction). Thus, the authors indicated that although the nascent research in sexual desire challenges pointed to a potential role of interpersonal factors in couples' well-being, further dyadic research was required to establish these associations. Consequently, my dissertation provides empirical evidence to support use of the IERM in conceptualizing SIAD and contributes to the expanding body of literature that substantiates the importance of dyadically examining interpersonal factors in couples coping with SIAD (e.g., Dubé et al., 2019; Hogue et al., 2019; Raposo et al., 2021; Raposo et al., 2020; Rosen, Corsini-Munt, et al., 2020).

The results of my dissertation may also contribute to other relevant models of sexual desire (e.g., Birnbaum, 2018; Dewitte, 2014; Mark & Lasslo, 2018). For example,

the *Relationship Development Model* (Birnbaum, 2018) postulates that sexual desire fluctuates over the course of long-term relationships, and that these fluctuations in desire are influenced by how couples cope with challenges. Regarding couples coping with desire discrepancies, Birnbaum (2018) posits that how couples navigate these differences in desire can shape their emotions and motivations, thereby impacting their perceptions of their relationship and the long-term sustainability of desire. My results lend cross-sectional, daily, and prospective support to the theorized effect that how couples navigate desire difficulties (i.e., responses to sexual rejection) plays a role in their relationship satisfaction and sexual well-being, but I did not find any significant prospective associations for sexual desire. Thus, it may be that in the context of chronic, distressing low desire, how couples navigate challenges have more significant implications closer in time to when they occur rather than over the long-term, given that they have often been coping with SIAD for an extended period of time. Indeed, individuals with SIAD in my samples reported experiencing symptoms for 7 years, on average.

4.3.2 First Examinations of Responses to Sexual Rejection

To the best of my knowledge, my dissertation comprises the first two studies of the associations between responses to sexual rejection and couples' sexual well-being and relationship satisfaction. The limited prior work in responses to sexual rejection has been characterized by (1) cross-sectional designs, (2) a focus on rejection by a stranger (e.g., Struckman-Johnson & Struckman-Johnson, 1991) or a casual sex partner (e.g., Wright et al., 2010), and (3) a lack of examination of facets of sexual or relationship well-being. In contrast, my studies (1) employed cross-sectional, daily, and prospective measurements,

(2) utilized a dyadic approach involving committed romantic couples, including SIAD and community samples, and (3) investigated both the relevant frequencies of distinct responses and their associations with sexual satisfaction, dyadic sexual desire, sexual frequency, sexual distress, and relationship satisfaction. Moreover, my inclusion of a community sample in Study 1 offers greater generalizability of my preliminary findings, compared to those obtained from a clinical sample only. Thus, my research offers significant theoretical contributions by providing the first insights into the implications of responses to sexual rejection for the sexual and relationship outcomes of couples coping with SIAD and community couples. Further, my results support the inclusion of partners in the conceptualization of sexual desire challenges by underscoring the role of their responses to sexual rejection in both couple members' sexual and relationship outcomes. Additionally, this research offers practical implications (see Section 4.4) for interventions targeted at couples coping with frequent sexual rejection, making it a valuable reference for future studies examining interpersonal factors in SIAD and desire discrepancies.

Across my studies, greater reported and perceived understanding responses, and less resentful and insecure responses, were generally associated with greater sexual well-being and relationship satisfaction for both couple members. These results were consistent with the hypotheses I had developed based on prior research, and theoretical and clinical models (e.g., Frost & Donovan, 2019; Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; Rosen, Corsini-Munt, et al., 2020). Enticing responses were assessed exploratorily in both studies. In Study 2, I also examined non-physical sexual coercion as a covariate in an attempt to elucidate the associations of enticing responses with couples' outcomes. Yet, the results of enticing responses were mixed in both studies. Thus, while

all of my findings would benefit from replication given this research is in its nascency, the role of enticing responses for couples' sexual and relationship well-being remains the least clear.

4.3.3 Implications for Interpersonal Dynamics in Couples Coping with SIAD

Generally, I found support for my hypotheses across Studies 1 and 2 (see Chapters 2 and 3, respectively). However, some notable exceptions emerged regarding the associations of understanding and insecure responses, along with interesting exploratory findings for enticing responses. In the following sections, I explore how these unexpected results may impact our comprehension of the interpersonal dynamics of couples coping with SIAD.

4.3.2.1 Understanding and Insecure Responses

Greater understanding responses and lower insecure responses were generally associated with greater sexual well-being and relationship satisfaction across the cross-sectional, daily, and prospective analyses. Unexpectedly, however, on days when participants perceived and reported greater understanding responses, they also reported higher sexual distress. Also contradictory to my hypotheses, when individuals with SIAD perceived greater insecure responses at baseline, their partners reported increased sexual satisfaction six months later. To begin, the small effect sizes for the unexpected understanding responses findings and a wide range in the confidence interval of the contradictory insecure responses result warrant caution when interpreting these findings. That said, if these findings are replicated in future research, theories regarding the interpersonal dynamics of coping with sexual desire challenges may need to be adapted to account for the possibility that well-intentioned responses (e.g., understanding) to sexual

difficulties (e.g., sexual rejection) may exacerbate negative emotions, rather than alleviate them, and lead to greater sexual distress. Whereas it may be that less helpful responses (e.g., insecure) prompt changes in relationship dynamics which promote sexual satisfaction.

In adapting current theories, or developing a new theory, of how couples cope with sexual desire challenges, researchers may reflect on theories of behavioural conditioning, cognitive dissonance, and communication. Theories of behavioural conditioning indicate that behaviours are learned or modified through consequences (Kwasnicka et al., 2016). For example, understanding responses might inadvertently reinforce negative feelings rather than mitigating them due to reinforcement of avoidance behaviours, while insecure responses may promote relationship maintenance behaviours. Cognitive Dissonance Theory (Harmon-Jones & Mills, 2019) suggests that individuals experience distress when holding two conflicting cognitions which motivates changes. It is possible that understanding responses elicit distress due to conflict resulting from the affirming response and one's own negative feelings about the rejection. Following insecure responses, individuals with SIAD may change their behaviours to reduce the dissonance between the results of their actions and their intentions or their self-image as a supportive and caring partner. Finally, theories regarding discrepancies in communication (e.g., Discrepant Verbal–Nonverbal Profile Theory; Grebelsky-Lichtman, 2021) posit that interpretations of verbal and non-verbal cues may differentially contribute to the recipient's emotional state, which may be especially relevant for contextualizing the distress associated with understanding responses. Moreover, given that the unexpected associations for understanding responses were only found at the daily level, and those of

the insecure responses were prospective, updated theories may need to specify between short-term and long-term sexual and relationship outcomes of interpersonal dynamics.

Overall, more nuanced theories regarding the interpersonal dynamics of couples coping with low sexual desire are necessary to accommodate these unexpected findings. These theories might encompass how outcomes may be linked to the consequences, associated cognitions, and interpretations of behaviours, compared to the objective behaviours. Further research should examine these theories to replicate the findings of my dissertation.

4.3.2.2 Enticing Responses

The results for enticing responses were mixed across both of my dissertation studies. One of these results in particular, poses an important contribution to the desire literature. Research in sexual desire has repeatedly found that feeling desirable is associated with greater sexual well-being (e.g., sexual desire, sexual satisfaction; Amos & McCabe, 2017; Mark et al., 2014). Yet, my results suggest that this association may be more nuanced for women and gender diverse individuals with SIAD. Specifically, in the prospective analyses, I found that—before and after controlling for non-physical sexual coercion—when individuals with SIAD perceived greater enticing responses at baseline, they reported lower sexual satisfaction six months later. However, after controlling for non-physical sexual coercion, when partners reported greater enticing responses at baseline, individuals with SIAD reported greater sexual satisfaction six months later.

As described in Section 3.5.3, a possible reason for these results is that individuals with SIAD who perceived more enticing responses at baseline may be more likely to misinterpret other responses to sexual rejection (e.g., understanding) as their partner's

attempts to re-initiate sexual activity. This interpretation is further bolstered by the Study 1 finding that individuals with SIAD perceived fewer understanding responses than partners reported. Qualitatively, women with low desire describe avoiding any situations that increase the likelihood that they will have to reject a partner (e.g., non-sexual physical contact, romantic experiences; Frost & Donovan, 2019; Moor et al., 2021). However, it is possible that their partners may be seeking alternative forms of intimacy with these behaviours. Thus, for individuals with SIAD, my findings indicate that only intentional (i.e., reported by their partners), non-coercive enticing responses are associated with greater sexual satisfaction. These results also point to the potential value of integrating facets of Attribution Theory—such as the tendency of individuals to attribute causes to events or behaviours based on their own preconceived notions, beliefs, or expectations, rather than on objective reality (Thompson & Snyder, 1986)—when developing new theoretical assumptions about the consequences of responses to sexual rejection.

In sum, my research offered the first evidence of the role of responses to sexual rejection in the sexual well-being and relationship satisfaction of couples coping with SIAD and community couples. My findings indicated that responses to sexual rejection should be included as an interpersonal factor in the conceptualization of sexual and relationship outcomes related to desire difficulties. Notably, my results suggest that in the context of SIAD, although resentful responses are stable in their negative associations with sexual and relationship well-being, understanding responses are not always helpful and insecure responses are not always unhelpful. Thus, my research highlights the need for updated theories that accurately reflect the nuanced outcomes of the interpersonal

dynamics of couples coping with SIAD.

4.4 Clinical Implications

Desire difficulties are often cited as the primary reasons couples seek therapy (Emond et al., 2024; Péloquin et al., 2019) and, within couples navigating these challenges, sexual rejection has been described as causing significant distress for both couple members (Frost & Donovan, 2019). Therefore, my dissertation research, focused on the role of partner responses to sexual rejection in sexual and relationship outcomes, is poised to contribute a novel target for therapeutic interventions for navigating desire difficulties in clinical and community samples. However, it is essential to note that while the findings of my studies were supported using multiple methods, further replication and investigation of potential mechanisms are necessary to offer conclusive recommendations. Nonetheless, in the following sections, I will suggest potential clinical implications of my dissertation research. Further, given that clinical and theoretical models, and qualitative research all underscore the importance of conceptualizing and treating desire difficulties *dyadically* (Dewitte, 2014; Frost & Donovan, 2019; Gambescia & Weeks, 2019; Girard & Woolley, 2017; Prekatsounaki et al., 2022; Rosen & Bergeron, 2019; van Anders et al., 2022), and the main variable in my research is *partner* responses to sexual rejection, I will focus on how my findings may be implemented in couple therapies.

4.4.1 Cognitive-Behavioural Interventions

Cognitive-behavioural couple therapy (CBCT) provides strategies for working with both couple and individual distress within the context of a relationship (Worrell, 2015). CBCT expands upon traditional cognitive-behavioural therapy approaches to

address cognitions, behaviours, and emotions, and acknowledge the relevance of the environment and broader context on relationships (Worrell, 2015). Therefore, the factors addressed by CBCT correspond to the areas frequently reported as adversely affected by sexual rejection among couples dealing with distressing low desire (Frost & Donovan, 2019), suggesting it may be a promising avenue for intervention. Indeed, earlier studies demonstrated the efficacy of group-based CBCT for HSDD, women reported greater sexual (e.g., sexual compatibility, esteem, desire, fantasy, assertiveness, and satisfaction) and relationship outcomes compared to pre-treatment, a waitlist control group, and compared to a women-only group (Hurlbert et al., 1993; Trudel et al., 2001). The first study examining the feasibility of a CBCT intervention for women with SIAD and their partners that was not group-based led to improvements in dyadic sexual desire (for women with SIAD only) and sexual distress scores from pre-treatment to post-treatment, and pre-treatment to 6-month follow-up (Bouchard et al., 2024).

CBCT interventions targeting responses to sexual rejection may include psychoeducation, discussions regarding couple's own experiences, and implementing behavioural experiments to practice more adaptive ways of responding. Therapists can help identify less helpful responses to sexual rejection (e.g., resentful) and foster skills for noticing and challenging unhelpful thinking styles that may contribute to, or result from, these responses. The unexpected findings of the understanding and insecure responses (see Section 4.3.3), suggest that it is imperative that the therapist attends to the nuanced implications of responses to sexual rejection. This many include discussing the interpretations and avoidance that may result from understanding responses and collaboratively exploring potential benefits of communicating one's insecurities to a

partner.

Taken together, a CBCT intervention targeting responses to sexual rejection, which includes psychoeducation, noticing and challenging unhelpful thinking styles, and enhancing collaborative sexual communication, may increase couples' feelings of intimacy and improve partner perceptions (e.g., as more responsive), thereby leading to improvements for both couple members.

4.4.2 Emotion-Focused Interventions

Emotionally focused couple therapy (EFCT) centers on emotions and attachment bonds between partners, grounded in the understanding that relationship distress often stems from emotional disconnection and unmet attachment needs (Johnson et al., 2008). EFCT aims to alter couples' emotion regulation and responses, fostering emotional responsiveness and nurturing bonding interactions (Johnson et al., 2008). Thus, EFCT's primary treatment focus (i.e., emotion regulation) aligns with how I theoretically conceptualized associations between responses to sexual rejection and couples' outcomes (i.e., in line with the IERM; Rosen & Bergeron, 2019). EFCT's perspective that partners' interactional patterns stem from their attachment bond may serve as a useful organizing principle to enhance couples' understanding of partners' responses to sexual rejection, and the subsequent reactions evoked from their partner (i.e., individuals with low desire). Further, in an early study of couples coping with HSDD, EFCT resulted in improvements in women's sexual function (e.g., sexual desire, frequency, avoidance), partners' sexual distress, and couples' dyadic adjustment compared to both a control group and pre-treatment scores (Macphee et al., 1995). These improvements included reduced sexual avoidance, which might be further enhanced by examining the role of responses to

sexual rejection.

EFCT is approached in three stages: (1) deescalating the negative cycle through identification of underlying emotions and attachment needs, (2) helping couples express their own, and accept each other's, attachment needs, (3) integration and consolidation of new strategies (Johnson et al., 2008). Since responses to sexual rejection occur frequently and have been described as an emotionally-charged interpersonal process (Frost & Donovan, 2019), it may be most effective to reflect on them in the first stage as a way to explore the patterns of interaction and understand underlying needs. During the second stage, the therapist might assist couples in reshaping their interactions concerning sexual rejection. For instance, they can encourage partners to directly request comfort, connection, and safety instead of resorting to insecure responses (Girard & Woolley, 2017).

Through EFCT, couples may directly address their sexual rejection dynamics while concurrently exploring deeply rooted cycles of interpersonal interactions that have broader implications for their relationship.

4.5 Conclusions

While prior research has primarily focused on determining the implications of sexual rejection behaviours for couples' sexual and relationship outcomes (e.g., Dobson et al., 2020; Kim et al., 2018; Kim et al., 2020), my dissertation constitutes the first studies to demonstrate that how partners *respond* to sexual rejection matters too, particularly in a clinical context where rejection occurs more frequently. Across two studies comprising cross-sectional, daily, and prospective analyses, I provided the first empirical evidence that four distinct types of partner responses to sexual rejection are

associated with both couple members' sexual and relationship well-being in SIAD and community samples. My findings support and expand upon clinical and theoretical models of dyadic sexual desire and the role of interpersonal factors for couples coping with desire difficulties. Given the novelty of this research, further studies are necessary to elucidate these associations. Nonetheless, my research underscores the importance of including partners in the conceptualization and treatment of SIAD and suggests that responses to sexual rejection may be a valuable target for interventions designed to improve the sexual well-being and relationship satisfaction of couples coping with frequent sexual rejection (e.g., SIAD, desire discrepancies).

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APPENDIX A. Supplemental Materials for Study 1

Supplemental Table A.1

Correlations within- and between-individuals for predictor and outcome variables in the SIAD sample

	1	2	3	4	5	6	7	8	9
1. Understanding responses	**.16***	-.64**	0.49**	-.19**	.11	.04	-.02	.39**	-.06
2. Resentful responses	-.54**	**.37****	.66**	.32**	-.12	-.13*	.09	-.43**	.09
3. Insecure responses	-.39**	.61**	**.35****	.30**	-.12	-.10	.21**	-.32**	.03
4. Enticing responses	.01	.29**	.15*	**.36****	-.02	.00	.10	-.17**	.17**
5. Sexual satisfaction	.21**	-.23**	-.36**	.04	**.25****	.28**	-.18**	.36**	.12
6. Sexual desire	-.01	.19**	.23**	.38**	-.05	**.04**	-.05	.15*	.25**
7. Sexual distress	-.26**	.36**	.58**	.06	-.49**	.08	**.16***	-.09	-.06
8. Relationship satisfaction	.35**	-.36**	-.54**	0.04	.47**	-.02	-.38**	**.36****	.10
9. Sexual frequency	.00	.11	.01	.16*	.09	.25**	-.07	.10	**.73****

Note: Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are on the diagonal, in bold. Sexual frequency is a couple-level variable, however, the value presented on the diagonal represents the correlation between couple members' reports of sexual frequency.
Rejection responses are perceived for individuals with SIAD and reported by partners.
** Correlation significant at $p < 0.01$.
* Correlation significant at $p < 0.05$.

Supplemental Table A.2

Correlations within- and between-individuals for predictor and outcome variables in the community sample

	1	2	3	4	5	6	7	8	9
1. Understanding responses	**.60****	-.50**	-.37**	.00	.30**	.15	-.18	.47**	.02
2. Resentful responses	-.43**	**.55****	.66**	.09	-.26**	-.25*	.27**	-.42**	-.11
3. Insecure responses	-.36**	.71**	**.50****	.10	-.34**	-.27**	.27**	-.42**	-.17
4. Enticing responses	-.15	.32**	.25**	**.43****	-.12	.06	.08	-.13	.05
5. Sexual satisfaction	.28**	-.58**	-.54**	-.07	**.46****	.55**	-.49**	.56**	.42**
6. Sexual desire	.00	.28**	.09	.36**	.15	**.09**	-.39**	.47**	.61**
7. Sexual distress	-.23*	.47**	.57**	.20*	.57**	-.08	**.38****	-.15	-.32**
8. Relationship satisfaction	.37**	-.53**	-.60**	-.20*	.65**	.06	-.46**	**.57****	.34**
9. Sexual frequency	.02	-.10	-.20*	.21*	.37**	.47**	-.22*	.22*	**.78****

Note: Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are on the diagonal, in bold. Sexual frequency is a couple-level variable, however, the value presented on the diagonal represents the correlation between couple members' reports of sexual frequency.
Rejection responses are perceived for individuals with SIAD and reported by partners.
** Correlation significant at $p < 0.01$.
* Correlation significant at $p < 0.05$.

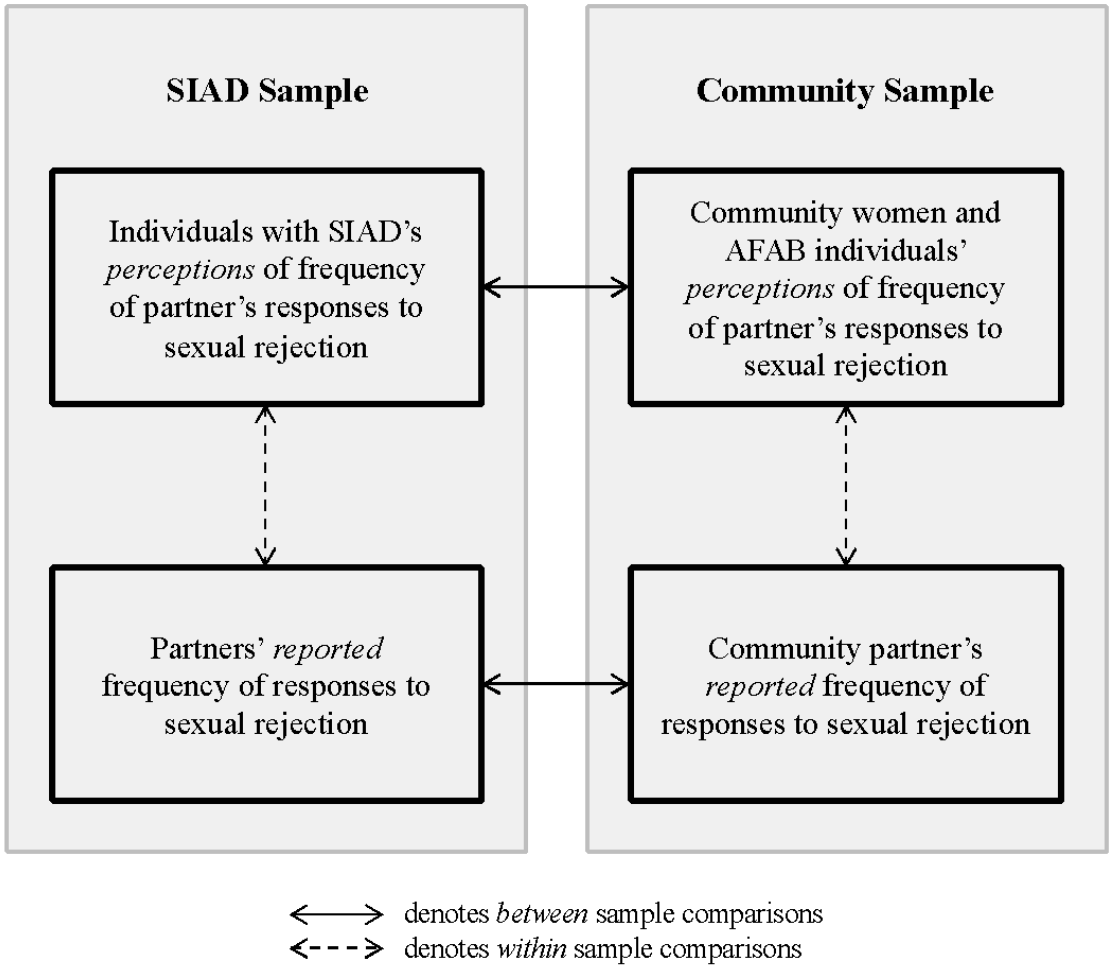
Supplemental Table A.3

BIC values for the constrained and unconstrained models of each of the outcome variables

Outcome variable	Constrained model (BIC)	Unconstrained model (BIC)
Sexual satisfaction	10671	10741
Sexual desire	10658	10668
Sexual distress	10175	10254
Sexual frequency	7137	7174
Relationship satisfaction	9878	9961

Supplemental Figure A.1

Diagram of comparisons examined in the first aim of Study 1



APPENDIX B. Supplemental Materials for Transition Section

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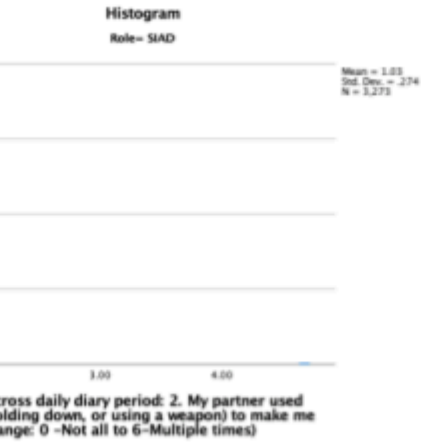
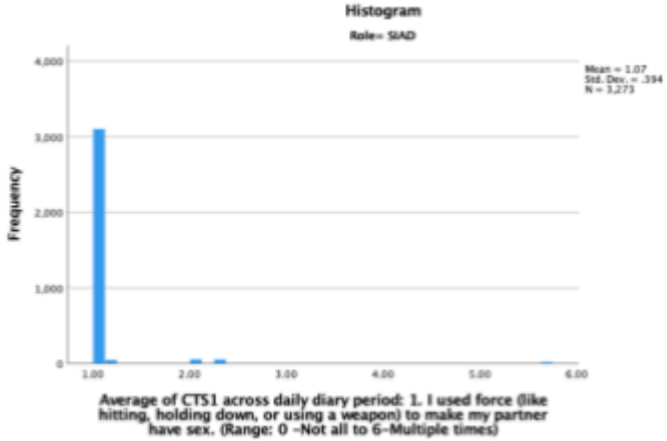
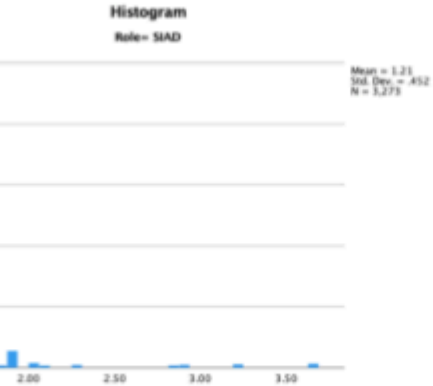
vidual with SIAD's (left) and partners' (right) reported physical al coercion at baseline



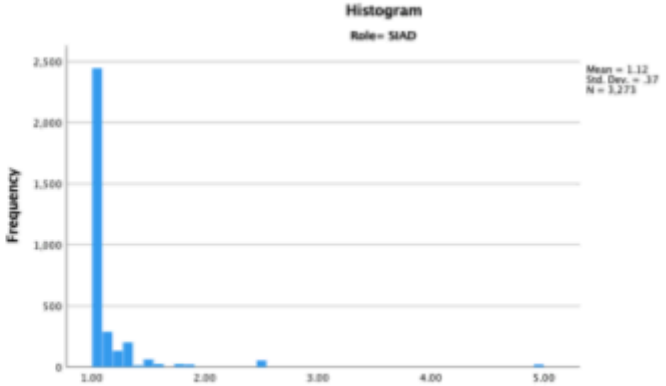
cross daily diary period: 2. My partner used olding down, or using a weapon) to make me ange: 0 -Not all to 6-Multiple times)



Average of CTS1 across daily diary period: 1. I used force (like hitting, holding down, or using a weapon) to make my partner have sex. (Range: 0 -Not all to 6-Multiple times)



oss daily diary period: 4. My partner insisted not want to (but did not use physical force). 0 -Not all to 6-Multiple times)



Average of CTS3 across daily diary period: 3. I insisted on sex when my partner did not want to (but did not use physical force). (Range: 0 -Not all to 6-Multiple times)

APPENDIX C. Supplemental Materials for Study 2

Supplemental Table C.1

Correlations added to each prospective model based on Model Fit Indices

Model	Correlations Included Based on Model Fit Indices
(1) Understanding Responses	● Both couple members' variables of the same outcome six months later with all other outcomes at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later with their own and one another's baseline partner-focused sexual desire, sexual distress, and relationship satisfaction) ● Both couple members' relationship satisfaction at baseline with their own and one another's outcome variables at baseline ● Individuals with SIAD's baseline relationship satisfaction with partners' baseline relationship satisfaction
(2) Resentful Responses	● Both couple members' variables of the same outcome six months later with all other outcomes at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later with their own and one another's baseline partner-focused sexual desire, sexual distress, and relationship satisfaction) ● Both couple members' variables of the same outcome six months later with all other outcome variables six months later ● Both couple members' relationship satisfaction at baseline with their own and one another's outcome variables at baseline ● Individuals with SIAD's outcome variables at baseline with partners' outcome variables at baseline ● Partners' sexual distress at baseline with their own sexual satisfaction at baseline

(3) Insecure Responses	● Both couple members' variables of the same outcome six months later with all other outcomes at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later with their own and one another's baseline partner-focused sexual desire, sexual distress, and relationship satisfaction) ● Both couple members' relationship satisfaction at baseline with their own and one another's outcome variables at baseline ● Individuals with SIAD's outcome variables at baseline with partners' outcome variables at baseline ● Partners' sexual distress at baseline with their own sexual satisfaction at baseline ● Individuals with SIAD's baseline sexual satisfaction with their own baseline sexual desire and sexual distress ● Individuals with SIAD's baseline sexual desire with their own baseline sexual distress
(4) Enticing Responses	● Both couple members' variables of the same outcome six months later with all other outcomes at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later with their own and one another's baseline partner-focused sexual desire, sexual distress, and relationship satisfaction) ● Both couple members' variables of the same outcome six months later with all other outcome variables six months later ● Both couple members' relationship satisfaction at baseline with their own and one another's outcome variables at baseline ● Each of individuals with SIAD's outcomes variable at baseline with partners' respective outcome variable at baseline

	● Partners' baseline sexual distress with their own baseline sexual satisfaction ● Individuals with SIAD's baseline sexual desire with their own baseline sexual satisfaction
(5) Enticing Responses with Covariate Non-physical Sexual Coercion	● Both couple members' variables of the same outcome six months later with all other outcomes at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later with their own and one another's baseline partner-focused sexual desire, sexual distress, and relationship satisfaction) ● Both couple members' variables of the same outcome six months later with all other outcome variables six months later ● Both couple members' relationship satisfaction at baseline with their own and one another's outcome variables at baseline ● Each of individuals with SIAD's outcomes variable at baseline with partners' respective outcome variable at baseline ● Partners' baseline sexual distress with their own baseline sexual satisfaction

Note: Base regressions and correlations included in each of the 5 prospective models prior to modifications based on the Model Fit Indices included: regressions of outcome variables six months later and at baseline on predictor variables, and regressions between outcome variables at six months and the same variables at baseline (e.g., individuals with SIAD's and partners' sexual satisfaction six months later regressed on their own and one another's sexual satisfaction at baseline). See Supplemental Figure C.2 for a visual representation of the base regressions and correlations.
Correlations are listed in the order they were added to the base model.
Model 5 also included regressions of both couple members' outcome variables at six months on both couple members' non-physical sexual coercion at baseline to account for the covariate.

Supplemental Table C.2

Correlations within and between couple members of individuals' average predictor and outcome variables across the daily diary period (N = 200 couples)

	1	2	3	4	5	6	7	8	9
1. Understanding responses	**-0.17***	-0.01	0.05	0.33**	-0.10	0.01	0.20**	0.11	0.32**
2. Resentful responses	0.11	**0.29***	0.74**	0.36**	0.23**	0.23**	0.04	-0.11	-0.27**
3. Insecure responses	0.34**	0.64**	**0.19****	0.43**	0.20**	0.23**	0.07	-0.18**	-0.20**
4. Enticing responses	0.30**	0.67**	0.54**	**0.27****	0.26**	0.18*	0.15*	-0.01	0.05
5. Sexual coercion	0.13	0.15*	0.21**	0.31**	**0.27****	-0.02	0.04	0.09	-0.17*
6. Sexual satisfaction	0.08	0.42**	0.45**	0.30**	0.06	**0.24****	0.05	-0.28**	-0.01
7. Dyadic sexual desire	0.22**	0.03	0.07	0.15*	0.03	0.11	**0.15***	0.42**	0.33**
8. Sexual distress	0.13	-0.12	-0.20**	-0.06	0.01	-0.40**	.19**	**0.49****	0.51**
9. Relationship satisfaction	0.13	-0.15*	-0.28**	-0.05	-0.07	-0.33**	.30**	.64**	**0.61****

Note: Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are bolded on the diagonal.
Rejection responses represent behaviours perceived by individuals with SIAD and reported by partners. Sexual coercion (non-physical) represents behaviours received by individuals with SIAD and enacted by partners.
** $p < .01$; * $p < .05$.

Supplemental Table C.3

Correlations within and between couple members of individuals' daily reports of predictor, covariate, and outcome variables (n = 3568 days)

	1	2	3	4	5	6	7	8	9
1. Understanding responses	**-0.12****	0.01	0.11**	0.34**	-0.10**	0.04*	0.09**	0.05**	0.20**
2. Resentful responses	0.11**	**0.11****	0.65**	0.27**	0.17**	0.19**	0.00	-0.12**	-0.24**
3. Insecure responses	0.30**	0.51**	**0.04***	0.35**	0.14**	0.22**	-0.03	-0.15**	-0.21**
4. Enticing responses	0.31**	0.48**	0.43**	**0.18****	0.14**	0.14**	0.07**	-0.03*	0.01
5. Sexual coercion	0.00	0.11**	0.09**	0.20**	**0.34****	0.00	-0.02	0.13**	-0.14**
6. Sexual satisfaction	0.01	0.27**	0.31**	0.22**	0.08**	**0.21****	0.02	-0.25**	0.03
7. Dyadic sexual desire	0.22**	0.04*	0.07**	0.18**	-0.01	0.10**	**0.14****	0.35**	0.26**
8. Sexual distress	0.10**	-0.05**	-0.12**	0.01	0.07**	-0.36**	0.22**	**0.36****	0.43**
9. Relationship satisfaction	0.14**	-0.09**	-0.17**	0.01	-0.05**	-0.31**	0.28**	0.58**	**0.54****

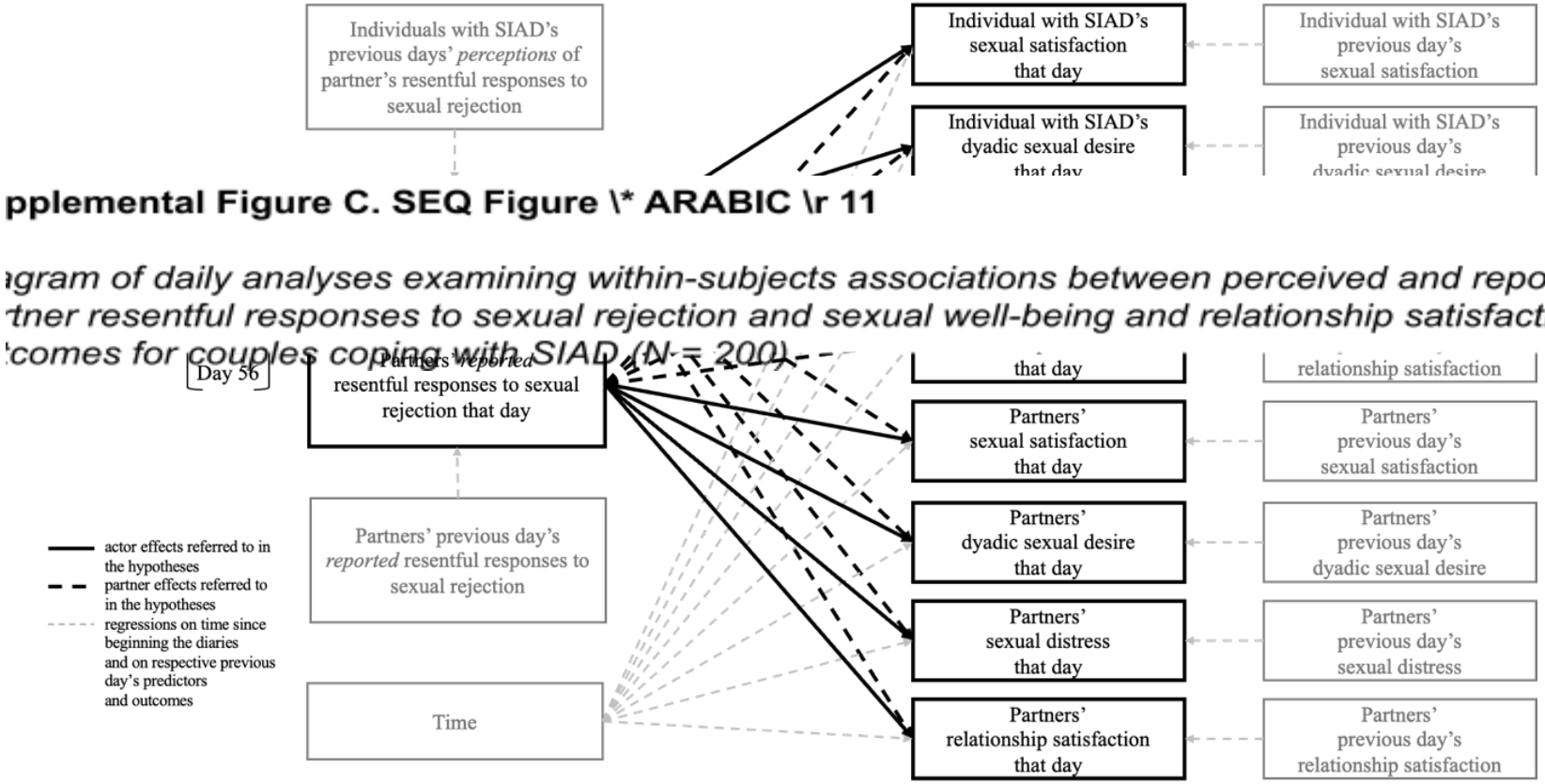
Note: Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are bolded on the diagonal.
Rejection responses represent behaviours perceived by individuals with SIAD and reported by partners. Sexual coercion (non-physical) represents behaviours received by individuals with SIAD and enacted by partners.
** $p < .01$; * $p < .05$.

Supplemental Table C.4

Correlations within and between couple members' longitudinal predictor (measured at baseline) and outcome (measured at 6 months) variables (N = 170)

	1	2	3	4	5	6	7	8	9
1. Understanding responses	**0.35****	-0.64**	-0.50**	-0.20*	-0.16*	0.18*	-0.06	-0.07	0.37**
2. Resentful responses	-0.49**	**0.51****	0.61**	0.31**	0.25*	-0.19*	-0.05	0.04	-0.43**
3. Insecure responses	-0.31**	0.60**	**0.55****	0.34**	0.21*	-0.14	-0.11	0.18*	-0.27**
4. Enticing responses	0.02	0.37**	0.25**	**0.54***	0.39**	-0.06	0.04	0.11	-0.18*
5. Sexual coercion	-0.18*	0.26**	0.19*	0.33**	**0.21****	-0.11	-0.11	-0.11	-0.14
6. Sexual satisfaction	0.20*	-0.20*	-0.35**	0.07	-0.01	**0.45****	0.27**	-0.23**	0.50**
7. Dyadic sexual desire	0.12	0.08	0.16*	0.29**	0.17*	0.20**	**0.17***	0.02	0.02
8. Sexual distress	-0.04	0.21**	0.43**	0.01	0.04	-0.51**	0.03	**0.24****	-0.09
9. Relationship satisfaction	0.35**	-0.37**	-0.41**	-0.07	-0.15*	0.51**	0.09	-0.39**	**0.58****

Note: Correlations within individuals with SIAD are above the diagonal; correlations within partners are below the diagonal. Correlations between individuals with SIAD and partners' predictors and outcomes are bolded on the diagonal.
Rejection responses represent behaviours perceived by individuals with SIAD and reported by partners. Sexual coercion (non-physical) represents behaviours received by individuals with SIAD and enacted by partners.
** $p < .01$; * $p < .05$.



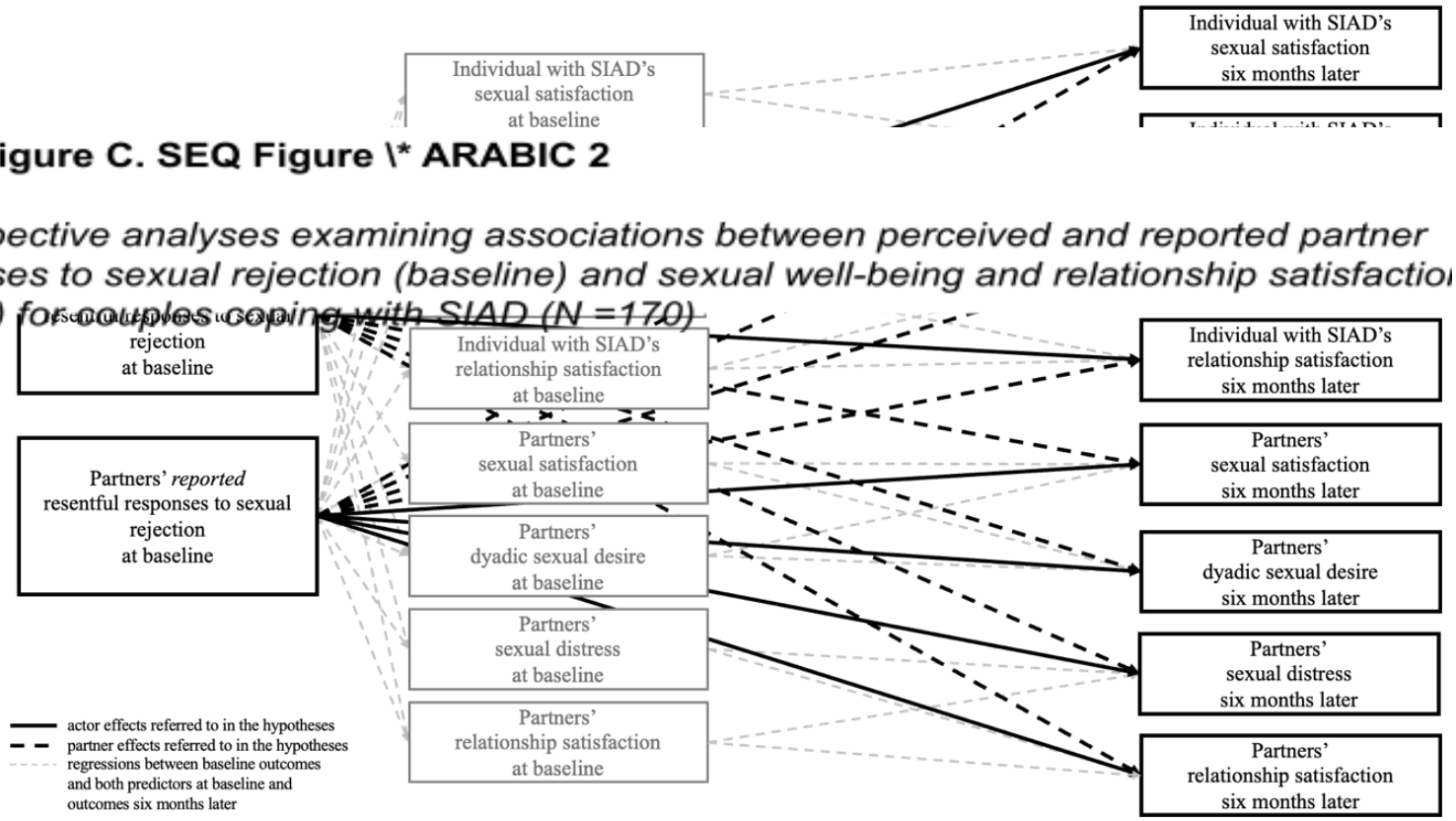
pplemental Figure C. SEQ Figure * ARABIC \r 11

agram of daily analyses examining within-subjects associations between perceived and reported rtner resentful responses to sexual rejection and sexual well-being and relationship satisfaction comes for couples coping with SIAD (N = 200)

ote. This is an example diagram of the daily analyses conducted, displaying resentful responses. One of these models was examined for each of the ur responses to sexual rejection. Each model included correlations between both predictor variables (i.e., perceived and reported responses to sexual jection) and between all outcome variables; this level of detail was omitted for visual clarity.

pplemental Figure C. SEQ Figure * ARABIC 2

agram of prospective analyses examining associations between perceived and reported partner entful responses to sexual rejection (baseline) and sexual well-being and relationship satisfactio months later) for couples coping with SIAD (N =170)



ote. This is an example diagram of the prospective analyses conducted, displaying resentful responses. One of these models was examined for each o e four responses to sexual rejection. Correlations within and between outcomes at baseline and six months later vary within each model and were cluded based on the Model Modification Indices reported by Mplus; this level of detail was omitted for visual clarity.

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