LAY BELIEFS ABOUT SEXUAL SATISFACTION AND ATTRIBUTIONS FOR LOW DESIRE IN RELATIONSHIPS

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Abstract

Sexuality plays a key role in shaping overall relationship happiness and stability, yet sexual desire tends to decline over time in relationships, which is a key reason for relationship dissolution. Theories of implicit (lay) beliefs about the maintenance of sexual satisfaction (i.e., sexual growth and sexual destiny beliefs) provide a valuable framework for understanding how people cope with sexual challenges, such as low desire, in a relationship. My dissertation extended theories of lay sexual beliefs by exploring associations with sexual and relationship well-being among people responding to both hypothetical and lived experiences of clinical low desire. I also tested novel mechanisms for these effects—the attributions that people make for the cause of their low desire. In Study 1, a study of individuals in relationships, sexual beliefs were associated with well-being, which was, in part, accounted for by the attributions people assigned to hypothetical low desire and arousal. In Study 2, sexual beliefs were differentially associated with relationship and sexual well-being in couples coping with clinically low desire. I found similar results in Study 3, a daily diary study of couples coping with clinically low desire, which were again, partially explained by daily attributions. Lastly, in Study 4, an experimental study, people oriented toward sexual growth (versus destiny) reported higher control attributions, which in turn was associated with people finding the situation less challenging. My dissertation demonstrated the critical and nuanced role of attributions in understanding how sexual beliefs are associated with relationship and sexual well-being in response to low desire.

Keywords: implicit sexual beliefs, sexual attributions, sexual desire, satisfaction well-being, relationship well-being

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CHAPTER ONE: General Introduction

Maintaining a satisfying romantic relationship is among the strongest predictors of overall health and well-being (Holt-Lunstad et al., 2008), and a fulfilling sexual relationship is a critical component of relationship satisfaction (Regan, 2000). At the same time, maintaining a satisfying sex life is challenging. Desire tends to be high in the early stages of relationships when partners get to know each other and share new experiences (Baumeister & Bratslavsky, 1999); however, desire often declines over time in a relationship (McNulty et al., 2016). In fact, 39% of women report low desire (Rosen et al., 2009; in line with other studies suggesting about one third of women; Laumann et al., 2005), and 8% to 23% of women are estimated to experience clinically low interest/arousal (i.e., Sexual Interest and Arousal Disorder/SIAD; West et al., 2008; Witting et al., 2008), which involves sustained low desire with accompanying distress. SIAD is the most common sexual issue reported by women and a key reason why couples seek therapy (Péloquin et al., 2019; West et al., 2008; for a review on women's sexual desire, see O'Sullivan & Vannier, 2016). More broadly, low desire is associated with relationship dissatisfaction and a higher likelihood of breaking up (Brezsnyak & Whisman, 2004; Regan, 2000), and sexual disconnection is a key reason why couples argue and ultimately end their relationship (Risch et al., 2003; Yabiku & Gager, 2009).

In my dissertation, I draw upon a key theoretical framework (i.e., *theories of implicit sexual beliefs*) that explains why people persist in or end their relationships due to sexual challenges, to investigate novel questions about how couples can sustain their intimate connections, even in the face of low desire (see Dweck et al., 1995; Maxwell et al., 2017). In my dissertation, I extend theory to test the role of people's implicit sexual beliefs—whether they

believe the maintenance of sexual satisfaction in relationships is due to ongoing work and effort (*sexual growth beliefs*) or natural partner compatibility that is evident right from the start (*sexual destiny beliefs*)—in their responses to situations of low desire (i.e., how challenging this situation would be, how motivated people would be to do something to resolve it, the likelihood of considering breaking up because of it), sexual well-being (i.e., sexual satisfaction, desire, distress), relationship well-being (i.e., relationship satisfaction, commitment, conflict), and personal well-being (i.e., anxiety, depression) in the face of low sexual desire. I also test novel mechanisms for these associations: the causal attributions (i.e., ascribed reasons) people make for low sexual desire in their relationship. Across four studies that combine the use of correlational, dyadic, longitudinal, and experimental methods, I test my predicted model in samples of people in romantic relationships who respond to hypothetical (or imagined) situations of low sexual desire, and clinical samples of couples actually coping with low sexual desire.

1 Low Sexual Desire in Romantic Relationships

Women's clinically low sexual desire is associated with lower sexual well-being for both partners (i.e., higher distress and lower sexual satisfaction; Rosen et al., 2019; see also Stephenson & Meston, 2010). Low desire can also present issues for couples' relationships in general, including lower satisfaction with a partner, more conflict in their relationship and less satisfaction with the way conflict is resolved; in fact, these links can be even more impactful than the associations between low desire and age or menopause status (Bodenmann et al., 2006; Brotto et al., 2010; Hayes et al., 2008; Laumann et al., 1999; Metz & Epstein, 2002). Overall, women's low sexual desire is linked to lower sexual and relationship quality and more conflict between partners. As such, it is crucial for research to consider the unique experiences of couples

coping with clinically low sexual desire (compared to couples coping with one or both partner's transient desire declines).

Beyond associations with sexual and relationship quality, women coping with low sexual desire also report broader consequences for their personal well-being. Research has shown a consistent link between heightened anxiety and low sexual desire (Brotto et al., 2010). Often comorbid with anxiety symptoms, especially for women with clinically low desire (compared to their control counterparts), are symptoms of depression (Rosen et al., 2019). Despite links between low sexual desire and poorer well-being for both partners, a growing body of research suggests that some couples can more easily navigate women's low sexual desire; that is, they experience fewer negative consequences relative to other affected couples (e.g., Hogue et al., 2019, Raposo et al., 2020). However, what allows some couples to better cope in the face of low sexual desire remains a puzzle. No research to date has considered whether people with low desire and their partners' lay beliefs about maintaining their sex lives are associated with the possible negative consequences of coping with low desire (e.g., higher distress and lower sexual satisfaction; Rosen et al., 2019).

In addition, one person's implicit sexual beliefs can influence both their own and their partner's outcomes; yet, with the exception of the transition to parenthood, most of the prior research has been limited to people who were relatively sexually satisfied. In a sample of couples transitioning to parenthood—a time that is often characterized by novel challenges to the couples' sexual relationship (Pastore et al., 2011)—higher sexual growth beliefs among new parents were linked to both partners reporting higher sexual and relationship satisfaction, whereas higher sexual destiny beliefs among new mothers were linked to both partners reporting lower relationship satisfaction (Maxwell et al., 2017). Although this is a sample that is

known to face sexual challenges, they tend to be more transient challenges (i.e., parents have a ready explanation for the changes in their sexual relationship). As such, although research has explored the experiences of couples in which both members experience normative changes in desire over time (McNulty et al., 2019; Muise et al., 2016), as well as highly satisfied couples facing more transient declines in desire (Maxwell et al., 2017), less is known about the experiences and dynamics of couples coping with a person's distressing clinical sexual issue.

2 Implicit Theories of Sexual Satisfaction

People hold implicit theories (or basic beliefs) about whether aspects of their lives are fixed (i.e., destiny or entity beliefs) or can be changed (i.e., growth or incremental beliefs; e.g., Dweck, 2012; Dweck et al., 1995; Knee, 1998; Maxwell et al., 2017). The term "implicit" refers to people's lay beliefs/theories/mindsets/schemas about human attributes, which people draw upon to organize their worldview (Dweck, 2006), rather than beliefs that are outside of a person's conscious awareness. Just as people hold general beliefs about whether aspects of their lives are more fixed or malleable, people also hold more domain-specific beliefs (e.g., about intelligence or romantic relationships). These specific beliefs are important as they tend to be most predictive of outcomes in that specific domain (Knee et al., 2003; Dweck et al., 1995). A large body of research has considered people's lay beliefs about romantic relationships. People who are higher, relative to lower, in *growth beliefs* are motivated to work on their relationship, seeing challenges as opportunities to grow (Knee, 1998). When faced with conflict, they tend to maintain higher positive emotion following disagreements (Knee et al., 2001) and remain committed despite differences (Knee et al., 2004). In contrast, people higher in *destiny beliefs* view successful relationships as requiring natural compatibility between partners; as such, they are particularly sensitive to compatibility threats and react more negatively to conflict, seeing it

as a sign that their partner is not “the one” for them (Knee, 1998; Knee et al., 2003). However, when they are confident that their partner is compatible for them, people higher in destiny beliefs experience more positive relationship outcomes (Burnette & Franiuk, 2010). Results suggest that although endorsing destiny beliefs is generally associated with adverse relationship outcomes, greater compatibility may enhance the quality of their relationships.

The large body of research on implicit beliefs has recently been applied to sexuality, which largely focuses on beliefs about how to maintain a satisfying sex life (e.g., Bőthe et al., 2017; Hanna-Walker & Busby, 2021; Maxwell et al., 2017; Rossi et al., 2022; Sutherland et al., 2018; Uppot et al., 2023). A factor distinguishing implicit beliefs in the relationship and sexual domains from implicit beliefs in other domains is that, rather than representing opposite ends of a single dimension (e.g., Chiu et al., 1997), implicit beliefs of relationships and sexual satisfaction are bi-dimensional (Knee et al., 2003; Maxwell et al., 2017). In other words, individuals can simultaneously endorse both high (or low) levels of growth and destiny, although these beliefs tend to be negatively correlated (Knee et al., 2003; Maxwell et al., 2017; Raposo et al., 2021). People who endorse *sexual growth beliefs* see sexual satisfaction as requiring ongoing work and effort to maintain over time (Maxwell et al., 2017). Specifically, those who endorse higher sexual growth beliefs report more positive sexual experiences (i.e., they tend to feel more connected to and desired by their partner), and experience more positive sexual outcomes in the moment, over time, and in especially challenging periods in relationships (e.g., the transition to parenthood; Maxwell et al., 2017). Conversely, people who endorse *sexual destiny beliefs* view sexual satisfaction as the result of being naturally sexually compatible with a partner (Maxwell et al., 2017). Consistent with research on general relationship beliefs (Knee, 1998), if people who highly endorse sexual destiny beliefs see signs that their partner is not the right sexual fit for

them or experience a sexual conflict, they will be more likely to report more frustrating and disappointing sex as a result (Maxwell et al., 2017).

3 Implicit Sexual Beliefs and Coping with Sexual Challenges

Despite sexual challenges being associated with poorer sexual, relationship, and personal well-being for couples (Bodenmann et al., 2006; Brotto et al., 2010; Hayes et al., 2008; Laumann et al., 1999; Metz & Epstein, 2002; Rosen et al., 2019; Stephenson & Meston, 2010), research suggests that some couples fare better with clinically low desire than others (i.e., report fewer negative consequences, e.g., Hogue et al., 2019; Raposo et al., 2020). In fact, a small but growing body of literature has begun to show that, when faced with sexual challenges, people higher (vs. lower) in sexual growth beliefs tend to report greater well-being and more adaptive coping tendencies, whereas those higher (vs. lower) in sexual destiny beliefs tend to report poorer well-being and more maladaptive coping tendencies (e.g., Maxwell et al., 2017; Sutherland & Rehman, 2018). In line with work on implicit relationship beliefs showing that people higher in growth beliefs tend to respond to relationship challenges more adaptively, whereas people higher in destiny beliefs tend to respond less adaptively (Burnette & Franiuk, 2010; Franiuk et al., 2002; Knee, 1998; Knee et al., 2001; Knee et al., 2004), research suggests that sexual beliefs are uniquely important for how people respond to sexual challenges.

Contexts in which couples are faced with challenges provide the key theoretical test of implicit sexual beliefs. Destiny beliefs tend to be associated with lower satisfaction and sexual well-being, particularly when people confront challenges, differences or disagreements (e.g., Maxwell et al., 2017; Rossi et al., 2022). This is true more broadly, but also in the domain of sex, specifically (Maxwell et al., 2017). There is some evidence that growth believers are even more motivated to be responsive to their partner's needs when faced with sexual challenges. Recently,

Uppot and colleagues (2023) studied how sexual growth and destiny beliefs relate to general and sexual responsiveness (i.e., being motivated to meet a partner's general or sexual needs, respectively)–factors linked to greater relationship and sexual quality and higher desire (Day et al., 2015; Impett et al., 2020; Muise & Impett, 2015). They examined these links across a host of challenging contexts, such as when coping with clinically low sexual desire, experiencing sexual changes since the beginning of the COVID-19 pandemic, and having more unmet sexual ideals in one's partner. Their findings reveal that, across couples coping with different sexual challenges, being higher in sexual growth beliefs was generally associated with higher sexual responsiveness and perceived partner sexual and general responsiveness. In contrast, findings for sexual destiny beliefs were more mixed, with either no associations with responsiveness or lower sexual responsiveness and perceived partner sexual and general responsiveness.

Research has also assessed other forms of implicit sexual beliefs (i.e., not specific to sexual satisfaction) in the context of sexual challenges. For example, in a series of studies assessing lay beliefs about sexual attraction (Bohns et al., 2015), people who believed that sexual attraction was fixed (akin to destiny beliefs) reported lower relationship quality when they were more sexually dissatisfied. Moreover, when asked to think about a hypothetical sexual (vs. non-sexual) challenge, they had fewer positive expectancies (i.e., they thought the challenge would be less solvable) and were more likely to use destructive behaviors in response to the hypothetical challenge (e.g., not talking to a partner out of anger, ending the relationship; Bohns et al., 2015). Similarly, in other experimental research assessing lay beliefs about sexual desire, when women expected to experience a hypothetical desire problem, being manipulated to believe that sexual desire remains constant over time (i.e., akin to destiny beliefs) was associated with more maladaptive coping, compared to being manipulated to believe that sexual desire changes

regularly (akin to growth beliefs; Sutherland & Rehman, 2018). For women in the incremental (growth) condition, Sutherland and Rehman (2018) also found a trending association with more adaptive coping, compared to women in the entity (destiny) condition.

Sexual beliefs have also been shown to be important during the transition to parenthood—a time in relationships marked by lower desire, sexual frequency, and relationship quality (see Haugen et al., 2004; Shapiro et al., 2000), as well as more conflict and sexual difficulties (Barrett et al., 1999; Belsky & Kelly, 1994). Among couples who have recently become parents for the first time, when people or their partners were higher in sexual growth beliefs, they reported higher sexual and relationship satisfaction, but this effect was weakened when they viewed their partner as less sexually ideal (Maxwell et al., 2017). In contrast, when people were higher in sexual destiny beliefs and saw their partner as less (compared to more) sexually ideal, they reported lower relationship satisfaction. In another study of couples transitioning to parenthood, expectant mothers who held higher sexual destiny beliefs in pregnancy were more sexually distressed and less sexually satisfied at three months postpartum, but when their partners were higher in sexual destiny beliefs, both they and the mothers desired sex more at three months postpartum (Rossi et al., 2022). In contrast, when partners held higher sexual growth beliefs in pregnancy, mothers desired sex less at three months postpartum (Rossi et al., 2022). Overall, this emerging research highlights the benefits of growth beliefs for coping with sexual challenges.

4 The Role of Attributions in the Context of Challenging Situations

Attributions involve assigning a cause to an experience to better understand why it happened (Weiner, 1972), and they tend to stem from beliefs about whether the cause is seen as being more fixed (stable and uncontrollable) or malleable (unstable and controllable; Knee et al.,

2003). Attributions have been assessed across various contexts, including academic performance and intelligence (e.g., Hong et al., 1999; Struthers & Perry, 1996; Weiner, 1979), depression (e.g., Abramson et al., 1978; Seligman et al., 1979), relationship challenges (e.g., Fincham & Bradbury, 1993; Neff & Karney, 2004; Péloquin et al., 2018; Shnaider et al., 2014), and sexual challenges (e.g., Jodoin et al., 2008, 2011; Vannier et al., 2018). Moreover, like implicit beliefs, they can be domain-specific (Struthers & Perry, 1996), whereby attributions about a particular domain (e.g., academic performance) would be more impactful when dealing with failure in that domain (e.g., failing a test), versus when dealing with a negative event in another domain (e.g., a sexual issue). Importantly, attributions tend to hold the most weight when faced with challenging or negative events (Peterson et al., 1982; also see Manusov et al., 1997). To cope with such challenges, people can alter the importance of their perceptions to help regulate a given situation (e.g., place more importance on positive than negative perceptions in a relationship; Neff & Karney, 2003).

In the current research, I focus on attributions for the cause of low sexual desire in a relationship. To contextualize the categorization of attributions, consider the example of someone making attributions about the cause of their low desire. Attributions can be categorized as *internal* (e.g., "the cause of my low desire is completely to do with me") or *external* (e.g., "the cause of my low desire is completely to do with other people or circumstances"); *global* (e.g., "the cause of my low desire affects all other areas of my life") or *specific* (e.g., "the cause of my low desire just affects my sexual desire"); and *stable* (e.g., "the cause of my low desire will always continue to affect me") or *unstable* (e.g., "the cause of my low desire will never affect me again"; see Bradbury & Fincham, 1990). Attributions involving relationship events (i.e., interpersonal contexts) can also be categorized as being the *partner's responsibility* or *not* (e.g.,

"my low desire is completely caused by my partner"; e.g., Jodoin et al., 2011; Vannier et al., 2018), as well as the degree of felt *personal control* (e.g., "I can control the cause of my low desire" vs. "the cause of my low desire is completely outside of my control"; e.g., Weiner, 1985).

In response to a negative event, attributions that are external, specific, and unstable can be grouped to represent a *positive attribution style*–that is, greater self-esteem and no greater likelihood of presenting depressive symptoms (Metalsky et al., 1987). In contrast, attributions that are internal, global, and stable in response to a negative event signify a *negative attribution style*–lower self-esteem (Metalsky et al., 1987) and greater depressive symptoms and helplessness (as per the reformulated learned helplessness model; Abramson et al., 1978; Poon & Lau, 1999; Seligman et al., 1979).

In relationships, attributions can differ for reported marital or relationship quality. For example, people who are dissatisfied in their marriage tend to make attributions about negative relationship events that are more global and their partner's responsibility (see Bradbury & Fincham, 1990), and among distressed wives, seeing a partner as responsible for a challenging event is associated with poorer problem solving (Bradbury & Fincham, 1992). People in clinical samples who are less satisfied with their relationships tend to report higher internal or self-blame (Péloquin et al., 2018), and those who tend to blame their partner or see their partner as being responsible for negative events generally tend to report poorer relationship quality in general and over time (Durtschi et al., 2011; Péloquin et al., 2018; Shnaider et al., 2014).

Given the importance of attributions for navigating close relationships and sexuality, it is crucial that research continues to investigate when attributions are most adaptive for coping with sexual challenges, which would help to advance the existing literature on attributions for sexual challenges more broadly (e.g., sexual dysfunctions, low sexual desire, sexual pain disorders,

erectile dysfunction, premature ejaculation, etc.). For example, one study assessed attributions for sexual challenges among postpartum mothers, showing that partner responsibility attributions for postpartum sexual challenges were associated with lower relationship and sexual quality (aligning with similar patterns among romantic relationships more broadly; e.g., Durtschi et al., 2011; more negative behavior as shown by Miller & Bradbury, 1995; more internalized pressure as shown by Mitchell et al., 2011; Péloquin et al., 2018; Shnaider et al., 2014), and stable attributions were linked to lower sexual satisfaction (Vannier et al., 2018). In response to infertility challenges, both self- and partner-blame were linked to people's own and their partner's poorer mental health (i.e., more symptoms of depression and anxiety) and relationship satisfaction (Péloquin et al., 2018). Turning to sexual pain disorders (e.g., vestibulodynia), global and stable attributions were linked to higher psychological distress, and global attributions were linked to lower sexual functioning (Jodoin et al., 2011). For couples' sexual dysfunctions more broadly, particularly for those who were members of non-traditional religious groups, men were shown to be more likely to attribute responsibility to themselves (i.e., internal attributions), whereas women made more partner responsibility attributions (Rosen & Berry, 1978). Other research on orgasm consistency showed that women with high orgasm consistency tended to make more self-serving attributions that accurately reflected their history (i.e., they made internal and stable attributions for orgasms, but unstable attributions when they did not orgasm), whereas women with low consistency tended to make more self-handicapping attributions (i.e., they made stable attributions when they did orgasm, but internal attributions when they did not orgasm; Loos et al.,1987; a finding that aligns with other research that explored several sexual dysfunctions; Fichten et al., 1988). Finally, in a study on erectile dysfunction, men with (vs. without) erectile dysfunction saw negative sexual events as being more due to themselves and

stable, although both groups were generally optimistic, and they both tended to make more external, unstable, and specific attributions for positive sexual (vs. general) events (Scepkowski et al., 2004). In fact, some research has even shown that, among men who attribute their sexual dysfunctions to a medical condition, the attributions they made about their sexual dysfunction shaped their emotional responses to a greater extent than their diagnosed somatic risk (Rowland et al., 2013).

Research has also explored people's attributions for a *partner's* sexual challenge. For example, in work on the male partners of women with a sexual pain disorder (i.e., provoked vestibulodynia), men reported poorer dyadic adjustment when they made more internal and global attributions for their partner's pain, higher distress when they made more internal, global, stable, and partner responsibility attributions, and lower sexual satisfaction when they made more global and stable attributions (note that partners' attributions did not impact women's sexual functioning or pain intensity; Jodoin et al., 2008). Among people experiencing sexual dysfunction (e.g., erectile dysfunction, orgasmic dysfunction, premature ejaculation) and their partners, both partners tended to blame the person experiencing the dysfunction rather than the partner or circumstances (Fichten et al., 1988). In the same study, researchers also found that male partners of women with orgasmic dysfunction were more likely to make internal (self-blame) attributions about the woman's dysfunction, female partners of men with erectile dysfunction were more likely to make circumstantial attributions, and the people experiencing the dysfunction thought they and their partners shared little but equal control over managing it (Fichten et al., 1988). In another study focusing on men's erectile dysfunction, both partners attributed responsibility to the men more so than any other person or circumstance, which contradicts self-serving attributions such that men with erectile dysfunction should theoretically

make more external (rather than internal) attributions for their sexual challenge (Simkins-Bullock et al., 1992). Lastly, when partners of women with provoked vestibulodynia made more negative attributions (i.e., a combination of higher internal, women's responsibility, global, and stable attributions), they responded more negatively (e.g., ignored their partner, expressed frustration toward their partner) and women reported more pain (Davis et al., 2015).

An unexpected pattern found in some work, however, is that internal and global attributions for sexual pain difficulties are linked to *higher* dyadic adjustment, and internal attributions have sometimes also been linked to more constructive coping tendencies (e.g., encouraging people to seek help, maintain treatment, better regulate their situation, or feel more in control; Low et al., 1993; Jodoin et al., 2011), which contrasts with what attribution theory suggests (Weiner et al., 1985). Still, taken together, endorsing attribution dimensions from positive attribution styles (external, unstable, specific) seem to be most adaptive when people are navigating sexual challenges, but results are mixed with regards to how positive versus negative internal or global attributions are for well-being and coping strategies. It is also currently unclear *for whom* (i.e., people who endorse higher sexual growth or destiny beliefs) each attribution dimension is most beneficial or endorsed.

5 Links Between Implicit Beliefs and Attributions for Challenging Situations

People's beliefs about how relationships are maintained tend to shape the attributions they make for their experiences, which they can subsequently draw from to decipher the cause of an issue and decide whether to continue or terminate a relationship (Franiuk et al., 2004; Knee, 1998; Knee et al., 2001; Knee et al., 2003; Knee et al., 2004). That is, implicit beliefs have been described as providing a framework that people can use to make consistent judgments and reactions about situations, in which beliefs influence how people make sense of why something

happened (Dweck et al., 1995; Dweck & Leggett, 1988). Outside of the sexual domain, research has assessed links between implicit beliefs and attributions or other coping-related behaviours. In work on implicit beliefs about different personal attributes (e.g., achievement, intelligence, relationships), growth-oriented people tended to make fewer helpless and dispositional attributions and display more mastery-oriented behaviour, as well as exert greater effort to resolve the issue, maintain stronger problem-solving strategies, persist longer when faced with prolonged failure, and report more positive affect (Bergen, 1991; Blackwell et al., 2007; Dweck, 1999; Dweck et al., 1993; Dweck & Leggett, 1988; Hong et al., 1999; Robins & Pals, 2002). In contrast, destiny-oriented people have been shown to assign more helpless attributions for challenging events (Dweck et al., 1995; Dweck & Leggett, 1988; Henderson & Dweck, 1990; Robins & Pals, 2002), withdraw sooner, report less optimism when faced with prolonged failure, make more internal, global, and stable attributions, and be more likely to blame others for negative behavior (Bergen et al., 1991; Dweck et al., 1993; Erdley & Dweck, 1993). Also, when induced to hold a soulmate theory about relationships (similar to destiny beliefs), people had more relationship-enhancing thoughts when they believed their partner was the "right" one for them, but more relationship-detracting thoughts when they did not (Franiuk et al., 2004).

Although some empirical evidence supports links between implicit beliefs and attributions in the context of close relationships more generally (Knee et al., 2004), limited existing research has considered attributions as a tool for coping with challenging *sexual* issues depending on one's implicit sexual beliefs (e.g., a suggested future direction in Maxwell et al., 2017)—a new link that could further explain differences between sexual growth and destiny beliefs and mixed sexual and relationship outcomes. Moreover, research has yet to explore whether attributions in a clinical context might function as a possible mechanism for the

established links between implicit sexual beliefs and relationship and sexual outcomes. Given the roles of beliefs and attributions in shaping couples' well-being, highly endorsing dimensions from a positive attribution style (when paired with adaptive implicit sexual beliefs: high sexual growth and low sexual destiny) may be one promising mechanism for couples navigating desire declines. Specifically, I predict that people higher in sexual growth beliefs would be more likely to endorse dimensions representing a positive attribution style (external, specific, unstable, not the partner's responsibility, controllable) for low desire and in turn, maintain higher levels of relationship and sexual well-being. In contrast, I predict that people higher in sexual destiny beliefs will be more likely to make more negative attributions (internal, stable, global, partner's responsibility, not controllable) for low desire and in turn, report poorer relationship and sexual well-being.

6 The Current Research

Implicit sexual beliefs are differentially associated with well-being outcomes in the context of sexual challenges, but it remains to be established whether implicit sexual beliefs would be associated with personal, relationship, and sexual well-being among couples coping with *clinically low sexual desire*. Addressing this gap, my dissertation will broaden the existing literature by testing whether sexual growth beliefs promote relationship outcomes among a sample of couples coping with a distressing sexual desire disorder, and to what extent sexual destiny beliefs might still be associated with more detriments. Testing implicit beliefs in samples particularly impacted could also inform future interventions for couples coping with low desire. Based on theory, I would expect that among couples coping with low desire, higher sexual growth beliefs would be associated with greater personal, relationship, and sexual well-being, whereas higher sexual destiny beliefs would be associated with poorer well-being outcomes.

Another gap in the literature is that we do not currently know the key *mechanism* for associations between implicit beliefs and well-being. In my dissertation, I test whether people who more strongly endorse sexual growth versus destiny beliefs might respond differently to low desire because of their assumptions about the nature of low desire—that is, the *attributions* they make about the cause of sexual challenges. Finally, research has yet to investigate whether *shifting* people's lay beliefs about sexuality affects their attributions for hypothetical situations of low desire, and in turn their relationship and sexual well-being and responses to the situation. Experimental evidence would advance our understanding of how implicit sexual beliefs shape responses and well-being amidst sexual challenges. In Studies 1 to 3, I assess people's existing beliefs via a self-report measure, but in Study 4, I test whether I can shift people's beliefs and in turn, their attributions, responses to situations low sexual desire, and sexual and relationship well-being.

In my dissertation, I assess implicit sexual beliefs across four studies of people in relationships, community couples and couples coping with clinically low sexual desire. In Study 1 (Chapter Two), I focus on individuals in relationships recruited from Prolific who were asked to think about *hypothetical* low desire in a cross-sectional study. In Studies 2 and 3 (Chapter Three), I focus on clinical samples of couples already coping with a person's clinically low desire (those diagnosed with Sexual Interest/Arousal Disorder, or SIAD). Study 2 is a published longitudinal study of couples coping with SIAD (Raposo et al., 2021), and Study 3 is a daily diary study of couples coping with SIAD. Study 4 (Chapter Four) is an experimental study of individuals in relationships whose implicit sexual beliefs were manipulated. In Chapter Five, I will discuss the key theoretical extensions, implications, limitations, and future research directions that stem from my findings.

The guiding model that I test across studies is that people's lay beliefs about sexual satisfaction are associated with the attributions they make for low sexual desire/arousal, and in turn, their relationship and sexual well-being. Specifically, I explore whether 1) implicit sexual beliefs underlie the attributions people assign to low desire, 2) attributions for causes of low desire explain links between implicit sexual beliefs and relationship and sexual well-being, and 3) how implicit sexual beliefs are associated with the personal, relationship, and sexual well-being of couples coping with SIAD.

CHAPTER TWO

My goal with Chapter Two was to test my predictions in a sample of people currently in a romantic relationship by asking them to think about hypothetical situations of low desire and arousal. This provided an initial test of my overall model in which implicit sexual beliefs were associated with attributions people assigned to causes of hypothetical low desire and arousal, and in turn, those attributions explained links between implicit sexual beliefs and relationship well-being and sexual well-being. Specifically, I combined theories of implicit sexual beliefs and attribution theories to test my first prediction that, given their ongoing efforts to maintain satisfaction (Maxwell et al., 2017), people higher (vs. lower) in sexual growth beliefs would report higher relationship and sexual satisfaction, commitment, desire, and a lower likelihood of considering breaking up in response to hypothetical low desire and arousal. I anticipated that a key reason why people high in growth beliefs would maintain their relationship and sexual well-being is that they would be more likely to make positive attributions about low desire. My second prediction was that people higher (vs. lower) in sexual destiny beliefs would report lower relationship and sexual satisfaction, commitment, desire, and a greater likelihood of considering breaking up in response to hypothetical low desire and arousal because they would be more likely to make negative attributions. To provide additional descriptive information about the factors people expected to cause a situation of low desire and arousal, I solicited open-ended responses on participant-reported causes, which I then coded to explore whether people higher in sexual growth or destiny beliefs were more likely to report certain types of causes for low desire and arousal.

2 Study 1

Study 1 is a cross-sectional study of individuals in romantic relationships (N = 464). In this study, my goals were to test initial associations between implicit (lay) sexual beliefs, attributions, and relationship and sexual well-being, as well as the predicted indirect effects. Using content analysis, I coded participants' open-ended responses about the main cause of their low desire and arousal, which contributed to the personal, sexual, relationship, and partner-related themes that past work has found people attribute to their low desire and arousal (e.g., Sims & Meana, 2010). I also tested whether sexual growth and destiny beliefs predicted the likelihood of mentioning a specific type of cause (based on coded themes). In additional exploratory analyses, I controlled for general beliefs about relationships to test whether the effects were unique to sexual beliefs.

2.1 Methods

2.1.1 Participants and Procedure

Participants were recruited using Prolific Academic, an online recruitment website (https://www.prolific.co/) in January 2019 and March 2020. Eligible participants were sexually active, in a romantic relationship for at least 6 months, 18 years of age or older, and living in Canada, the USA, or the UK. Once eligibility and consent were confirmed, participants began an online survey that took an average of 38.36 minutes to complete (SD = 17.51; based on the final sample post-exclusions). I excluded participants if they did not provide consent (n = 1), meet all eligibility criteria (n = 2), pass both attention checks (n = 6), or if their responses were deemed unreliable (n = 16).[1] The final sample consisted of 464 participants (204 males, 253 females, one other, and six missing). The sample was primarily straight/heterosexual, married, and White. The average age ranged from 18 to 76 (M = 35.69, SD = 11.16) and the average relationship duration

ranged from .58 to 55 years (*M* = 10.71 years, *SD* = 9.49 years). I compensated participants £3.35 (approximately $CAD 5.76) for their time. See Table 1 for a full list of sample demographics.

Table 1

Sample Characteristics (N = 464)

Characteristic	*M* (range) or *n*	*SD* or %
Age (years)	35.7 (18 – 76)	11.2
Ethnicity		
White (e.g., North American, European, etc.)	399	86%
Black (e.g., African, Caribbean, etc.)	10	2.2%
East Asian (e.g., Chinese, Korean, etc.)	12	2.6%
South Asian (e.g., Indian, Pakistani, etc.)	12	2.6%
Latin American (e.g., Mexican, Columbian, etc.)	3	.6%
Bi- or multi-ethnic/ racial (e.g., White/Black, East Asian/South Asian, etc.)	20	4.3%
Not listed	6	1.3%
Relationship status		
Dating	71	15.3%
Living together (not common-law or married)	118	25.4%
Common-law	15	3.2%
Married	241	51.9%
Engaged	17	3.7%
Not listed	2	.4%
Sexual Orientation		
Asexual	5	1.1%
Bisexual	13	2.8%
Gay	2	.4%
Lesbian	4	.9%
Straight/ Heterosexual	435	93.8%

Pansexual	2	.4%
Queer	1	.2%
Not listed	1	.2%
Relationship duration (years)	10.7 (.6 – 55)	9.5

Note. "Not listed" includes participants who did not identify with one of the presented categories.

2.1.2 Measures

In addition to key variables in all studies, I collected data about participants' age, relationship status and duration, demographics (e.g., gender, sexual orientation, ethnicity, etc.), and duration of experienced chronic low desire and arousal (Studies 2 and 3).

Implicit sexual beliefs. I assessed implicit sexual beliefs using a short version of the Implicit Theories of Sex Scale (Maxwell et al., 2017). Five items assessed *sexual growth beliefs* (e.g., "In a relationship, maintaining a satisfying sex life requires effort"; $\alpha = .82$, $M = 5.76$, $SD = .85$) and five items assessed *sexual destiny beliefs* (e.g., "Struggles in a sexual relationship are a sure sign that the relationship will fail"; $\alpha = .86$, $M = 3.09$, $SD = 1.29$). Items were rated on a 7-point scale from 1 = "strongly disagree" to 7 = "strongly agree". Individuals were scored for sexual destiny and sexual growth, and both beliefs were entered simultaneously in statistical models.

Implicit relationship beliefs. As a covariate, I assessed implicit relationship beliefs using the Implicit Theories of Relationships Scale (Knee et al., 2003). Eleven items assessed *relationship growth beliefs* (e.g., "A successful relationship evolves through hard work and resolutions of incompatibilities"; $\alpha = .75$, $M = 5.15$, $SD = .67$) and eleven items assessed *relationship destiny beliefs* (e.g., "Struggles at the beginning of a relationship are a sure sign that the relationship will fail"; $\alpha = .87$, $M = 4.11$, $SD = .94$). Items were rated on a 7-point scale from

1 = “strongly disagree” to 7 = “strongly agree”. Individuals were scored for relationship destiny and relationship growth, and both beliefs were entered simultaneously in statistical models.

Attributions, ease of recall, and likelihood of considering breaking up. I assessed attributions for low desire and arousal using a modified version of the Sexual Attributional Style Questionnaire (similar to the original Attributional Style Questionnaire by Peterson et al., 1982 and the Extended Attributional Style Questionnaire by Metalsky et al., 1987, but with the addition of controllability and partner responsibility; Weiner, 1979; for similar applications, see Jodoin et al., 2011 and Vannier et al., 2018). Assigning expectations about future experiences can influence how positive or negative the situation will likely be (e.g., Barlow, 1986). For example, in a sample of newlyweds, anticipating being more satisfied in the future subsequently led to higher satisfaction six months later (McNulty & Fisher, 2008).

Participants imagined two hypothetical situations (i.e., a within-person design) in which they experience lower sexual desire (situation 1) or arousal (situation 2) for their partner in the near future. Next, they indicated what they thought would be the main cause of each situation (open-ended response) and rated the cause using five attributions dimensions: *internal/external* (“Does the cause you gave have something to do with you, or does it have something to do with other people or circumstances?” rated from 1 = “other people or circumstances” to 7 = “completely to do with me”, $M = 4.59$, $SD = 1.76$), *specific/global* (“Is the cause you gave something that just affects your sexual desire [or sexual arousal during sexual activity], or does it affect other areas in your life?” rated from 1 = “just affects my sexual desire [or arousal]” to 7 = “affects all other areas”, $M = 4.85$, $SD = 1.53$), *unstable/stable* (“How likely is it that the cause you gave will continue to affect you?” rated from 1 = “will never affect me again” to 7 = “will always affect me”, $M = 4.58$, $SD = 1.25$), *partner’s responsibility vs. not* (“What is the

responsibility of your partner in this situation?" rated from 1 = "not at all caused by my partner" to 7 = "completely caused by my partner", *M* = 2.82, *SD* = 1.63), and how *uncontrollable/controllable* the cause is ("Are you able to control the cause you gave, or is it outside of your control?" rated from 1 = "it is outside of my control" to 7 = "I can control it", *M* = 3.53, *SD* = 1.60). Given that I assessed two related hypothetical situations, and responses were significantly correlated across both scenarios (all *p*'s < .001), I created composite scores for each type of attribution across situations. See Appendix A for descriptive statistics, correlations between the same attribution dimensions across situations, and results for each situation separately. See Table 2 for correlations between composite attributions and implicit sexual beliefs.

I was also interested in whether participants believed the hypothetical situations would lead them to consider breaking up from their partner, on a scale from 1 = "I would not consider ending my relationship" to 7 = "I would strongly consider ending my relationship" (*M* = 1.70, *SD* = 1.27). As a covariate in case there were differences based on implicit sexual beliefs or attributions, I also tested whether participants reported that the hypothetical situations were easy for them to imagine happening in their relationship in the past four weeks, from 1 = "it is impossible to imagine this situation happening" to 7 = "it is very easy to imagine this situation happening" (*M* = 5.05, *SD* = 1.57). Again, I created composite scores given that responses were significantly correlated across both scenarios (*p*'s < .001).

Sexual desire. I assessed sexual desire with two items from a modified version of the desire subscale of the Female Sexual Function Index (FSFI) to capture desire for a partner (Rosen et al., 2000; see also Masheb et al., 2004): "Over the past four weeks, how often did you feel sexual desire or interest for your partner?" (1 = "almost always or always" to 5 = "almost

never or never") and "Over the past four weeks, how would you rate your level (degree) of sexual desire or interest?" (1 = "very high" to 5 = "very low or none at all"). I reverse-scored items so that higher scores would indicate higher desire and combined them into a composite (r between items = .79, $p < .001$, $M = 3.47$, $SD = 1.03$).

Sexual satisfaction. I assessed sexual satisfaction using the Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1998). Participants rated their overall sexual relationship on five 7-point bipolar scales (e.g., "very bad to very good"; $\alpha = .94$, $M = 5.44$, $SD = 1.25$).

Relationship satisfaction and commitment. I assessed relationship satisfaction and commitment using the Perceived Relationship Quality Component (PRQC; Fletcher et al., 2000), which consists of three items specific to relationship satisfaction (e.g., "How satisfied are you with your relationship?"; $\alpha = .95$, $M = 5.83$, $SD = 1.09$) and three items specific to commitment (e.g., "How committed are you to your relationship?"; $\alpha = .91$, $M = 6.47$, $SD = .87$). Items were assessed with a 7-point scale ranging from 1 = "not at all" to 7 = "extremely".

Sexual frequency. I assessed sexual frequency in the past 30 days with the mean of six items: oral sex (giving to partner), oral sex (receiving from partner), giving manual stimulation (touching or massaging your partner's genitals), receiving manual stimulation (your partner touching or massaging your genitals), sexual intercourse with vaginal penetration, and sexual intercourse with anal penetration. Participants rated items on a 7-point scale from 0 = "not at all" to 6 = "more than once a day". The average sexual frequency was 1.47 ($SD = 1.10$, $\alpha = .91$), which approximately corresponded to the midpoint between 1 = "once or twice in the past 30 days" and 2 = "once a week".

Table 2

Correlations Between Implicit Sexual Beliefs and Attributions

	1	2	3	4	5	6	7	8	9
1. Internal	–	-.33***	.05	.11*	.19***	.11*	.03	.04	.08
2. Partner		–	.19***	-.12**	-.03	-.08	.18***	.03	-.01
3. Stable			–	.26***	-.21***	.06	-.04	.06	.002
4. Global				–	-.15**	.16***	-.04	.12*	-.001
5. Control					–	.09	.08	.04	.03
6. Sexual growth						–	-.20***	.44***	-.15**
7. Sexual destiny							–	-.07	.41***
8. Rel. growth								–	-.22***
9. Rel. destiny									–

Note. ***p < .001, **p < .01, *p < .05. Rel. = Relationship.

2.1.3 Data Analysis Strategy

Data were analyzed using SPSS version 28. I tested main effects using multiple regression models. Predictors in all models were grand-mean centered. When implicit sexual beliefs (i.e., sexual growth and destiny) were tested as predictors, they were both included simultaneously in the model. This was also the case when testing attributions as predictors (i.e., internal, partner's responsibility, stable, global, control). Mediations were tested using model 4 of Hayes' PROCESS Macro and 10,000 bootstrap resamples. As a robustness check, I controlled for implicit relationship beliefs (only in models that included implicit sexual beliefs), ease of recall, or all other attributions (only in models that included an attribution) to assess whether effects held. In all models, betas are unstandardized (*b*) and represent the change in the dependent variable for every one-unit change in the predictor variable. Data and syntax are available on the OSF (https://osf.io/rh7by/?view_only=2955b9ebf0ed4ac5ad6308c4d68ed9fa).

Qualitative analysis. I analyzed open-ended responses in which participants indicated what they felt would be the main cause of their low desire/arousal using content analysis. My goal was to interpret and provide structure to the open-ended responses in a systematic way to better understand the types of causes people indicate for low desire and arousal (Downe-Wamboldt, 1992; Kleinheksel et al., 2020; Kolbe & Burnett, 1991). Although researchers have qualitatively coded causes of low desire or arousal (e.g., Sims & Meana) and other experiences of desire (declines, ebbs and flows, maintained levels; e.g., Graham et al., 2004; Murray et al., 2014; Vowels et al., 2020) in past work, it is unclear how reported causes are associated with implicit sexual beliefs. Given the fragmented understanding of causes for anticipated (hypothetical) low desire and arousal among a sample of people who have or have not already experienced declines, I followed an inductive (vs. deductive) approach in which I interpreted the

data rather than applied an existing framework (Elo & Kyngäs, 2007; Lauri & Kyngäs, 2005). To create the codebook (available on the OSF), I first reviewed responses across each hypothetical situation (low desire, low arousal) several times and noted common themes among the data. Next, I shared the responses and my initial coding scheme with two co-authors to condense and clarify the codebook where possible, which resulted in the final codebook that was used by two coders (myself and a co-author). To code the responses, I merged the data and codebook into NVivo 12, a qualitative data analysis software, and duplicated the file so that both coders (myself and a co-author) could independently code using the same file.

Both coders independently coded the first 20 responses in the data to address any issues with the codebook or procedure. We reached 100% agreement, so we continued with the rest of the coding. If a response was met with confusion, that response was coded as "unsure". Both coders met to discuss all "unsure" responses until they reached an agreement about how to code each one; if an agreement could not be reached, the coders consulted with my advisor (i.e., the supervisor of this work), Dr. Amy Muise, who made the final decision. In total, 68 (7.3%) responses across situations were coded as "unsure" and were not included in the calculation of inter-rater reliability or agreement; these responses were later coded by the first author using the agreed-upon coding. For the low arousal situation, the coders struggled to classify responses that fell under two separate themes that were very similar to one another, so we revised the coding scheme by collapsing the two separate themes into a single theme to ensure that all themes were distinct and could be easily distinguished from one another (Downe-Wamboldt, 1992). Once coding was complete, I merged both files back together to calculate reliability and identify disagreements.

To determine inter-rater reliability, I calculated the unweighted Cohen's Kappa in NVivo 12. In each hypothetical situation of low desire or arousal, our Kappa was .94 and we reached 99.6% overall agreement (excluding all responses coded as "unsure"), demonstrating high inter-rater reliability and almost perfect agreement (see McHugh, 2012). The coders discussed all disagreements until they were resolved; if an agreement could not be reached, we consulted with the supervisor, who made the final decision. We made final revisions to the labeling of the themes for clarity and conciseness.

Finally, to test differences between implicit sexual beliefs in people's endorsement of each theme, I dummy-coded all themes (1 = response contained the theme vs. 0 = response did not contain the theme). Then, I ran bivariate logistic regressions, with sexual growth and destiny beliefs (grand-mean centered) entered simultaneously in the same model as predictors. Again, I controlled for implicit relationship beliefs as a robustness check.

2.2 Results

2.2.1 Are Implicit Sexual Beliefs Associated with the Attributions People Make for Their Causes of Hypothetical Situations of Low Sexual Desire and Arousal?

People who were higher in sexual destiny beliefs attributed the causes of their hypothetical low desire and arousal to being their partner's responsibility and controllable (see Table 3). In contrast, people who were higher in sexual growth beliefs attributed the causes of their hypothetical low desire and arousal to being more internal, global, and controllable. There were no other significant associations between sexual destiny or growth beliefs and attributions. With one exception, all significant effects held controlling for implicit relationship beliefs. The exception was that the association between sexual destiny beliefs and higher control attributions was reduced to non-significance (b = .12, SE = .06, $t(458) = 1.88$, p = .061).

Table 3

Associations Between Implicit Sexual Beliefs and Attributions

	Internal		Partner responsibility		Stability		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Sexual destiny	.08(.06)	1.16	.22(.06)	3.74***	-.02(.05)	-.53	-.01(.06)	-.18	.12(.06)	2.09*
Sexual growth	.24(.10)	2.47*	-.08(.09)	-.93	.07(.07)	1.06	.29(.08)	3.39***	.21(.09)	2.34*

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients.

I was also interested in whether implicit sexual beliefs were associated with how people expected to respond to the hypothetical situations they were asked to imagine (for associations between implicit sexual beliefs and relationship and sexual well-being, see Appendix A). People who were higher in sexual destiny beliefs reported that they were more likely to consider breaking up as a result of the hypothetical low desire and arousal (b = .27, SE = .05, t(460) = 6.09, p < .001), whereas people who were higher in sexual growth beliefs were less likely to consider breaking up (b = -.15, SE = .07, t(460) = -2.18, p = .030). Both effects held when controlling for implicit relationship beliefs.

As a covariate, I tested how easy it was for participants to imagine the hypothetical situations happening in their relationships in the past four weeks. People who were higher in sexual destiny beliefs reported that it was more difficult for them to imagine the hypothetical situations happening in their relationships in the past four weeks (b = -.13, SE = .06, t(460) = -2.25, p = .025), whereas people who were higher in sexual growth beliefs reported that it was easier for them to imagine the hypothetical situations happening in their relationships in the past four weeks (b = .23, SE = .09, t(460) = 2.62, p = .009).[2] Given that there were differences in implicit sexual beliefs for how easy it was to imagine the hypothetical situations happening, I tested whether the significant effects of implicit sexual beliefs on attributions and likelihood of considering breaking up held controlling for ease of recall, and with one exception, all effects held. The exception was that the association between sexual destiny beliefs and control was reduced to non-significance (b = .11, SE = .06, t(459) = 1.84, p = .067).

2.2.2 Are the Attributions People Make for Their Causes of Hypothetical Situations of Low Sexual Desire and Arousal Associated with Relationship and Sexual Well-Being?

People who attributed the causes of their hypothetical low desire and arousal to being their partner's responsibility reported lower relationship satisfaction, sexual satisfaction, and commitment (see Table 4). People who made more stable attributions reported lower relationship and sexual satisfaction, commitment, and desire. In addition, people who felt that they could control the causes of their hypothetical low desire and arousal reported higher sexual satisfaction and desire. There were no other significant associations. For reverse associations in which relationship and sexual well-being were independent variables, and attributions were dependent variables, see Appendix A.

Again, I was interested in whether attributions were associated with how people expected to respond to the situation. People reported that they were more likely to consider breaking up when they attributed the cause of their hypothetical low desire and arousal to being their partner's responsibility (b = .37, SE = .03, $t(457) = 10.78$, $p < .001$), stable (b = .15, SE = .04, $t(457) = 3.41$, $p < .001$), and something global that affects multiple areas of their life (b = .08, SE = .04, $t(457) = 2.17$, $p = .030$). There were no other significant associations. Finally, given that it was easier for people to imagine the hypothetical situations happening in their relationship in the past four weeks when they reported more stable (b = .44, SE = .06, $t(457) = 7.58$, $p < .001$) and global attributions (b = .18, SE = .05, $t(457) = 3.87$, $p < .001$), I tested whether significant effects of attributions on well-being and likelihood of considering ending the relationship held with ease of recall included as a covariate, and indeed, all significant effects held.

Table 4

Associations Between Attributions and Relationship and Sexual Well-Being

	Relationship satisfaction		Commitment		Sexual satisfaction		Sexual desire	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Internal	.02(.03)	.75	.02(.02)	.80	.03(.03)	.85	-.03(.03)	-.93
Partner respons.	-.21(.03)	-6.77***	-.12(.03)	-4.62***	-.18(.04)	-5.05***	-.04(.03)	-1.43
Stable	-.18(.04)	-4.49***	-.11(.03)	-3.12**	-.26(.05)	-5.50***	-.20(.04)	-4.96***
Global	-.06(.03)	-1.85	.003(.03)	.12	-.01(.04)	-.28	.03(.03)	.86
Control	.04(.03)	1.24	.02(.03)	.57	.09(.04)	2.56*	.13(.03)	4.53***

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Respons. = responsibility.

2.2.3 Attributions as Mechanisms for Links Between Sexual Destiny Beliefs and Relationship and Sexual Well-Being

Partner responsibility attributions. Sexual destiny beliefs were significantly associated with higher partner responsibility attributions and, in turn, lower relationship satisfaction (b = -.23, SE = .03, t(459) = -7.74, p < .001), commitment (b = -.13, SE = .02, t(459) = -5.37, p < .001), sexual satisfaction (b = -.23, SE = .03, t(458) = -6.89, p < .001), and sexual desire (b = -.08, SE = .03, t(459) = -2.78, p = .006), and a greater likelihood of considering breaking up (b = .36, SE = .03, t(459) = 11.60, p < .001). All indirect effects were significant (see Table 5)

All significant indirect effects held when controlling for implicit relationship beliefs, and with one exception, all significant indirect effects held when controlling for all other attribution dimensions. The exception was that the effect of partner responsibility attributions on sexual desire was reduced to non-significance (b = -.06, SE = .03, t(455) = -1.96, p = .050; indirect effect 95% CI [-.04, .000]). Overall, these indirect effects were robust.

Control attributions. Sexual destiny beliefs were also significantly associated with higher control attributions and, in turn, higher relationship satisfaction (b = .09, SE = .03, t(459) = 2.73, p = .007), sexual satisfaction (b = .13, SE = .04, t(458) = 3.54, p < .001), and sexual desire (b = .14, SE = .03, t(459) = 4.95, p < .001; see Table 5). However, control attributions were not significantly associated with commitment (b = .04, SE = .03, t(459) = 1.59, p = .113) or likelihood of considering breaking up (b = -.05, SE = .04, t(459) = -1.42, p = .157). That is, control attributions did not explain the association between sexual destiny beliefs and commitment or likelihood of considering breaking up.

When controlling for implicit relationship beliefs, the effects of control attributions on relationship satisfaction, sexual satisfaction, and sexual desire remained significant, but the

indirect effects were reduced to non-significance (relationship satisfaction: b = .09, SE = .03, t(457) = 2.72, p = .007; indirect effect 95% CI [-.001, .03]; sexual satisfaction: b = .13, SE = .04, t(456) = 3.54, p < .001; indirect effect 95% CI [-.002, .04]; sexual desire: b = .14, SE = .03, t(457) = 4.96, p < .001; indirect effect 95% CI [-.003, .04]). Similarly, when controlling for all other attribution dimensions, the effects of control attributions on relationship satisfaction (b = .03, SE = .03, t(455) = 1.00, p = .318; indirect effect 95% CI [-.003, .01]) and sexual satisfaction (b = .07, SE = .03, t(454) = 1.91, p = .057; indirect effect 95% CI [-.003, .02]) were reduced to non-significance. In contrast, the effect of control attributions on sexual desire remained significant, but the indirect effect was reduced to non-significance (b = .12, SE = .03, t(455) = 4.00, p < .001; indirect effect 95% CI [-.004, .03]). Overall, these indirect effects were not robust.

Table 5

Partner Responsibility and Control Mediations

Model	Total Effect	Direct Effect	Indirect Effect	95% Confidence Interval (bootstrapped)	
	b(SE)	*b*(SE)	*b*(BSE)	Lower Bound	Upper Bound
SD → partner resp. → rel satisfaction	-.08(.04)	-.03(.04)	**-.05(.02)**	-.09	-.02
SD → partner resp. → comm	-.09(.03)**	-.07(.03)*	**-.03(.01)**	-.05	-.01
SD → partner resp. → sex satisfaction	.07(.05)	.12(.04)**	**-.05(.02)**	-.09	-.02
SD → partner resp. → sex desire	.12(.04)**	.14(.04)***	**-.02(.01)**	-.04	-.002
SD → partner resp. → breakup	.27(.05)***	.19(.04)***	**.08(.03)**	.03	.13
SD → control → rel satisfaction	-.08(.04)	-.09(.04)*	**.01(.01)**	.000	.03
SD → control → sex satisfaction	.07(.05)	.05(.05)	**.02(.01)**	.000	.035
SD → control → sex desire	.12(.04)**	.10(.04)**	**.02(.01)**	.000	.04

Note. ***$p < .001$, **$p < .01$, *$p < .05$. BSE = bootstrapped SE. SD = sexual destiny beliefs. Rel = relationship. Sex = sexual. Resp. = responsibility. Bolded indirect effects indicate a significant effect (i.e., the confidence interval did not include 0).

2.2.4 Attributions as Mechanisms for Links Between Sexual Growth Beliefs and Relationship and Sexual Well-Being

Internal attributions. Sexual growth beliefs were significantly associated with higher internal attributions and, in turn, higher relationship satisfaction (b = .08, SE = .03, t(459) = 2.63, p = .009), commitment (b = .05, SE = .02, t(459) = 2.29, p = .022), and sexual satisfaction (b = .07, SE = .03, t(458) = 2.14, p = .033), and a lower likelihood of considering breaking up (b = -.14, SE = .03, t(459) = -4.36, p < .001; see Table 6). However, internal attributions were not significantly associated with sexual desire (b = -.01, SE = .03, t(459) = -.30, p = .767). With one exception, all significant indirect effects held controlling for implicit relationship beliefs. The exception was the effect of internal attributions on sexual satisfaction remained significant, but the indirect effect was reduced to non-significance (b = .07, SE = .03, t(456) = 2.18, p = .030; indirect effect 95% CI [-.001, .05]). However, when controlling for all other attribution dimensions, the effects of internal attributions on relationship satisfaction (b = .02, SE = .03, t(455) = .73, p = .464; indirect effect 95% CI [-.01, .01]), commitment (b = .02, SE = .02, t(455) = .93, p = .351; indirect effect 95% CI [-.004, .01]), sexual satisfaction (b = .01, SE = .03, t(454) = .39, p = .698; indirect effect 95% CI [-.01, .02]), and likelihood of considering breaking up (b = -.05, SE = .03, t(455) = -1.76, p = .079; indirect effect 95% CI [-.03, .003]) were reduced to non-significance. Overall, these indirect effects were not robust.

Global attributions. Sexual growth beliefs were also significantly associated with higher global attributions and, in turn, lower relationship satisfaction (b = -.09, SE = .03, t(459) = -2.71, p = .007) and sexual satisfaction (b = -.08, SE = .04, t(458) = -2.13, p = .033), and a greater likelihood of considering breaking up (b = .08, SE = .04, t(459) = 2.01, p = .045; see Table 6). However, global attributions were not significantly associated with commitment (b = -.02, SE =

.03, $t(459) = -.65$, $p = .514$) or sexual desire ($b = -.05$, $SE = .03$, $t(459) = -1.60$, $p = .111$). With two exceptions, all significant indirect effects remained significant when controlling for implicit relationship beliefs. First, while the effect of global attributions on sexual satisfaction remained significant, the indirect was reduced to non-significance (95% CI [-.04, .000]). Second, while the effect of global attributions on the likelihood of considering breaking up was reduced to non-significance ($b = .07$, $SE = .04$, $t(457) = 1.95$, $p = .051$), the total, partial, and indirect effects remained significant. Similarly, with one exception, all significant indirect effects remained significant when controlling for all other attribution dimensions. The exception was the effect of global attributions on sexual satisfaction was reduced to non-significance ($b = -.04$, $SE = .04$, $t(454) = -1.10$, $p = .273$; indirect effect 95% CI [-.03, .01]). Overall, these indirect effects predicting relationship satisfaction and likelihood of considering breaking up—but not sexual satisfaction – were robust.

Control attributions. Finally, sexual growth beliefs were also significantly associated with higher control attributions and, in turn, higher relationship satisfaction ($b = .09$, $SE = .03$, $t(459) = 2.73$, $p = .007$), sexual satisfaction ($b = .13$, $SE = .04$, $t(458) = 3.54$, $p < .001$), and sexual desire ($b = .14$, $SE = .03$, $t(459) = 4.95$, $p < .001$). However, control attributions were not significantly associated with commitment ($b = .04$, $SE = .03$, $t(459) = 1.59$, $p = .113$) or likelihood of considering breaking up ($b = -.05$, $SE = .04$, $t(459) = -1.42$, $p = .157$). All significant indirect effects held when controlling for implicit relationship beliefs. However, with the exception of the indirect effect for sexual desire, the significant indirect effects for relationship and sexual satisfaction were reduced to non-significance when controlling for all other attribution dimensions (relationship satisfaction: $b = .03$, $SE = .03$, $t(455) = 1.00$, $p = .318$;

indirect effect 95% CI [-.01, .02]; sexual satisfaction: b = .07, SE = .03, t(454) = 1.91, p = .057; indirect effect 95% CI [-.002, .04]). Overall, these indirect effects were somewhat robust.

Table 6

Internal, Global, and Control Mediations

Model	Total Effect	Direct Effect	Indirect Effect	95% Confidence Interval (bootstrapped)	
	B(SE)	*b*(SE)	*b*(BSE)	Lower Bound	Upper Bound
SG → internal → rel satisfaction	.14(.06)*	.12(.06)*	**.02(.01)**	.001	.04
SG → internal → commitment	.12(.05)*	.11(05)*	**.01(.01)**	.001	.03
SG → internal → sex satisfaction	.34(.07)***	.32(.07)***	**.02(.01)**	.000	.04
SG → internal → breakup	-.15(.07)*	-.11(.07)	**-.03(.02)**	-.07	-.01
SG → global → rel satisfaction	.14(.06)*	.17(.06)**	**-.03(.01)**	-.05	-.004
SG → global → sex satisfaction	.34(.07)***	.36(.07)***	**-.02(.01)**	-.05	-.002
SG → global → breakup	-.15(.07)*	-.17(.07)*	**.02(.01)**	.001	.05
SG → control → rel satisfaction	.14(.06)*	.12(.06)*	**.02(.01)**	.001	.04
SG → control → sex satisfaction	.34(.07)***	.31(.07)***	**.03(.01)**	.003	.06
SG → control → sex desire	.21(.06)***	.18(.06)**	**.03(.01)**	.004	.06

Note. ***$p < .001$, **$p < .01$, *$p < .05$. BSE = bootstrapped SE. SG = sexual growth beliefs. Rel = relationship. Sex = sexual. Bolded indirect effects indicate a significant effect (i.e., the confidence interval did not include 0).

2.2.5 Qualitative Analysis of Assigned Causes for Low Desire and Arousal

Finally, I conducted a content analysis of participants' open-ended responses about the main anticipated cause of their hypothetical low desire and arousal. I identified 13 themes (the same themes were identified in the causes of low sexual desire and arousal; see Table 7): boredom, relational changes, children and household, conflict, fatigue, relationship neglect, psychological, partner mistreatment, appearance and attraction, physical health, sex-related, work and school, not specific or did not understand. Excluding those who skipped these questions, participant responses for hypothetical low desire and arousal contained a range of 1 to 3 themes per response (low desire: $M = 1.19$; 17.5% of responses included more than 1 theme; low arousal: $M = 1.10$; 11.4% of responses included more than 1 theme), and most responses were specific to one type of cause. For hypothetical low desire, the three most common themes were psychological, fatigue, and physical health; similarly, the three most common themes for hypothetical low arousal were psychological, fatigue, and sex-related.

I also assessed whether sexual growth and destiny beliefs predicted the likelihood of mentioning a specific theme. The odds ratio (OR) reported below can be interpreted as for every one-point increase in sexual growth/destiny, the participant's response was the reported percentage more likely to report that theme. Beginning with causes for hypothetical low desire, for every one-point increase in sexual destiny beliefs, participants were 48% less likely to say that the cause was due to children and household responsibilities ($b = -.66$, $p = .009$, $OR = .52$, 95% CI [.31, .85]), 47% more likely to say that the cause was due to conflict ($b = .38$, $p = .012$, $OR = 1.47$, 95% CI [1.09, 1.98]), and 91% more likely to report a cause that was due to something unspecific, unknown, or they did not understand ($b = .64$, $p < .001$, $OR = 1.91$, 95% CI [1.31, 2.77]). In contrast, for every one-point increase in sexual growth beliefs, people were

75% more likely to say that the cause was due to conflict (*b* = .56, *p* = .049, *OR* = 1.75, 95% CI [1.00, 3.07]).

Turning to causes for hypothetical low arousal, for every one-point increase in sexual destiny beliefs, people were 56% more likely to say that the cause was due to something unspecific, unknown, or they did not understand (*b* = .45, *p* = .006, *OR* = 1.56, 95% CI [1.14, 2.14]), and 88% more likely to say that the cause was due to partner mistreatment (*b* = .63, *p* = .003, *OR* = 1.88, 95% CI [1.23, 2.85]). In contrast, for every one-point increase in sexual growth beliefs, people were 49% more likely to say that the cause was due to something psychological (*b* = .40, *p* = .004, *OR* = 1.49, 95% CI [1.14, 1.94]). All significant effects held controlling for implicit relationship beliefs, suggesting that the effects were unique to sexual beliefs.

Table 7

Qualitative Analysis

Categories	Description	Example	Situation 1 (Lower desire)		Situation 2 (Lower arousal)	
			Freq.	%	Freq.	%
1. Boredom	Boredom, routine, repetition, and familiarity.	"Too much routine again, things need to change, shake things up."	18	3.9	20	4.3
2. Relational changes	Changes in feelings about a partner, relationship dynamics, and feeling distanced from a partner.	"Drifting apart."	7	1.5	2	.4
3. Children & household	Children, having a baby, others in the house, household chores and obligations, and family responsibilities.	"Work and home obligations"	17	3,7	5	1.1
4. Conflict	Arguments, fights, and relationship problems.	"We had a fight recently."	23	5	11	2.4
5. Fatigue	Tired, overworked, low energy, exhaustion, and fatigue.	"Tiredness."	96	20.7	97	20.9
6. Relationship neglect	Failure to listen or cooperate, lack of effort, busy/not enough time spent together, unmet/ignored needs, unappreciated or unloved, and lack of affection.	"My partner not giving me time or appreciation outside of the bedroom."	20	4.3	9	1.9
7. Psychological	Poor mental health (depressed, anxious, low mood), stress, worry, negative emotion/feeling, distraction, overthinking, low self-esteem/confidence/self-conscious, and fears.	"Depression and anxiety."	137	29.5	124	26.7
8. Partner mistreatment	Lies, infidelity, negative partner behaviours, and mistreating a partner,	"My partner being horrible to me."	28	6	12	2.6
9. Appearance & attraction	Weight gain, poor hygiene, physical appearance (body, clothing), feel or look less attractive/desirable/sexy, self-image, and physical confidence.	"Losing attraction for my partner."	33	7.1	33	7.1

10. Physical health	Age, hormones, menstruation, menopause, ill/unwell/sick, pregnant/childbirth, medication, health issue, physical state/health, biology, exercise, physical pain/discomfort, low iron, cold temperature, alcohol, and digestion.	"Physical changes due to aging."	87	18.8	74	15.9
11. Sex-related	Recent sexual encounter, lack of sex, not in the mood/low libido, sexual avoidance, lack of touch/intimacy/passion, sexual dysfunction, sexual boredom/repetition, masturbation, sexual trauma, not sexually fulfilled, sexual rejection, lack of orgasm, harsh or lack of stimulation/foreplay, lack of enjoyment/enthusiasm, unsatisfying sexual experience, rushed sex, excessive talking, and recent use of pornography.	"Unsatisfying sex."	33	7.1	84	18.1
12. Work & school	Work/school obligations, work stress, tired from work, job loss/unemployment, and work issues.	"Tired from work/studies."	36	7.8	15	3.2
13. Not specific or did not understand	Response was unclear or vague, or did not understand or provide cause.	"Im not sure'	16	3.4	23	5

2.3 Footnotes

[1]I excluded 16 participants because their responses were deemed unreliable for the following reasons: suspicious Prolific ID, large amounts of missing data, attempting to complete the survey twice, indicating that they did not complete the survey openly and honestly, and skipping an item or providing a response to an item that did not align with the inclusion criteria (e.g., age and country of residence, respectively).

[2]Controlling for implicit relationship beliefs, the association between sexual growth beliefs and ease of recall was reduced to non-significance (b = .18, SE = .10, $t(458) = 1.91$, p = .056).

2.4 Brief Discussion

In summary, sexual destiny beliefs were associated with mixed attributions (higher partner responsibility, but also higher control), as were sexual growth beliefs (higher control, but also higher internal and global). Whereas people higher in sexual destiny beliefs found it more difficult to recall experiencing lower desire and arousal in the past four weeks, they were more likely to consider breaking up because of it. The opposite was true for people higher in sexual growth beliefs; it was easier for them to recall lower desire and arousal in the past four weeks, but they were less likely to consider breaking up because of it. Nearly all significant effects held controlling for ease of recall and implicit relationship beliefs, suggesting that these effects are robust and unique to beliefs about sexuality.

In this study, when people felt more control over the cause of their hypothetical low desire and arousal, they reported greater sexual well-being (i.e., higher satisfaction and desire). In contrast, attributing the cause to a partner's responsibility and believing it would be long-lasting were both associated with poorer relationship and sexual well-being (i.e., lower relationship and sexual satisfaction, commitment, and for stable attributions only, lower desire).

In response to the hypothetical situations, people who made more partner responsibility, stable, and global attributions said they would be more likely to consider breaking up—attributions which tend to be associated with poorer relationship and sexual quality more generally (e.g., Durtschi et al., 2011; Neff & Karney, 2004; Péloquin et al., 2018; Shnaider et al., 2014; Vannier et al., 2018). In addition, when they made more stable and global attributions, it was easier for them to recall experiencing low desire and arousal in the past four weeks. Internal attributions were not directly linked to relationship or sexual well-being in this study. Again, all significant effects held regardless of how easy or difficult it was for people to recall experiencing lower desire and arousal in the past four weeks, demonstrating the impact that attributions about negative situations can have for relationship and sexual well-being, regardless of whether causes are anticipated or experienced.

I was interested in whether attributions might explain links between implicit sexual beliefs and well-being. Beginning with people higher in sexual destiny beliefs, I found that when they attributed causes of low desire and arousal to their partner, they experienced poorer relationship and sexual well-being, and a greater likelihood of considering breaking up. Next, when people higher in sexual destiny beliefs felt more in control over the causes of low desire and arousal, they reported greater relationship and sexual well-being. Covariate analyses revealed that effects with partner responsibility—but not control—attributions were most robust. Based on theories of implicit beliefs, destiny believers tend to blame and punish others for negative behaviours (Erdley & Dweck, 1993) and are more inclined to disengage when faced with challenges (Sutherland & Rehman, 2018). Here, I demonstrate a specific example of these associations in the sexual domain and extend past theory to show the role of attributions for a sexual problem.

Turning to people higher in sexual growth beliefs, when they believed the causes of low desire and arousal were due to themselves (internal attributions), they reported greater relationship and sexual well-being, and a lower likelihood of considering breaking up. Similarly, when they felt more in control over the causes they assigned to hypothetical low desire and arousal, they reported greater relationship and sexual well-being. In contrast, when they believed the causes of low desire and arousal would impact other areas of their lives in addition to their sex lives, they reported poorer relationship and sexual well-being, and a greater likelihood of considering breaking up. Covariate analyses revealed that the effects for control attributions were the most robust when controlling for implicit relationship beliefs, but indirect effects for all mediators (internal, global, control) were mixed when controlling for all other attributions. In this context, seeing the cause as internal and controllable was associated with greater well-being, possibly because doing so facilitates more constructive coping strategies and mastery-oriented behaviours (Blackwell, 2007; Jodoin et al., 2011; Robins & Pals, 2002), whereas seeing the cause as something that impacts all areas of your life (i.e., exacerbating the consequences of a challenge) was associated with poorer outcomes. Research on growth beliefs shows that viewing challenges as opportunities to grow is associated with greater relationship maintenance and well-being (Maxwell et al., 2017; Raposo et al., 2020; Uppot et al., 2023), and that people who endorse these beliefs tend to make fewer helpless attributions and problem-solve more adaptively (Blackwell et al., 2007; Dweck, 1999; Hong et al., 1999; Robins & Pals, 2002). In this work, I show that feeling more in control over resolving sexual issues is one reason why people higher in sexual growth beliefs reap greater relationship and sexual benefits.

Finally, I qualitatively assessed the causes participants gave for low desire and arousal. Most responses were not multifaceted and included only one theme; however, this may be a

result of how the attributions measure was structured (i.e., I asked for the one main cause of low desire, so I cannot confirm whether participants would have otherwise indicated multiple causes if assessed differently). Across situations, participants said that the two most common anticipated causes for hypothetical low desire and arousal were psychological (e.g., poor mood, anxiety, depression, stress, etc.) and not getting enough sleep/feeling exhausted, which reflect common causes identified in past work assessing experienced—rather than anticipated—sexual challenges (e.g., Bodenmann et al., 2005; Murray & Millhausen, 2012; Simkins-Bullock, 1992; Trudel et al., 2001). I also tested whether sexual growth and destiny beliefs predicted the likelihood of mentioning a specific theme. Out of 26 themes across situations, I only found associations between implicit sexual beliefs and six themes. In general, this suggests that people higher (vs. lower) in sexual growth or destiny beliefs are typically not more likely to endorse a specific cause. Interestingly, I found that across both situations (low desire and arousal), people higher in sexual destiny beliefs were more likely to describe a cause that was more difficult to code (e.g., not specific enough, unknown, unclear, not applicable to them, etc.). People higher in destiny beliefs tend to make more helpless attributions in the face of challenges (Dweck & Leggett, 1988; Henderson & Dweck, 1990; Robins & Pals, 2002); in this context, it is possible that saying they did not know the cause may be an avoidance strategy. My findings extend previous work by showing that, unique to the sexual domain (effects held controlling for implicit relationship beliefs), people higher in sexual destiny beliefs struggled to explain and make sense of challenging sexual situations, which may have downstream implications for how adaptively they might cope. Although some participants in this sample indicated that they have experienced low desire before, it is unclear how severe or persistent their reports of "low" levels were, and more

work is needed to better understand the extent to which implicit sexual beliefs are associated with well-being outcomes among those coping with chronic levels of low desire.

CHAPTER THREE

Study 1 focused on hypothetical situations of low sexual desire and arousal. To ensure results generalized to couples actually coping with low sexual desire and arousal, my goal with Chapter Three was to test my predictions in two samples (Studies 2 and 3) of couples coping with one partner's clinically low desire (i.e., one partner met the criteria for Sexual Interest/ Arousal Disorder; SIAD). Past research has considered implicit sexual beliefs in the context of couples coping with normative declines in sexual well-being (e.g., Maxwell et al., 2017; Rossi et al., 2022; Uppott et al., 2023) and anticipated sexual challenges (Sutherland & Rehman, 2018), but this extension provided the first test of implicit sexual beliefs in a clinical sample coping with one person's diagnosis of chronic low desire and arousal.

The existing literature has also examined attributions for sexual challenges (e.g., vestibulodynia, orgasmic difficulty, erectile dysfunction, premature ejaculation, midlife changes in sexual responses, dyspareunia, infertility, acquired vaginismus; Bhutto et al., 2021; Fichten et al., 1988; Jodoin et al., 2008, 2011; Mansfield et al., 2000; Meana et al., 1999; Mitchell et al., 2011; Péloquin et al., 2018; Quadland, 1980; Reissing, 2012; Rowland et al., 2013; Rowland & Neal, 2014; Rowland et al., 2016), but by combining attribution theory with theories of implicit sexual beliefs in this clinical context, I showed for the first time whether sexual attributions explained links between implicit sexual beliefs and well-being among couples coping with an ongoing clinical sexual challenge.

Across Studies 2 and 3, I tested my questions using perspectives from both partners within couples. Given that most romantic couples are sexually monogamous (Blanchflower & Oswald, 2004), people tend to rely on their partners to have their sexual needs met (Day et al., 2015). As such, having both partners report on their implicit (lay beliefs) and attributions

provided an ideal opportunity to explore the partner dynamics at play in associations between implicit sexual beliefs, sexual attributions for desire (Study 3 only), and well-being. That is, rather than isolating the effects of people's own implicit sexual beliefs and/or sexual attributions on their own well-being (as demonstrated in Studies 1 and 4), the dyadic nature of Studies 2 and 3 allowed me to also test whether one person's beliefs or attributions were associated with their *partner's* experiences, providing a more holistic perspective of how beliefs and attributions function within long-term couples.

3 Study 2

My key goal for Study 2, which has been published in the Journal of Sex Research (Raposo et al., 2021), was to ensure results from Study 1 generalized to couples coping with low sexual desire and arousal. The results of Study 1 as well as previous research (e.g., Bohns et al., 2015; Bőthe et al., 2017; Maxwell et al., 2017; Raposo et al., 2020; Sutherland & Rehman, 2018; Uppott et al., 2023) demonstrates the promise of theories of implicit (lay) sexual beliefs for understanding differences in how people navigate sexual challenges or disagreements in relationships. People high in sexual growth beliefs tend to maintain positive sexual well-being, even during challenging periods in relationships (e.g., the transition to parenthood; Maxwell et al., 2017), whereas when people high in sexual destiny beliefs experience a sexual disagreement with their partner, they tend to report sex that is more frustrating and disappointing (Maxwell et al., 2017). However, previous research has not tested the role of sexual growth and destiny beliefs in navigating clinical sexual issues. Assessing this unique sample presents an opportunity to test initial links between sexual growth and destiny beliefs and sexual, relationship, and personal well-being for couples coping with clinically low sexual interest and arousal. Both partners completed an online baseline survey, followed by an online survey one year later.

I collaborated with researchers from Dalhousie University to recruit a dyadic sample of couples in which one person received a clinical diagnosis for Sexual Interest and Arousal Disorder (SIAD; $N = 97$ couples). This study also included a one-year longitudinal follow-up. The dyadic and longitudinal elements of this study extend past experimental research on implicit beliefs and desire (Sutherland & Rehman, 2018) by examining people diagnosed with low desire who were involved in romantic relationships, and their romantic partners. In this study, I tested the predictions that when the person with low desire and their partner were higher in sexual destiny beliefs, they and their partner would report poorer sexual, relationship, and personal well-being compared to those who were lower in sexual destiny beliefs; but when they reported higher sexual growth beliefs, they and their partner would report greater well-being. I also tested whether the effects persisted over time, differed based on the duration of the person's low desire, or were accounted for by people's perceived sexual compatibility with their partner. This research advanced the current understanding of the role of implicit sexual beliefs in couples coping with challenging sexual issues.

3.1 Methods

3.1.1 Participants and Procedure

My collaborators recruited people who met the diagnostic criteria for SIAD consisting of three or more of the following symptoms for at least six months, which were accompanied by significant distress and not attributed to another psychiatric or medical disorder: little to no sexual interest, sexual thoughts, sexual initiation/receptivity to a partner's sexual initiation, excitement or pleasure during sex (at least 75% of the time), responsive desire to sexual cues, or genital/non-genital sensations during sex (at least 75% of the time; American Psychiatric Association, 2013; Mitchell et al., 2016). To assess whether people met the diagnostic criteria,

participants were assessed in a clinical interview (described below). Participants were recruited through online and physical advertisements in Canada and the United States as part of a larger study (Rosen et al., 2019).

In addition to people meeting SIAD criteria and to ensure participating couples could meaningfully respond to the measures I assessed, eligible couples had to either be living together or have in-person contact at least four times per week, be in a committed relationship for at least six months, have had previous sexual contact with their partner, be 18 years of age or older, not currently pregnant or within one year post-partum, and be able to read and understand English. Many of the measures directly assessed sexuality-related variables, for which sexual experience and frequent in-person contact would have been necessary for participants to adequately comprehend and respond and to have the opportunity for sexual activity during the reporting period. I assessed three attention checks at Time 1: "This is an attention check. Please select 4 ('Almost completely')", "This is an attention check. Please select 1 ('Most of the time')", and "This is an attention check. Please select 7 ('Strongly Agree')." Twenty-six participants were excluded from the analyses for failing at least one attention check at Time 1.

As per recommendations for achieving sufficient power to detect medium-sized actor effects with dyadic data, the aim was to recruit 100 couples (Kenny et al., 2006). After excluding participants due to suspicious responses (n = 14), only one partner completing Time 1 (n = 10), or failing any attention check (n = 26), the final sample consisted of 97 people with SIAD and their partners (N = 88 men, seven women, two other). Participants ranged in age from 19 to 70 years (M = 31.64, SD = 8.53). The sample was primarily White/Caucasian (74.2%), straight/heterosexual (77.3%), and married (41.8%); the average relationship length was 7.67 years (SD = 7.16), and people were coping with SIAD for 4.55 years on average (SD = 5.26). See

Table 8 for a full breakdown of sample characteristics, and see Rosen et al. (2019) for more information about this sample.

Although I did not assess whether the partner of the person with SIAD had a confirmed diagnosis of a sexual dysfunction, another study that utilized the same data set from which our findings were derived showed that the male partners of the person with SIAD (n = 89) reported significantly more difficulties with sexual functioning (e.g., orgasm, erectile function; assessed with the International Index of Erectile Function; Rosen et al., 1997) and lower sexual satisfaction (overall and with intercourse) in the past four weeks, compared to male partners of the person without a diagnosis of SIAD (Rosen et al., 2019). However, their level of sexual functioning did not reach clinical levels of impairment.

Table 8

Sample Characteristics (N = 97 Couples)

	People with SIAD		Partners	
	M (range) or *n*	*SD* or %	*M* (range) or *n*	*SD* or %
Age (years)	31.03 (19.07 – 57.48)	7.73	32.25 (19.07 – 70.34)	9.27
Ethnicity				
African American/Black	2	2.1%	2	2.1%
Asian American/Asian	9	9.3%	9	9.3%
Caucasian/White	69	71.1%	75	77.3%
East Indian	1	1%	1	1%
Hispanic/Latino/Latina	4	4.1%	2	2.1%
Middle Eastern/Central Asian	3	3.1%	3	3.1%
Biracial/Multiracial	3	3.1%	3	3.1%
Not listed	5	5.2%	2	2.1%
Relationship status				
Dating	10	10.3%	-	-
Cohabitating	26	26.8%	-	-
Common-law	13	13.4%	-	-
Engaged	7	7.2%	-	-
Married	41	42.3%	-	-
Sexual orientation				
Asexual	1	1%	3	3.1%
Bisexual	15	15.5%	6	6.2%
Lesbian	3	3.1%	4	4.1%
Straight/Heterosexual	68	70.1%	82	84.5%
Pansexual	4	4.1%	0	0%
Queer	4	4.1%	2	2.1%
Not listed	2	2.1%	0	0%
Relationship duration (months)	92.07 (7.5 – 426.50)	85.92	-	-
SIAD duration (months)	54.65 (3 – 372)	63.14	-	-

Sexual frequency (couple)	1.09 (0 – 3.30)	.73	-	-

Note. "Not listed" includes participants who did not identify with one of the categories. Variables that did not vary between partners (i.e., relationship status, relationship duration, sexual frequency) are reported in the People with SIAD's column and denoted with a dash (-) in the Partners' column. SIAD duration is only reported in the People with SIAD's column (and denoted with a dash in the Partners' column) because only their responses were assessed.

Couples were pre-screened for eligibility via telephone as part of a larger study (Rosen et al., 2019). Then, the person reporting low desire completed a clinical interview (30–45 minutes) to determine a diagnosis of SIAD over the telephone with a doctorate-level clinical psychologist or graduate student in a clinical psychology program. Details about the clinical interview are available on the Open Science Framework (OSF): https://osf.io/mecrq/?view_only=b2dcc065d6864c22b515b28435da2d9a. The clinical interview was designed to rule out other related factors (e.g., experiencing low desire due to depression, side effects of medications, etc.). Once eligibility and consent were obtained, participants completed an online baseline survey (Time 1), followed by an online survey one year later (Time 2). If participants did not complete the survey within one week from receiving the link, then they received a phone call from a research assistant and a reminder e-mail two and three weeks after. Surveys expired after four weeks. Each partner was compensated 18 CAD ($15 USD) as an Amazon gift card for completing Time 1, and 10 CAD ($8 USD) as an Amazon gift card for completing Time 2. Nine couples from the original sample of 97 couples were no longer with their partner by the Time 2 survey and one couple withdrew. Of the 87 remaining couples, at least one member from 72 couples completed Time 2 (a retention rate of 74%), and there were 66 couples (68%) for whom both partners completed Time 2.

3.1.2 Measures

In addition to the key variables outlined below, both partners reported their age, relationship duration and sexual frequency (both were couple-level variables calculated by taking the mean of each partner's reports). See Table 9 for correlations between all measures at Time 1.

Table 9

Correlations Between Key Variables in Couples Coping with SIAD at Time 1

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	**.89*** **	.79***	−.18	−.07	.11	.44***	−.11	−.12	.08	−.28**	.08	−.14	−.20*
2. Rel. length	.71***	**.995*** **	−.04	−.15	.16	.44***	−.03	−.09	.05	−.22*	.04	−.11	−.11
3. Sexual freq.	−.07	−.04	**.65*** **	−.13	.15	−.05	.33**	.34**	−.05	.14	.02	.01	−.08
4. SDB	.24*	.06	.05	**.21***	−.27**	−.11	−.34**	−.03	−.06	−.36***	.27**	.27**	.24*
5. SGB	.15	.25*	.04	−.11	**.32*** *	.13	.21*	.24*	−.09	.16	−.18	−.16	−.05
6. SIAD duration	.38***	.44***	−.05	.06	.13	-	−.22*	−.18	−.20	−.14	.15	−.13	−.18
7. Compatibility	−.11	−.04	.27**	−.23*	.10	−.21*	**.28*** *	.16	−.11	.33**	−.18	−.07	−.08
Sexual well-being													
8. Sexual desire	−.09	.06	.06	−.21*	−.07	−.06	.11	**−.28*** *	−.16	.23*	.03	−.01	−.08
9. Sexual distress	.11	.10	−.20*	.15	.03	.01	−.36***	−.10	**.14**	−.02	−.07	.27**	.19
Rel. well-being													
10. Rel. satisfaction	−.17	−.06	.21*	−.39***	.09	−.18	.59***	.30**	−.56***	**.48*** **	−.55***	−.30**	−.29**
11. Conflict	.08	.00	−.06	.12	−.15	.01	−.22*	−.06	.18	−.58***	**.50*** **	.26*	.15
Personal well-being													
12. Anxiety	.07	−.02	−.06	.06	.02	.00	−.19	−.14	.44***	−.45***	.32**	**.22***	.77***
13. Depression	.02	.06	.03	.01	.06	−.07	.00	−.23*	.44***	−.33**	.29**	.75***	**.21***

Note. ***p < .001, **p < .01, *p < .05. Person with SIAD's correlations are above the diagonal. Partner's correlations are below the diagonal. Bolded correlations are between both partners' scores. Rel. = relationship. Freq. = frequency. SDB = sexual destiny beliefs. SGB = sexual growth beliefs. SIAD = sexual interest/arousal disorder. Compatibility = perceived partner sexual compatibility. SIAD duration is denoted with a dash (-) on the diagonal because we only assessed it for the person with SIAD (not their partner). N = 97

people with SIAD and 97 partners, except for correlations including “SIAD duration” (n = 95 for both roles) or “age” (n = 97 people with SIAD and 96 partners).

Sexual growth and destiny beliefs. I measured implicit sexual beliefs using the shortened version of the Implicit Theories of Sex Scale (Maxwell et al., 2017, Study 5) with items rated on a 7-point scale (1 = "strongly disagree" to 7 = "strongly agree"). Five items assessed *sexual destiny beliefs* (e.g., "A couple is either destined to have a satisfying sex life or they are not"; person with SIAD: α = .85, *M* = 2.37, *SD* = 1.12; partner: α = .80, *M* = 2.41, *SD* = 1.07) and five items assessed *sexual growth beliefs* (e.g., "In a relationship, maintaining a satisfying sex life requires effort"; person with SIAD: α = .84, *M* = 6.00, *SD* = .85; partner: α = .83, *M* = 5.86, *SD* = .99). Individuals were scored for both sexual destiny and sexual growth, and both beliefs were tested simultaneously in statistical models as predictors.

Perceived sexual compatibility. I assessed perceived sexual compatibility with one item at Time 1 (Maxwell et al., 2017). Participants rated the item "My partner is as close to ideal as a sexual partner as I ever expect to find" on a 7-point scale from 1 = "strongly disagree" to 7 = "strongly agree" (person with SIAD: *M* = 4.37, *SD* = 1.90; partner: *M* = 4.42, *SD* = 1.80).

Sexual frequency. I assessed sexual frequency in the past four weeks with five items at Time 1: oral sex (giving to partner), oral sex (receiving from partner), giving manual stimulation (touching or massaging your partner's genitals), receiving manual stimulation (your partner touching or massaging your genitals), and sexual intercourse with vaginal penetration. Participants rated items on a 7-point scale: 0 = "not at all", 1 = "once or twice", 2 = "once a week", 3 = "2–3 times a week", 4 = "4–5 times a week", 5 = "once a day", 6 = "more than once a day". Both partners' scores were highly correlated (r = .65, p < .001), so I calculated a couple-level average sexual frequency variable (*M* = 1.09, *SD* = .73; an average sexual frequency that corresponded to about once or twice in the past four weeks; i.e., a score slightly greater than 1 = "once or twice").

Sexual well-being. Sexual well-being in this study included sexual desire and sexual distress.

Sexual desire. I assessed sexual desire with a modified version of the desire subscale of the Female Sexual Function Index (FSFI; Rosen et al., 2000; see also Masheb et al., 2004). Participants rated two items on 5-point scales: "Over the past four weeks, how often did you feel sexual desire or interest for your partner?" (1 = "almost always or always" to 5 = "almost never or never") and "Over the past four weeks, how would you rate your level (degree) of sexual desire or interest?" (1 = "very high" to 5 = "very low or none at all"). Items were reverse-coded (person with SIAD: r between items = .54, $p < .001$, $M = 1.79$, $SD = .70$; partner: $r = .66$, $p < .001$, $M = 3.95$, $SD = .89$) such that higher scores indicate higher desire. I assessed the same items at Time 2 (person with SIAD: $r = .68$, $p < .001$, $M = 2.31$, $SD = 1.00$; partner: $r = .56$, $p < .001$, $M = 4.01$, $SD = .80$).

Sexual distress. I assessed sexual distress with the Female Sexual Distress Scale–Revised (DeRogatis et al., 2008; also validated in men, Santos-Iglesias et al., 2018). Participants rated thirteen items about their sexual distress in the past 30 days on 5-point scales (e.g., "How often did you feel distressed about your sex life;" 0 = "never" to 4 = "always"; person with SIAD: $\alpha = .91$, $M = 30.08$, $SD = 9.85$; partner: $\alpha = .92$, $M = 17.62$, $SD = 10.49$). The total possible score was 52, and higher scores reflect greater sexual distress. I assessed the same items at Time 2 (person with SIAD: $\alpha = .95$, $M = 23.17$, $SD = 11.65$; partner: $\alpha = .95$, $M = 18.30$, $SD = 11.02$).

Relationship well-being. Relationship well-being in this study included relationship satisfaction and conflict.

***Relationship satisfaction*.** I assessed relationship satisfaction with the 16-item Couples Satisfaction Index (CSI-16; Funk & Rogge, 2007). I assessed items (e.g., "Please indicate the

degree of happiness, all things considered, of your relationship") with a variety of 6- and 7-point scales (person with SIAD: α = .97, *M* = 58.37, *SD* = 15.40; partner: α = .96, *M* = 60.53, *SD* = 13.12). The total possible score was 81, and higher scores indicate higher relationship satisfaction. I assessed the same items at Time 2 (person with SIAD: α = .97, *M* = 58.26, *SD* = 15.37; partner: α = .98, *M* = 59.42, *SD* = 16.47).

Conflict. I measured conflict with two items from the Revised Dyadic Adjustment Scale (RDAS; Busby et al., 1995; person with SIAD: *r* = .67, *p* < .001, *M* = 1.94, *SD* = .70; partner: *r* = .64, *p* < .001, *M* = 1.81, *SD* = .64). Participants rated two items (i.e., "How often do you and your partner quarrel (i.e., argue, disagree, conflict)?" and "How often do you and your partner 'get on each other's nerves'?") on 6-point reverse-coded scales (0 = "all of the time" to 5 = "never"). Higher scores indicate more conflict. I assessed the same items at Time 2 (person with SIAD: *r* between items = .65, *p* < .001, *M* = 1.88, *SD* = .78; partner: *r* = .70, *p* < .001, *M* = 1.86, *SD* = .66).

Personal Well-Being. Personal well-being in this study included anxiety and depression.

Anxiety. I assessed anxiety symptoms with the short form of the State-Trait Anxiety Inventory (Spielberger et al., 1968). Participants rated six items (e.g., "I am worried") on a 4-point scale (1 = "not at all" to 4 = "very much"; person with SIAD: α = .88, *M* = 14.79, *SD* = 4.39; partner: α = .84, *M* = 12.20, *SD* = 3.69). The total possible score was 24, and higher scores reflect higher levels of anxiety symptoms. I assessed the same items at Time 2 (person with SIAD: α = .86, *M* = 14.00, *SD* = 4.20; partner: α = .86, *M* = 12.23, *SD* = 3.89).

Depression. I assessed depressive symptoms with the Beck Depression Inventory-II (BDI-II; Beck et al., 1996). Participants rated 20 items (e.g., "sadness," "pessimism") on a variety of 4-point scales (person with SIAD: α = .94, *M* = 14.94, *SD* = 11.69; partner: α = .89, *M*

= 10.19, *SD* = 7.70). I assessed the same items at Time 2 (person with SIAD: α = .92, *M* = 11.42, *SD* = 9.72; partner: α = .93, *M* = 9.26, *SD* = 8.34). The total possible score was 60, and higher summed scores indicated higher levels of depressive symptoms.

3.1.3 Data Analysis Strategy

Data were analyzed using multilevel modeling guided by the Actor-Partner Interdependence Model (Kenny et al., 2006) in SPSS 23.0. Data and syntax for the analyses are available on the OSF: https://osf.io/mecrq/?view_only=b2dcc065d6864c22b515b28435da2d9a. I tested distinguishable (1 = "person with SIAD", 2 = "person with SIAD's partner") two-level models in which persons were nested within dyads (Kenny et al., 2006), and only one outcome variable was assessed per model. I grand-mean centered all predictors in the models (i.e., actor and partner sexual destiny beliefs and sexual growth beliefs), which represent between-person differences. Unstandardized *b*s can be interpreted as the average change in the dependent variable for every one-unit change in the predictor value. To rule out alternative explanations, I tested moderations between sexual destiny beliefs and sexual growth beliefs and either SIAD duration (i.e., assessed by asking the person with SIAD how many months they have experienced low sexual interest/arousal) or perceived sexual compatibility. I probed significant interactions by calculating the simple slope effects using one standard deviation (*SD*) value below and above the sample mean of the moderator (Aiken et al., 1991).

Next, to test whether key outcomes differed from Time 1 (baseline) to Time 2 (one-year follow-up) in people with SIAD and their partners, I conducted paired-sample t-tests. For the variables that differed from Time 1 to Time 2 for either partner, I then tested whether the grand-mean centered Time 1 predictors (i.e., actor and partner sexual destiny beliefs and sexual growth beliefs) were associated with changes in the outcomes one year later, by predicting the outcome

one year later while accounting for the person's grand-mean centered outcome as assessed at Time 1. I also tested whether there were differences in any of the key outcomes between people with SIAD who completed Time 2 and people with SIAD who did not complete Time 2.

3.2 Results

3.2.1 Time 1 Analyses

Sexual well-being. First, when the person with SIAD reported higher sexual destiny beliefs, the partner felt lower sexual desire (see Table 10). There were no other associations between sexual destiny beliefs and either partner's sexual well-being. In contrast, when the person with SIAD reported higher sexual growth beliefs, they reported higher sexual desire, but their partner reported lower sexual desire. There were no other significant associations between sexual growth beliefs and either partner's sexual well-being.[1]

Table 10

Associations Between Implicit Sexual Beliefs and Sexual Well-Being

	SIAD sexual desire		Partner sexual desire		SIAD sexual distress		Partner sexual distress	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
SIAD SDB	.01(.07)	.21	−.23(.08)	−2.82**	−.75(.97)	−.78	−.29(1.04)	−.28
Partner SDB	.08(.07)	1.12	−.16(.08)	−1.98	−1.01(.97)	−1.04	1.49(1.04)	1.44
SIAD SGB	.22(.09)	2.44*	−.24(.11)	−2.21*	−1.17(1.29)	−.91	−.61(1.38)	−.44
Partner SGB	.01(.08)	.07	−.09(.09)	−.93	−.92(1.09)	−.84	.61(1.17)	.52

Note. ***$p < .001$, **$p < .01$, *$p < .05$. I used unstandardized beta (*b*) coefficients. Degrees of freedom were equal to 92. $N = 97$ couples. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs.

Relationship well-being. Next, when the person with SIAD reported higher sexual destiny beliefs, both they and their partner reported lower relationship satisfaction and higher conflict (see Table 11). When the partner of the person with SIAD reported higher sexual destiny beliefs, they reported lower relationship satisfaction. There were no other significant effects of sexual destiny beliefs, or between either partner's sexual growth beliefs, on relationship well-being.

Table 11

Associations Between Implicit Sexual Beliefs and Relationship Well-Being

	SIAD relationship satisfaction		Partner relationship satisfaction		SIAD conflict		Partner conflict	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
SIAD SDB	-4.72(1.43)	-3.30**	-3.13(1.16)	-2.71**	.16(.07)	2.32*	.21(.06)	3.59**
Partner SDB	-.70(1.43)	-.49	-4.05(1.16)	-3.50**	.005(.07)	.07	.02(.06)	.34
SIAD SGB	1.48(1.91)	.78	.78(1.54)	.50	-.12(.09)	-1.29	.003(.08)	.03
Partner SGB	-.95(1.61)	-.59	-.40(1.30)	-.31	.05(.08)	.68	-.03(.07)	-.49

Note. ***$p < .001$, **$p < .01$, *$p < .05$. I used unstandardized beta (*b*) coefficients. Degrees of freedom were equal to 92. $N = 97$ couples. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs.

Personal well-being. Finally, when the person with SIAD reported higher sexual destiny beliefs, they reported higher anxiety, and both they and their partner reported more depressive symptoms (see Table 12). When the partner of the person with SIAD reported higher sexual destiny beliefs, the person with SIAD reported lower anxiety and fewer depressive symptoms. There were no other significant effects of sexual destiny beliefs, and there were no significant associations between either partner's sexual growth beliefs and personal well-being.

Table 12

Associations Between Implicit Sexual Beliefs and Personal Well-Being

	SIAD anxiety		Partner anxiety		SIAD depression		Partner depression	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
SIAD SDB	1.14(.41)	2.80**	.64(.36)	1.79	3.09(1.09)	2.85**	1.63(.75)	2.19*
Partner SDB	-.94(.41)	-2.31*	.04(.36)	.11	-3.08(1.09)	-2.83**	-.22(.75)	-.29
SIAD SGB	-.66(.55)	-1.22	-.47(.48)	-.98	-.09(1.45)	-.07	-.28(1.00)	-.28
Partner SGB	.09(.46)	.20	.41(.41)	1.00	-.24(1.23)	-.20	.98(.84)	1.17

Note. ***$p < .001$, **$p < .01$, *$p < .05$. I used unstandardized beta (*b*) coefficients. Degrees of freedom were equal to 92. *N* = 97 couples. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs.

In sum, when the person with SIAD reported higher sexual destiny beliefs, they reported lower relationship satisfaction and higher conflict, higher anxiety, and more depressive symptoms, and their partner reported lower sexual desire, lower relationship satisfaction, higher conflict, and more depressive symptoms. When the partner was higher in sexual destiny beliefs, they reported lower relationship satisfaction, but the person with SIAD reported lower anxiety

and fewer depressive symptoms. Holding higher sexual growth beliefs was not significantly associated with well-being, with two exceptions. When the person with SIAD reported higher sexual growth beliefs, they reported higher sexual desire, but their partner reported lower sexual desire.

3.2.2 Time 2 Analyses

Next, I report the associations between sexual growth and destiny beliefs and couples' well-being one year later. First, I conducted a paired-sample t-test to compare sexual, relationship, and personal well-being outcomes at Time 1 (baseline) to Time 2 (one-year follow-up) in people with SIAD and their partners who were still in a relationship one year later to determine if there were changes in these outcomes over time. Given that some couples did not complete Time 2 or broke up and needed to be excluded from the Time 2 data, they were also excluded from the Time 1 data in the following paired-sample t-test analyses. Thus, the following means and standard deviations for variables at Time 1 differ slightly from the values reported in the Measures section above. Overall there was a significant increase in sexual desire for people with SIAD from Time 1 (M = 1.76, SD = .73) to Time 2 (M = 2.31, SD = 1.00), $t(68) = -4.85$, $p < .001$. In addition, people with SIAD also reported lower sexual distress from Time 1 (M = 29.32, SD = 9.13) to Time 2 (M = 23.17, SD = 11.65), $t(68) = 4.69$, $p < .001$, as well as fewer depressive symptoms from Time 1 (M = 13.75, SD = 10.89) to Time 2 (M = 11.42, SD = 9.72), $t(68) = 2.01$, $p = .048$. There were no other significant differences between Time 1 and Time 2 in people with SIAD or their partners. Given that only 9% of people with SIAD in this sample reported seeking treatment over the previous year, it seems that the key indicators of SIAD – sexual desire and distress – showed some natural improvement over time, as did people with SIAD's depressive symptoms.

To ensure that those who completed Time 2 did not differ significantly from those who did not complete Time 2, I also conducted an independent-samples t-test to compare the sexual, relationship, and personal well-being outcomes of people with SIAD who completed Time 2 (n = 70) to people with SIAD who did not (n = 27).[2] There were no significant differences in any outcome variable, indicating that those who completed Time 2 were not significantly different in our key variables of interest from those who did not participate at Time 2.

Only people with SIAD, but not their partners, demonstrated changes in the key outcomes over time; therefore, I tested the effects of people with SIAD's and their partners' sexual growth and destiny beliefs at Time 1 on only the people with SIAD's sexual and personal well-being outcomes that differed one year later. That is, I only tested effects for the person with SIAD's well-being over time because only the person with SIAD (not their partner) showed significant changes in sexual and personal well-being (i.e., sexual desire, sexual distress, and depression). All longitudinal analyses were conducted using multiple regression models (given I was analyzing changes in only one couple member). After accounting for the outcome of interest at Time 1, I did not find any significant associations between either partner's sexual growth and destiny beliefs at Time 1 and changes in people with SIAD's sexual, relationship and personal well-being at Time 2 (see Table 13).

Table 13

Associations Between the Person with SIAD's Implicit Sexual Beliefs and Their Sexual and Personal Well-Being One Year Later

	Sexual desire		Sexual distress		Depression	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*

SIAD SDB	.05(.10)	.47	1.95(1.16)	1.68	-.17(.97)	-.18
SIAD SGB	-.07(.15)	-.47	.19(1.67)	.11	.65(1.33)	.49
Partner SDB	-.16(.10)	-1.55	-.05(1.16)	-.05	.89(.96)	.92
Partner SGB	-.14(.12)	-1.24	-.68(1.34)	-.51	-.81(1.05)	-.77

Note. ***$p < .001$, **$p < .01$, *$p < .05$. I used unstandardized beta (*b*) coefficients. Degrees of freedom were equal to 63. *N* = 69 people with SIAD. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs.

3.2.3 Ruling Out Alternative Explanations

Duration of SIAD. Next, I aimed to rule out whether effects differed based on the duration with which the person with SIAD in this sample had been coping with low sexual desire. It is possible that growth beliefs would no longer have a positive association with one's sexual desire when couples have been coping with SIAD for a long time. None of the associations were significantly moderated by the duration of low desire, suggesting that the findings are consistent both for couples who have been coping with the person with low desire for shorter as well as longer durations.

Perceived sexual compatibility. Lastly, I aimed to rule out whether effects differed based on evaluations of the extent to which people perceived their partner as sexually compatible. Perceived sexual compatibility may have been driving the effects such that having a compatible partner reduces the importance of sexual beliefs for well-being. It is also possible that destiny beliefs were particularly impactful when people perceived their partner as lower versus higher in overall sexual compatibility (e.g., Franiuk et al., 2002; Maxwell et al., 2017). However, all effects reported above remained significant when actors' and partners' perceptions of sexual

compatibility were controlled in the model, suggesting that perceived sexual compatibility was not driving the effects.

Finally, with one exception, none of the associations were significantly moderated by perceived sexual compatibility. The exception was that the association between the person with SIAD's sexual destiny beliefs and their own reports of conflict was moderated by their partner's perceptions of sexual compatibility at Time 1, $b = .11$, $SE = .05$, $t(82) = 2.28$, $p = .025$. For the person with SIAD, when their partner perceived them as being highly sexually compatible with them (+1 *SD*), the person with SIAD's greater sexual destiny beliefs were unexpectedly associated with higher conflict, $b = .36$, $SE = .11$, $t(82) = 3.32$, $p = .001$, whereas when their partner perceived them as being low in sexual compatibility (−1 *SD*), the person with SIAD's sexual destiny beliefs no longer predicted conflict, $b = -.04$, $SE = .12$, $t(82) = -.29$, $p = .770$. Given that there were no significant effects for Time 2, I did not test whether longitudinal effects differed by perceived sexual compatibility.

3.3 Footnotes

[1]I also tested the associations between sexual growth and destiny beliefs and another measure of desire – the partner-focused dyadic subscale of the Sexual Desire Inventory (SDI; Moyano et al., 2017; Spector et al., 1996). Consistent with when desire was assessed with a modified version of the desire subscale of the FSFI (Rosen et al., 2000), as assessed by the SDI, the person with SIAD's sexual growth beliefs were associated with their own higher sexual desire, $b = 3.45$, $SE = 1.15$, $t(92) = 3.01$, $p = .003$. Uniquely for the SDI at Time 2, the partner's sexual destiny beliefs were associated with the person with SIAD's lower sexual desire at Time 2, $b = -2.44$, $SE = 1.01$, $t(63) = -2.41$, $p = .019$. None of the effects predicting sexual desire were moderated by the person with SIAD's duration of SIAD or either partner's perceptions of sexual compatibility.

Finally, controlling for both partners' perceived sexual compatibility, the effect of the person with SIAD's sexual growth beliefs on their own sexual desire was still statistically significant, $b = 2.81$, $SE = 1.04$, $t(90) = 2.69$, $p = .009$, as was the effect of a partner's sexual destiny beliefs on the person with SIAD's lower sexual desire at Time 2, $b = -2.37$, $SE = 1.04$, $t(61) = -2.28$, $p = .026$. However, other associations were not replicated with the SDI. Specifically, the person with SIAD's sexual growth beliefs were not associated with their partner's sexual desire, $b = -.81$, $SE = 1.06$, $t(92) = -.76$, $p = .449$, and neither were their sexual destiny beliefs, $b = -.97$, $SE = .79$, $t(92) = -1.23$, $p = .223$. Similarly, controlling for both partners' perceived sexual compatibility, the person with SIAD's sexual destiny beliefs were no longer associated with their partner's sexual desire, $b = -.63$, $SE = .84$, $t(90) = -.75$, $p = .456$, and neither were their sexual growth beliefs, $b = -.95$, $SE = 1.07$, $t(90) = -.89$, $p = .376$.

[2]I conducted independent samples t-tests to assess whether there were key demographic differences (i.e., age, relationship duration, SIAD duration) in people with SIAD who did vs. did not complete Time 2. There were no significant differences in age, relationship duration, or SIAD duration, indicating that those who participated at Time 2 were not significantly different in key demographic variables from those who did not participate at Time 2. In addition, I conducted an additional independent samples t-test to compare the sexual, relationship, and personal well-being outcomes of partners of people with SIAD who completed Time 2 to partners of people with SIAD who did not. Like comparisons in people with SIAD, there were no significant differences in any outcome variable for partners, indicating that the partners of those who completed Time 2 were not significantly different in our key variables of interest from the partners of those who did not participate at Time 2.

3.4 Brief Discussion

In the first investigation of sexual growth and destiny beliefs among couples coping with clinically low sexual desire, I found that when the person with SIAD reported higher sexual destiny beliefs, they reported lower relationship satisfaction and higher conflict, higher anxiety, and more depressive symptoms, and their partner reported lower sexual desire, lower relationship satisfaction, higher conflict, and more depressive symptoms. When the partner was higher in sexual destiny beliefs, they reported lower relationship satisfaction, but the person with SIAD reported lower anxiety and fewer depressive symptoms. When the person with SIAD reported higher sexual growth beliefs, they reported higher sexual desire, but their partner reported lower sexual desire.

After accounting for the outcome of interest at baseline, I did not find any significant associations between either partner's sexual growth and destiny beliefs at baseline and changes in the person with SIAD's sexual, relationship and personal well-being one year later. Additional research with a smaller follow-up interval is needed to better understand whether effects of implicit sexual beliefs on well-being last for shorter periods of time. None of the associations were significantly moderated by the duration in which couples were coping with the person's SIAD, and with one exception, none of the associations were significantly moderated by perceived partner sexual compatibility. The exception was that the association between the person with SIAD's sexual destiny beliefs and their own reports of conflict was moderated by their partner's perceptions of sexual compatibility at Time 1. For the person with SIAD, when their partner perceived them as being highly sexually compatible with them, the person with SIAD's greater sexual destiny beliefs were unexpectedly associated with higher conflict, whereas when their partner perceived them as being low in sexual compatibility, the person with SIAD's

sexual destiny beliefs no longer predicted conflict. Overall, in line with past work on implicit sexual beliefs in non-clinical samples (Maxwell et al., 2017), I found that people higher in sexual destiny beliefs report lower well-being in the face of a sexual problem, whereas people higher in sexual growth beliefs tend to maintain well-being. In fact, findings showed that even in the context of coping with clinically low desire, the person with SIAD with higher sexual growth beliefs reported higher sexual desire—a finding which has since helped to inform, or has been replicated in, other work (e.g., Rossi et al., 2022; Rossi et al., 2023; Uppot et al., 2023).

There were, however, some unexpected associations. First, when the partner was higher in sexual destiny beliefs, the person with SIAD reported lower anxiety and depressive symptoms. It is possible that having a partner who endorses sexual destiny beliefs (i.e., who views sexual satisfaction as the result of natural sexual compatibility) may buffer the person with SIAD's symptoms of anxiety and depression by limiting their focus on "fixing" their low desire (i.e., reducing the pressure placed on them). Rossi et al. (2022) found a similar buffering effect of sexual destiny beliefs among a sample of couples transitioning to parenthood, such that partners' sexual destiny beliefs in pregnancy were linked to both partners' higher desire three months into postpartum. In their work, researchers postulated that sexual destiny beliefs may be associated with viewing sexual changes as being more short-lived, which may have offset the concerns they would have otherwise reported. Second, when the person with SIAD was higher in sexual growth beliefs, their partner felt lower desire. High sexual growth beliefs are associated with increased efforts to work on challenges (Maxwell et al., 2017). However, in the context of coping with chronic levels of low desire and arousal, partners may begin to feel turned off when people with SIAD who are high in sexual growth beliefs are persistently focused on working through their distressing sexual issue. Again, a similar finding has since been demonstrated by Rossi et al.

(2022), such that partners' higher sexual growth beliefs in pregnancy were associated with new mothers' lower desire three months into postpartum. In their work, researchers posited that focusing on working through sexual challenges may present an additional stressor for new parents during an already vulnerable and stressful time, which could have dampened their desire over time (Rossi et al., 2022). This work presents novel targets for future intervention research, and new directions for future work on implicit sexual beliefs to consider, including the extent to which implicit sexual beliefs are associated with daily well-being (to demonstrate more immediate effects at smaller intervals), and whether sexual attributions remain a mechanism (as demonstrated in Study 1) among couples coping with clinically low desire.

4 Study 3

Study 3 is a daily diary study of couples coping with Sexual Interest and Arousal Disorder (SIAD). I had three key goals for this study to extend my findings from Studies 1 and 2, all centering around the unique extension that this study provides: test the mediating role of attributions for low desire in the associations between sexual growth, destiny beliefs and well-being among couples coping with lived sexual challenges over time. First, I tested initial links between implicit sexual beliefs and attributions for low desire among couples coping with one partner's clinically low sexual interest and arousal, which allowed me to conceptually replicate main effects and mediations from Study 1 among couples coping with actual (as opposed to hypothetical) sexual challenges. Second, by including a 56-day daily diary component to this study, I was able to repeatedly sample the attributions they made for the person with SIAD's level of desire each day, as well as daily sexual and relationship well-being (rather than testing all variables at the same time-point), providing a more accurate assessment of attributions in daily life. Third, I added a modified assessment of attributions specific to a *partner's* level of

sexual desire, which allowed me to test the extent to which people made attributions about a partner's low desire, as well as how making attributions about one's partner is associated with people's own and their partner's well-being, shedding additional light on partner dynamics shown in Study 2 and existing findings (e.g., Davis et al., 2015; Fichten et al., 1988; Jodoin et al., 2008; Simkins-Bullock et al., 1992).

I focused on women and gender diverse individuals who met the diagnostic criteria for SIAD, and their partners. Each couple member was asked to independently complete a baseline survey, 56 daily diary surveys, and follow-up surveys 6- and 12-months later, all completed online. For my dissertation, I focused on the baseline and daily diary surveys only. In addition to key well-being variables assessed in mediation models in Study 1 (sexual satisfaction, sexual desire, relationship satisfaction, commitment), I also tested sexual distress as this is a key component of SIAD diagnostic criteria. Given that effects may differ based on the duration of the person's low desire, that negative attribution dimensions for negative events tend to be associated with greater depression (e.g., Abramson et al., 1978; Peterson & Seligman, 1984), and that sexual destiny beliefs tend to be especially sensitive to cues of incompatibility (Maxwell et al., 2017), I also tested broader well-being indicators as exploratory controls (i.e., the length in which couples have been coping with the person's SIAD, depression, relationship conflict).

Beginning with predictions for baseline implicit sexual beliefs predicting daily attributions, based on past work (e.g., Blackwell et al., 2007; Dweck, 1999; Dweck et al., 1995; Dweck et al., 1993; Dweck & Leggett, 1988; Erdley & Dweck, 1993; Henderson & Dweck, 1990; Hong et al., 1999; Robins & Pals, 2002) and findings from Study 1, I predicted that higher sexual growth beliefs would be associated with daily attributions that are more controllable. In contrast, I predicted that higher sexual destiny beliefs would be positively associated with daily

partner responsibility attributions. I also exploratorily tested associations with daily attributions that were more internal, stable, and global.

Next, for mediation models, I predicted that controllable attributions explain why people higher (vs. lower) in sexual growth beliefs would maintain greater well-being, whereas daily partner responsibility attributions would explain why people higher (vs. lower) in sexual destiny beliefs would report poorer well-being. These predictions follow from past work (Stephenson & Meston, 2016; Vannier et al., 2018) and extend findings from Study 1.

In Study 2, I also found partner effects, such that when people with low desire reported higher sexual destiny beliefs, their partners reported lower sexual desire, lower relationship satisfaction, higher conflict, and more depressive symptoms, and when partners were higher in sexual destiny beliefs, people with low desire reported lower anxiety and fewer depressive symptoms (Raposo et al., 2021). In contrast, when people with low desire reported higher sexual growth beliefs, their partners reported lower sexual desire. The attribution literature has also shown partner dynamics in which people tend to make attributions about others. For example, in a study on sexual stereotypes, when people were told women who were strangers were more sexually experienced, they attributed their sexual arousal to more internal causes (compared to women who were less sexually experienced; Garcia, 1983). In other research on women with vestibulodynia, their male partners reported poorer dyadic adjustment when they made more internal and global attributions for the women's sexual challenge, and lower sexual satisfaction when they made more global and stable attributions (Jodoin et al., 2008). Similarly, in another study on women with vestibulodynia, when their partners made more negative attributions (i.e., internal, partner responsibility, global, and stable), they responded more negatively (e.g., ignored their partner more, expressed more frustration), and this contributed to women reporting more

pain (Davis et al., 2015). Given evidence of partner effects in a similar sample, and that I have reports from both partners in each couple in this study, I tested in an exploratorily fashion links between one partner's implicit beliefs and the other partner's daily attributions, as well as mediation models with partners of people with low desire's attributions as mediators of the person with low desire's sexual beliefs and as outcome variables either partner's relationship and sexual satisfaction, sexual desire, and sexual distress as outcome variables.

4.1 Methods

4.1.1 Participants and Procedure

My collaborators at Dalhousie University recruited couples coping with low sexual interest and arousal using emails to previous participants, free and paid online advertisements, print posters and pamphlets, and word-of-mouth via social media in Canada and the United States from November 2020 to May 2022. Eligibility criteria included being 18 years of age or older, in a committed relationship for one year or longer with at least four in-person contacts per week in the last month, fluent in English or French, residing in Canada or the United States, and having a partner in the relationship who is a woman or assigned female at birth (including trans-women and non-binary individuals) *and* meets criteria for Sexual Interest/Arousal Disorder (SIAD) based on a structured clinical interview. For ease of readability, I use the term "SIAD" to refer to those with Female Sexual Interest/Arousal Disorder throughout the remainder of this study. This study was inclusive of women with diverse bodies, and/or gender non-binary individuals assigned female at birth. Thus, I will refer to the *person* with SIAD despite the diagnosis referring to "Female" Sexual Interest/Arousal Disorder.

Participants were excluded if, in their clinical interview, their sexual problem (low desire/arousal) was a) attributed to a medication, substance use, or medical condition, b) onset or

persistence of the problem was associated with a specific event or context, c) the problem reflected a desire discrepancy between partners as the primary issue, or d) the problem was secondary to genito-pelvic pain. Outside of the clinical interview, exclusion criteria also included e) pregnancy, breastfeeding, or one-year post-partum, f) taking hormonal therapy (hormonal contraceptives were allowed), g) no prior sexual experience, or h) currently undergoing treatment for SIAD. After exclusions, the final sample of people who completed both the baseline and daily diary surveys consisted of 229 people with SIAD (*N* = one man, 221 women, two indigenous [Two-Spirit] or other cultural gender identity [e.g., Fa'afafine], ten non-binary, two self-specified) and their partners (*N* = 200 men, 21 women, seven non-binary, three self-specified). Participants ranged in age from 18 to 69 years (*M* = 35.34, *SD* = 10.22). The sample was primarily Québécois or French Canadian (44.8%) or English Canadian (41.7%), straight/heterosexual (75.1%), and cohabiting (56.8%), the average relationship length was 9.34 years on average (*SD* = 7.97; range: .96 to 40.63), and couples engaged in sexual activity about once or twice a month on average (*M* = 1.19, *SD* = .93; i.e., slightly more than once a month). For a full breakdown of sample characteristics, see Table 14.

The person with low desire completed an eligibility screening call (10 minutes) with a research assistant. Then, the person reporting low desire completed a semi-structured clinical interview (30–45 minutes) via Zoom or phone with a student in Psychology to confirm a diagnosis of SIAD. Both members within each couple were asked to independently complete the baseline survey, 56 daily diary surveys, and follow-up surveys 6- and 12-months later; however, in the current research I will only include data from the baseline (45-60 minutes) and daily diary (5-10 minutes on non-sex days, 10-12 minutes on sex days). Participants were contacted via phone twice a week and were expected to speak with a research assistant to ask questions or

resolve any issues at least once a week. If they were not reachable, they received an email reminder about the required phone check-in. Baseline surveys expired one month after a link was sent (i.e., participants received a call or email three weeks after a link was sent, and links expired one week after that). Daily diary surveys were sent at 5 PM and expired at 4 AM in the participant's time zone. Each partner was compensated 15 CAD (or equivalent USD) for completing Time 1, and up to $60 CAD (or equivalent USD) for completing all diary surveys.

Table 14

Sample Characteristics (N = 229 Couples)

	People with SIAD		Partners	
	M (range) or *n*	*SD* or %	*M* (range) or *n*	*SD* or %
Age (years)	34.52 (18 – 67)	9.91	36.15 (18 – 69)	10.49
Ethnicity				
Québécois or French Canadian	107	46.7%	98	42.8%
English Canadian	96	41.9%	95	41.5%
Indigenous (e.g., First Nations, Métis, Inuit)	5	2.2%	4	1.7%
American	5	2.2%	4	1.7%
European (Western or Eastern)	26	11.3%	25	10.9%
Asian (South, East, or Southeast)	6	2.6%	10	4.3%
African	2	0.9%	1	0.4%
Australian	0	0%	0	0
Middle Eastern/Central Asian	3	1.3%	4	1.7%
Latin American, Hispanic, Latino/Latina/Latinx	6	2.6%	10	4.4%
White	62	27.1%	72	31.4%
Black/African American	3	1.3%	7	3.1%
Biracial/Multiracial	5	2.2%	6	2.6%
Native Hawaiian/other Pacific Islander	0	0%	0	0%
Not listed	6	2.6%	5	2.2%
Relationship status				

Cohabitation/living with one another, but not married	130	56.8%	-	-
Married	85	37.1%	-	-
Committed relationship, but not living together	14	6.1%	-	-
Sexual orientation				
Asexual	4	1.7%	0	0%
Bisexual	28	12.2%	15	6.6%
Lesbian	9	3.9%	14	6.1%
Gay	0	0%	2	.9%
Straight/Heterosexual	159	69.4%	185	80.8%
Pansexual	14	6.1%	5	2.2%
Queer	10	4.4%	5	2.2%
Questioning	3	1.3%	3	1.3%
Not listed	2	0.9%	0	0%
Relationship duration (months)	112.43 (11.50 – 487.50)	95.66	-	-
SIAD duration (months)	87.63 (6 – 540)	95.90	-	-
Sexual frequency (couple)	1.19 (0 – 5)	.93	-	-

Note. "Not listed" includes participants who did not identify with one of the presented categories. Variables that did not vary between partners (i.e., relationship status, relationship duration, sexual frequency) are reported in the person with SIAD's column and denoted with a dash (-) in their partners' column. SIAD duration is only reported in the person with SIAD's column (and denoted with a dash in their partner's column) because only their responses were assessed.

4.1.2 Baseline Measures

Implicit sexual beliefs. I assessed implicit sexual beliefs using a short version of the Implicit Theories of Sex Scale (Maxwell et al., 2017). Five items assessed *sexual growth beliefs* (e.g., "In a relationship, maintaining a satisfying sex life requires effort"; person with SIAD: $\alpha = .73$, $M = 5.96$, $SD = .80$; partner: $\alpha = .67$, $M = 5.90$, $SD = .79$) and five items assessed *sexual destiny beliefs* (e.g., "Struggles in a sexual relationship are a sure sign that the relationship will fail"; person with SIAD: $\alpha = .77$, $M = 2.21$, $SD = 1.03$; partner: $\alpha = .77$, $M = 2.59$, $SD = 1.16$). Items were rated on a 7-point scale from 1 = "strongly disagree" to 7 = "strongly agree".

SIAD length: I assessed SIAD length using a single item for the person with SIAD only (i.e., "How long have you been experiencing problems with low sexual interest and/or arousal?"). Response options were open-ended and included years and months. I first converted years to months, and then calculated the total number of months for each couple (range: .5 to 45 years, M = 7.30 years, SD = 7.99 years).

Depressive symptoms: I assessed depressive symptoms with the sum of 20 items from the BDI-II (Beck et al., 1996). Participants rated twenty items (e.g., "sadness," "pessimism") on a 4-point scale ranging from 0 to 3. Higher scores indicate higher levels of depressive symptoms (person with SIAD: α = .91, M = 15.18, SD = 10.27; partner: α = .92, M = 10.93, SD = 9.19).

Relationship conflict: I assessed relationship conflict with two items adapted from the RDAS (Busby et al., 1995; e.g., "How often do you and your partner argue (i.e., disagree, have conflict)?"), rated from 0 = "all of the time" to 5 = "never". I reverse-scored this measure and calculated a composite score, with higher scores indicating higher relationship conflict (person with SIAD: r between items = .62, p < .001, M = 1.87, SD = .77; partner: r = .64, p < .001, M = 1.76, SD = .83).

4.1.3 Daily Measures

Attributions for person with SIAD's level of desire each day. I assessed attributions for *levels of desire each day* (given daily assessments, as opposed to low desire more broadly as assessed in Studies 1 and 4) using a modified version of the Sexual Attributional Style Questionnaire (e.g., see Jodoin et al., 2011 and Vannier et al., 2018). The original measure is based on hypothetical scenarios, which I adapted to be about participants' actual experiences each day. In every daily diary survey, the person with SIAD was asked to think about their level of desire that day. Next, they indicated what they thought was the main cause and assigned

attributions to the cause. The person with SIAD rated attributions for their indicated cause using five subscales: *external/internal* ("Is the cause for your level of desire today due to other people (other than your partner) or circumstances, or does it have to do with you personally?", rated from 1 = "other people or circumstances" to 7 = "completely to do with me"; *M* = 4.65, *SD* = 2.22), *specific/global* ("Does the cause of your level of desire today affect just you and your partner's sex life, or does it affect your entire lives?", rated from 1 = "affects just our sex life" to 7 = "affects our entire lives"; *M* = 3.84, *SD* = 2.19), *unstable/stable* ("Is the cause for your level of desire today unstable (i.e., it changes over time) or stable (i.e., stays the same over time)?", rated from 1 = "unstable" to 7 = "stable"; *M* = 4.59, *SD* = 2.23), *partner's responsibility vs. not* ("To what extent is the cause for your level of desire today the result of your partner (something your partner does or does not do)?", rated from 1 = "not at all caused by my partner" to 7 = "completely caused by my partner"; *M* = 2.47, *SD* = 1.79), and how *uncontrollable/controllable* the cause is ("Are you able to control the cause for your level of desire today, or is it outside of your control?", rated from 1 = "it is outside of my control" to 7 = "I can control it"; *M* = 2.65, *SD* = 1.78).

Given that I recruited both partners in couples, I also modified the above measure to assess what *partners* perceived to be the main cause of the person with SIAD's level of sexual desire each day. Specifically, I assessed the following five subscales: *external/internal* ("Do you think the cause for your partner's level of desire today is due to other people or circumstances (other than you), or does it have to do with *them* personally?", rated from 1 = "other people or circumstances" to 7 = "completely to do with my partner"; *M* = 4.08, *SD* = 2.11), *specific/global* ("Do you think the cause for your partner's level of desire today affects just you and your partner's sex life, or does it affect your entire lives?", rated from 1 = "affects just our sex life" to

7 = “affects our entire lives”; *M* = 3.67, *SD* = 2.09), *unstable/stable* (“Do you think the cause for your partner’s level of desire today is unstable (i.e., it changes over time) or stable (i.e., it stays the same over time)? ”, rated from 1 = “unstable” to 7 = “stable”; *M* = 4.65, *SD* = 2.12), *own responsibility vs. not* (“To what extent do you think the cause for your partner’s level of desire today is the result of something *you* do or do not do?”, rated from 1 = “not at all caused by me” to 7 = “completely caused by me”; *M* = 2.63, *SD* = 1.59), and how *uncontrollable/controllable* the cause is (“Do you think your partner is able to control the cause for their level of desire today, or is it outside of their control?”, rated from 1 = “it is outside of my partner’s control” to 7 = “my partner can control it”; *M* = 3.15, *SD* = 1.80).

Relationship satisfaction: I assessed daily relationship satisfaction using the four-item Couples Satisfaction Index (Funk & Rogge, 2007; e.g., *“How satisfied are you with your current relationship, today?”*), rated with a mix of 6- and 7-point scales. I calculated a summed score, with higher scores indicating higher relationship satisfaction (person with SIAD: ω = .99, *M* = 12.93, *SD* = 4.71; partner: ω = .99, *M* = 13.24, *SD* = 4.71).

Sexual satisfaction: I assessed daily sexual satisfaction with the five-item GMSEX (Lawrance & Byers, 1995), which includes 7-point bipolar scales (e.g., very bad to very good) specific to participants’ overall sexual relationship today (person with SIAD: ω = .99, *M* = 4.01, *SD* = 1.38; partner: ω = .99, *M* = 4.10, *SD* = 1.54). I calculated a composite score, with higher scores indicating higher sexual satisfaction.

Sexual desire: I assessed daily sexual desire with one item about dyadic desire (e.g., “How much did you feel sexual desire for your partner today?”), from 1 = “not at all” to 7 = “a lot”. Higher scores indicate higher sexual desire (person with SIAD: *M* = 1.75, *SD* = 1.28; partner: *M* = 3.52, *SD* = 1.94).

Sexual distress: I assessed daily sexual distress using three items from the Female Sexual Distress Scale-Revised (DeRogatis et al., 2008; also validated in men, Santos-Iglesias et al., 2018; e.g., "How often did you feel distressed about your sex life?"), rated from 0 = "never" to 4 = "always". I calculated a composite score, with higher scores indicating higher sexual distress (person with SIAD: ω = .99, *M* = 1.05, *SD* = 1.08; partner: ω = .99, *M* = .66, *SD* = .89).

Daily Sexual Encounters: I assessed daily sexual encounters with two items: "I have had sexual activity TODAY" (response options: "not at all", "once", "more than once") and, if participants indicated they had sex once or more than once, "Who did you have this/these sexual activity(ies) with?" (response options: "myself, alone", "my partner", "another sexual partner"). Sexual activity was defined as including "one or more of the following, whether with a partner or alone: fondling, caressing, foreplay, masturbation, manual stimulation, oral sex, using sex toys, anal penetration (with penis, fingers, sex-toys, etc.), vaginal penetration (with penis, fingers, sex-toys, etc.), etc.". Overall, across the diary study, participants reported having sex today once (14.5%), more than once (2.5%), or not at all (59.5%; missing = 23.5%), and of those who said once or more than once, they engaged in sex by themselves/alone (7.4%), with their partner (10.1%), or with another sexual partner (.1%). Overall, this means that participants reported engaging in sex of any type on 17% of days, and sex with their partner on 10.1% of days. For moderation analyses, I only included those who indicated they had sex once or more than once *and* with their partner (which included those who said they also had sex alone or with another partner). Participants who met these criteria were coded as 1 (10.1%), and all other participants were coded as 0 (66.4%) or missing (23.5%).

4.1.4 Data Analysis Strategy

This research was pre-registered on the Open Science Framework, and data and code for main analyses are openly shared: https://osf.io/m56k9/?view_only=0bc1d6be71364522ace0bac759350d71. The raw data were cleaned (e.g., daily diary matching within couples and inputting of blank cells for missing entries) and spot-checked (i.e., comparing the final data file to the raw data file). Following IBM's (2021) *Missing Values* manual, item-level missing data were estimated using maximum likelihood imputation in SPSS 28.0. The Missing Value Analysis (MVA) function in SPSS was used to assess missingness. Participant scale responses with 20% or less of missing data had missing data estimated, whereas scale responses with more than 20% of data were retained as missing for that participant (Dong & Peng, 2013). Missing values were estimated using the expectation-maximization (EM) method within the MVA function. The estimates created using the EM method for the missing variables were merged with the original dataset.

I analyzed data using two-level distinguishable (by diagnosis: person with SIAD vs. their partner) cross models, guided by the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006), to account for the interdependence between partners within couples and across. Models included two intercepts (i.e., I modeled separate intercepts for the person with SIAD and their partner) and the covariance between people with low desire and their partner. Implicit sexual beliefs were grand-mean centered. Sexual growth and destiny beliefs were tested simultaneously in the same models, and all attribution dimensions were tested simultaneously in the same models. Outcome variables were tested in separate models. Given that the attribution measure is specific to the person with SIAD's level of desire each day, and that I assessed measures using the same scales across distinguishable partners, I crossed and stacked both sets of responses from

partners into the same variable. Setting up the attribution dimensions in this dyadic structure allowed me to assess each partner's reports on a specific variable while accounting for the other partner's reports on the same variable (i.e., a necessary step when testing both actor and partner effects in an APIM).

Mediation analyses. For my questions about whether attributions explain associations between baseline implicit sexual beliefs and daily relationship and sexual satisfaction, sexual desire, and sexual distress, I conducted tests of mediation following guidelines for a 2-1-1 mediation (Zhang et al., 2009) using the Monte Carlo Method of Assessing Mediation with 20,000 resamples and 95% confidence intervals (MacKinnon et al., 2004). By testing mediation models, I could determine whether there were significant indirect effects of baseline implicit sexual beliefs on daily relationship and sexual satisfaction, sexual desire, and sexual distress through daily attributions. Given that the mediation model involved implicit sexual beliefs (assessed at baseline), attributions (assessed daily) and well-being (assessed daily, tested in separate models), I had a 2-1-1 mediation. In other words, although I could model the within and between-person variation of attributions, mediation models could only work through the aggregated attributions (between-person, level 2) because the independent variables (baseline implicit sexual beliefs) were at the between-person level (level 2). I applied grand-mean centering (between-person) and person-mean centering (within-person) to the attribution variables to decompose the between and within-person variance. Models included random intercepts and fixed slopes. The final mediation models included both partners' internal, stable, global, partner responsibility, and control attributions.[1]

Exploratory analyses. I exploratorily tested correlations and mean-level differences between the person with SIAD's and their partner's attribution dimensions. However, I did not

anticipate different *effects* for the person with SIAD versus their partner. To assess whether relationship and personal challenges (i.e., depression, relationship conflict, and the length in which couples had been coping with the person's SIAD) at baseline were driving the effects between implicit sexual beliefs and attributions, I exploratorily tested covariates to rule out alternative explanations.

At the daily level, as pre-registered, I tested whether daily attributions (within- and between-person) predicted daily well-being (i.e., relationship and sexual satisfaction, sexual desire, and sexual distress; see Appendix B). However, I will focus here on attributions as a mechanism for links between implicit sexual beliefs and well-being. Given that people may report higher sexual desire on days in which couples reported engaging in sexual activity (i.e., termed "sex days"), I also tested whether sex days moderated the associations between daily attributions (within) and daily well-being (see Appendix B).[2]

4.2 Results

4.2.1 Descriptive Statistics

Apart from sexual destiny beliefs, I found that all variables (sexual growth beliefs, attributions, well-being) were significantly positively correlated between the person with SIAD and their partner (see Table 5). Across partners, sexual destiny beliefs were correlated with poorer well-being, sexual growth beliefs were correlated with greater well-being (for the person with SIAD only), and associations between attribution dimensions and well-being variables were generally negative or mixed. Next, I assessed mean-level differences between both partners' daily (aggregated) attributions using t-tests. The person with SIAD reported significantly higher internal attributions ($t = 3.98$, $df = 456$, $p < .001$), but significantly lower partner responsibility ($t = -2.15$, $df = 456$, $p = .016$) and control attributions ($t = -4.59$, $df = 443.32$, $p < .001$) than their

partner. However, there were no significant differences between both partners' endorsements of stable (t = -.46, df = 456, p = .325) or global attributions (t = .81, df = 456, p = .208). For descriptive statistics, see the Measures section above.

Table 15

Correlations Between Key Variables in Couples Coping with SIAD

	1	2	3	4	5	6	7	8	9	10	11
Sexual beliefs											
1. SDB	**.14***	.002	.02	-.03	.09	.09	.13*	-.17**	-.03	.18**	-.28***
2. SGB	-.17*	**.12**	.05	.09	.21**	.03	.10	.10	.09	.001	.03
Attributions											
3. Internal	-.01	-.05	**.26*****	.21**	.19**	-.06	.25***	-.17*	.12	.14*	-.09
4. Stable	.09	-.04	.26***	**.25*****	-.05	-.13*	-.03	-.07	-.19**	-.11	.09
5. Global	.10	.10	-.15*	-.27***	**.37*****	.22***	.30***	-.26***	.14*	.39***	-.46***
6. Partner	.19**	.03	-.17*	-.12	.37***	**.34*****	.37***	-.004	-.02	.26***	-.21**
7. Control	.04	.10	-.19**	-.11	.17*	.43***	**.22****	-.01	.05	.10	-.14*
Sexual well-being											
8. Sexual sat.	-.13*	.21**	.01	-.004	-.21**	-.05	.10	**.51*****	.18**	-.39***	.62***
9. Sexual desire	-.07	.15*	-.12	-.16*	.05	.16*	.29***	.43***	**.19****	.19**	.23***
10. Sexual distress	.07	-.10	.07	-.07	.06	-.06	-.11	-.21**	.06	**.28*****	-.34***

Rel. well-being											
11. Rel. sat.	-.33***	.21**	.09	-.02	-.33***	-.51***	-.06	.51***	.29***	-.002	**.64*** **

Note: ***$p < .001$, **$p < .01$, *$p < .05$. Person with SIAD's correlations are below the diagonal. Partner's correlations are above the diagonal. Bolded correlations are between both partners' scores. Sexual beliefs were assessed at baseline. All other variables were assessed at the daily level. Daily variables were aggregates across the diary. SDB = sexual destiny beliefs. SGB = sexual growth beliefs. Partner = partner responsibility. Sat. = satisfaction. Rel. = relationship.

4.2.2 Associations Between Implicit Sexual Beliefs and Daily Well-Being

Person with SIAD. First, I tested whether implicit sexual beliefs (assessed at baseline) were associated with daily well-being. When the person with SIAD was higher in sexual destiny beliefs, both they and their partner reported lower relationship satisfaction (see Table 16). In contrast, when the person with SIAD was higher in sexual growth beliefs, they reported higher relationship satisfaction and sexual desire (but no significant associations for the partner), and both partners reported higher sexual satisfaction.

Partner of person with SIAD. When a partner was higher in sexual destiny beliefs, both they and the person with SIAD reported lower relationship satisfaction, and the partner reported lower sexual satisfaction and higher sexual distress (see Table 16). In contrast, when a partner was higher in sexual growth beliefs, this was not associated with either partner's relationship or sexual satisfaction, sexual desire, or sexual distress.

Table 16

Associations Between Implicit Sexual Beliefs and Daily Well-Being

	SIAD SDB		SIAD SGB		Partner SDB		Partner SGB	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
SIAD relationship sat.	**-.94(.21)**	**-4.41*** **	**.68(.27)**	**2.50***	**-.51(.19)**	**-2.70****	-.20(.28)	-.73
Partner relationship sat.	**-.64(.23)**	**-2.74****	.30(.30)	1.00	**-.82(.20)**	**-4.00*** **	.18(.30)	.61
SIAD sexual sat.	-.12(.07)	-1.68	**.25(.09)**	**2.78****	.01(.06)	.14	.11(.09)	1.28
Partner sexual sat.	-.02(.08)	-.26	**.31(.10)**	**3.06****	**-.16(.07)**	**-2.39***	.12(.10)	1.15
SIAD sexual desire	-.04(.05)	-.86	**.12(.06)**	**2.04***	.04(.04)	.97	.07(.06)	1.20
Partner sexual desire	-.13(.09)	-1.48	-.18(.11)	-1.54	-.02(.08)	-.31	.19(.12)	1.69
SIAD sexual distress	.04(.06)	.66	-.11(.07)	-1.57	-.01(.05)	-.11	.09(.07)	1.20
Partner sexual distress	.01(.05)	.10	-.08(.06)	-1.24	**.12(.04)**	**2.67****	.01(.07)	.16

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs. Partner resp. = Partner responsibility.

4.2.3 Associations Between Implicit Sexual Beliefs and Daily Attributions

Person with SIAD. Second, I tested whether implicit sexual beliefs were associated with daily attributions. When the person with SIAD was higher in sexual destiny beliefs, they and their partner made higher partner responsibility attributions, and their partner made lower stable attributions and higher control attributions (see Table 17). In contrast, when the person with SIAD was higher in sexual growth beliefs, their partner made higher daily partner responsibility and control attributions (that is, partners of people with SIAD thought the cause was due to themselves and something the person with SIAD could control).

Partner of person with SIAD. When a partner was higher in sexual destiny beliefs, the person with SIAD made lower internal attributions and higher partner responsibility and control attributions (see Table 17). In contrast, when a partner was higher in sexual growth beliefs, they made higher global attributions.

Table 17

Associations Between Implicit Sexual Beliefs and Attributions

	SIAD SDB		SIAD SGB		Partner SDB		Partner SGB	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
SIAD Internal	-.01(.09)	-.06	-.10(.11)	-.92	**-.17(.08)**	**-2.24***	-.001(.11)	-.01
Partner Internal	.002(.10)	.02	-.21(.13)	-1.64	.02(.09)	.21	.11(.13)	.89
SIAD Stable	.15(.11)	1.38	-.05(.14)	-.32	-.09(.10)	-.92	-.09(.14)	-.66
Partner Stable	**-.23(.11)**	**-2.03***	-.03(.14)	-.20	-.02(.10)	-.18	.22(.15)	1.52
SIAD Global	.17(.10)	1.63	.22(.13)	1.67	.01(.09)	.05	.14(.13)	1.08
Partner Global	.11(.11)	1.01	.06(.14)	.43	.13(.10)	1.32	**.44(.15)**	**3.01****
SIAD Partner resp.	**.18(.07)**	**2.73****	.09(.09)	1.08	**.17(.06)**	**2.94****	-.02(.09)	-.18
Partner Partner resp.	**.19(.07)**	**2.84****	**.18(.09)**	**2.07***	.06(.06)	1.07	-.01(.09)	-.16
SIAD Control	.05(.07)	.72	.17(.09)	1.87	**.14(.06)**	**2.26***	-.10(.09)	-1.05
Partner Control	**.19(.09)**	**2.28***	**.30(.11)**	**2.74****	**.14(.07)**	**1.91**	.11(.11)	.98

Note. ***$p < .001$, **$p < .01$, *$p < .05$). Beta values are unstandardized coefficients. SIAD = person with SIAD. Partner = partner of person with SIAD. SDB = sexual destiny beliefs. SGB = sexual growth beliefs. Partner resp. = Partner responsibility.

4.2.4 Mediations: Attributions Accounting for Associations Between Implicit Sexual Beliefs and Daily Well-Being

Person with SIAD. Next, I tested whether the person with SIAD's attributions for their low desire over the course of the diary study mediated the associations between their own and their partner's implicit sexual beliefs and daily well-being. When a partner was higher in sexual destiny beliefs, the person with SIAD made lower daily *internal* attributions. However, in turn, the person with SIAD's internal attributions over the course of the diary study were not associated with their own or their partner's relationship satisfaction, sexual satisfaction, sexual desire, or sexual distress.

When the person with SIAD was higher in sexual destiny beliefs, they reported higher *partner responsibility* attributions and, in turn, they reported lower relationship satisfaction (b = -1.44, SE = .22, t(214.12) = -6.48, p < .001; 95% CI [-.48, -.07]). However, the person with SIAD's chronic partner responsibility attributions were not associated with their partner's relationship satisfaction, or either partner's sexual satisfaction, desire, or distress. Similarly, when a partner was higher in sexual destiny beliefs, the person with SIAD reported higher partner responsibility attributions and, in turn, the person with SIAD reported lower relationship satisfaction [95% CI [-.45, -.08]).

When a partner was higher in sexual destiny beliefs, the person with SIAD also made higher daily *control* attributions and, in turn, the person with SIAD reported higher relationship satisfaction (b = .53, SE = .19, t(215.48) = 2.82, p = .005; 95% CI [.01, .18]) and sexual desire (b = .16, SE = .05, t(211.70) = 3.35, p < .001; 95% CI [.003, .05]). The person with SIAD's chronic control attributions were not significantly associated with their own sexual satisfaction, their partner's relationship or sexual satisfaction or desire, or either partner's sexual distress.

Partner of person with SIAD. Finally, I tested whether a partner's attributions over the course of the diary study mediated the associations between their own and the person with SIAD's implicit sexual beliefs and daily well-being. When the person with SIAD was higher in sexual destiny beliefs, their partner reported lower *stable* attributions and, in turn, the partner reported lower sexual desire (b = -.17, SE = .06, t(213.90) = -3.10, p = .002; 95% CI [.001, .09]). However, a partner's chronic stable attributions were not associated with either partner's relationship satisfaction, sexual satisfaction, or sexual distress, or the person with SIAD's sexual desire.

When a partner was higher in sexual growth beliefs, they made higher *global* attributions and, in turn, they and the person with SIAD reported lower relationship satisfaction (partner: b = -.77, SE = .14, t(213.60) = -5.49, p < .001, 95% CI [-.61, -.11]; person with SIAD: b = -.31, SE = .12, t(213.67) = -2.53, p = .012, 95% CI [-.30, -.02]) and sexual satisfaction (partner: b = -.16, SE = .05, t(214.09) = -3.25, p = .001, 95% CI [-.14, -.02]; person with SIAD: b = -.10, SE = .05, t(212.62) = -2.23, p = .027, 95% CI [-.10, -.003]), and the partner reported higher sexual distress (b = .18, SE = .03, t(212.50) = 5.70, p < .001; 95% CI [.03, .14]). However, a partner's chronic global attributions were not associated with either partner's sexual desire, or the person with SIAD's sexual distress.

When the person with SIAD was higher in sexual destiny or growth beliefs, their partner made higher *partner responsibility* attributions and, in turn, the partner reported higher sexual distress (b = .17, SE = .05, t(214.20) = 3.43, p < .001; 95% CI for the model with sexual destiny beliefs [.01, .07]; 95% CI for the model with sexual growth beliefs [.001, .07]). However, a partner's chronic partner responsibility attributions were not associated with either partner's

relationship satisfaction, sexual satisfaction, sexual desire, or the person with SIAD's sexual distress.

4.2.5 Testing Alternative Explanations

Given that effects may differ based on the duration of low desire, that negative attribution dimensions tend to be associated with greater depression (e.g., Abramson et al., 1978; Peterson & Seligman, 1984), and that sexual destiny beliefs tend to be especially sensitive to cues of incompatibility (Maxwell et al., 2017), I tested a series of additional models controlling for the duration couples have been coping with SIAD, as well as both partners' depression and relationship conflict at baseline. In large part, the associations between beliefs and attributions remained significant when controlling for depression and SIAD duration as reported at baseline. However, when controlling for both partners' depression at baseline, the associations between a person with SIAD's destiny beliefs and their partner's stable attributions were reduced to non-significance. When controlling for both partners' conflict at baseline, the association between people with SIAD's sexual destiny beliefs and their own partner responsibility attributions, their partners' stable attributions, and their partner's control attributions were all reduced to non-significance. These findings suggest that when people are coping with low desire, relationship conflict might be driving some of the associations between sexual destiny beliefs and how people attribute the cause of their low desire. However, the associations between sexual growth beliefs and attributions are robust to these controls.

4.3 Footnotes

[1]I pre-registered that, to account for the size of the mediation models, I would only include the person with low desire's attributions as the mediator. In separate mediation models, I said that I would test their partner's attributions for the person with low desire's level of desire each day.

However, I realized that to test an APIM mediation, I would not be able to isolate the person with low desire's (or their partner's) attributions in separate models, and therefore had to proceed with including both partners' attributions in the same model. I also pre-registered that, to account for the number of models tested and reduce the number of mediators included, I would only include attributions in the full mediation models (in which I tested the *b*-path and indirect effects) if sexual growth or destiny beliefs were associated with that attribution (i.e., if I found a significant a-path). However, because I combined both partners' attributions in the same model, and that at least one person's implicit sexual belief was associated with each attribution dimension, I included all attributions in the same model.

[2]I pre-registered that I would test whether sex days would moderate the associations between implicit sexual beliefs and daily attributions, and between daily attributions (between-person) and outcomes. However, given that sex days were assessed at the within-person daily level, implicit sexual beliefs were assessed at baseline, and between-person attributions were assessed at level 2, I realized these test of moderations (with implicit sexual beliefs at baseline or between-person attributions) would not be ideal and therefore, I did not proceed.

4.4 Brief Discussion

In Study 3, I tested associations between implicit sexual beliefs and daily relationship and sexual well-being in a sample of couples coping with low sexual desire (i.e., one partner met the diagnostic criteria for SIAD). I also assessed whether attributions for desire accounted for these associations. First, in line with Study 2 (Raposo et al., 2021) and research on implicit sexual beliefs more broadly (e.g., Maxwell et al., 2017), I found that when the person with SIAD was higher in sexual destiny beliefs, both partners reported lower daily relationship satisfaction. In contrast, when the person with SIAD was higher in sexual growth beliefs, they reported higher

daily relationship satisfaction and sexual desire, and both partners reported higher sexual satisfaction. Turning to their partner, when a partner of a person coping with SIAD was higher in sexual destiny beliefs, both partners reported lower relationship satisfaction, and the partner reported lower sexual satisfaction and higher sexual distress. Taken together, I demonstrate that sexual destiny beliefs are associated with poorer relationship and sexual well-being; whereas people with SIAD's (not their partners') sexual growth beliefs were associated with greater relationship and sexual well-being (replicating a similar pattern of findings shown in Study 2 for people with SIAD's sexual growth beliefs and their own—not their partner's—desire, and in past work, e.g., Maxwell et al., 2017). Unlike results from Study 2 and other work (e.g., Rossi et al., 2022), I did not replicate the same counterintuitive findings for both sexual growth and destiny beliefs and well-being outcomes, which may be explained by the daily nature of this study (compared to more chronic/baseline effects demonstrated elsewhere).

I then tested my key predictions about the role of attributions in these associations. Beginning with the person with SIAD's attributions as mechanisms, as predicted, I found that when the person with SIAD or their partner were higher in sexual destiny beliefs, the person with SIAD reported higher partner responsibility attributions and, in turn, lower relationship satisfaction. Turning to the exploratory tests of a partner's attributions as mechanisms, in line with my predictions, I found that when the person with SIAD was higher in sexual destiny beliefs, their partner made higher partner responsibility attributions (i.e., thought the cause was due to themselves) and, in turn, the partner reported higher sexual distress. In this study, findings demonstrated that one reason why people higher in sexual destiny beliefs report poorer well-being—or have partners who report poorer well-being—is because of their own or their partner's chronic tendency to attribute the person with low desire's daily levels of desire to being their

partner's responsibility (as with people with low desire) or their own responsibility (as with their partners). This maladaptive attribution tendency is in line with other research showing links between sexual destiny beliefs and poor anticipated coping strategies (Sutherland & Rehman, 2018), links between a partner's attributions for women's provoked vestibulodynia, partners' behavioural responses, and women's reports of pain and depressive symptoms (Davis et al., 2015), and with research showing tendencies to blame a partner and themselves for orgasm difficulties (e.g., Bhutto et al., 2021). However, I also provide a new perspective on existing findings by showing that the maladaptive coping strategies of people higher in sexual destiny beliefs also stretch beyond oneself to their partner, emphasizing the joint roles of implicit sexual beliefs and attributions in shaping well-being outcomes. However, my predictions about control attributions as mechanisms for the associations between sexual growth beliefs and greater relationship and sexual well-being were not supported. Exploratorily, I also found that when the person with SIAD was higher in sexual destiny beliefs, their partner reported lower stable attributions and, in turn, their partner reported lower sexual desire.

Unexpectedly, when a partner was higher in sexual destiny beliefs, the person with SIAD made higher daily control attributions and in turn, they reported higher relationship satisfaction and sexual desire. This finding corresponds with an unexpected finding from Study 2, showing that a partner's sexual destiny beliefs were linked with lower anxiety and depressive symptoms (Raposo et al., 2021), and with research on couples transitioning to parenthood in which a partner's higher sexual destiny beliefs during pregnancy was linked to both partners' higher desire three months into postpartum (Rossi et al., 2022). It is possible that perceiving a partner as believing in natural sexual compatibility might help the person with low desire to be more accepting of their low desire, and as a result, feel more in control. Counter to my predictions, I

also found that when the person with SIAD was higher in sexual growth beliefs, their partner made higher partner responsibility attributions (i.e., thought the cause was due to themselves) and, in turn, their partner reported higher sexual distress. I also exploratorily found that when a partner was higher in sexual growth beliefs, they made higher global attributions and, in turn, they and the person with SIAD reported lower relationship satisfaction, sexual satisfaction, and the partner reported higher sexual distress. Again, these findings correspond with an unexpected finding from Study 2, showing that when the person with SIAD was higher in sexual growth beliefs, their partner felt lower desire. It may be the case that when the person with SIAD places more focus on needing to work through their distressing sexual challenge with their partner, their partner assumes greater responsibility, and in turn, they feel more sexually distressed. Similarly, it is possible that when a partner of someone with SIAD is focused on working through their sexual challenge, they may begin to view the cause of their sexual challenge as extending into other areas of their relationship, and in turn, report higher sexual distress and both partners report lower satisfaction with their relationship and sex life.

Taken together, this study extends previous work by testing the role of attributions for low desire in the associations between implicit sexual beliefs and well-being among couples coping with clinically low sexual desire. Sexual destiny beliefs were associated with poorer well-being outcomes, which was partially explained by greater partner responsibility attributions, as well as by lower stable attributions. However, unlike what I predicted, I also found higher control attributions explained links between sexual destiny beliefs and higher relationship satisfaction and sexual desire. Although sexual growth beliefs tended to be associated with better well-being outcomes, there were mixed findings suggesting that sexual growth beliefs might sometimes detract from well-being if couples attribute the cause of their low desire to the person

with SIAD's partner, and to something that impacts all areas of their relationships. Although I have temporally demonstrated that implicit sexual beliefs at baseline are associated with daily chronic sexual attributions, I have not yet been able to demonstrate whether implicit sexual beliefs lead to changes in sexual attributions, or whether sexual attributions truly explain links between implicit sexual beliefs and well-being—directional effects that require experimentation. In my final study, I will manipulate implicit sexual beliefs to demonstrate whether causality is, in fact, supported.

CHAPTER FOUR

My goal with Chapter Four was to explore whether manipulating people toward sexual growth (vs. sexual destiny) beliefs affects their causal attributions for a hypothetical situation of low desire, and in turn, their reports of sexual well-being, relationship well-being, and responses to low desire. Past research has successfully experimentally manipulated sexual growth and destiny beliefs to examine whether shifting these beliefs affects people's responses to sexual challenges and sexual and relationship satisfaction (Maxwell et al., 2017; Sutherland & Rehman, 2018). For example, Maxwell et al. (2017) used a bogus article that was said to have been published in a popular psychology magazine, which integrated fabricated research and examples from couples to enhance either sexual growth or destiny beliefs. In fact, this bogus article manipulation design has also been successfully used in other implicit theories research (e.g., Chiu et al., 1997; Franiuk et al., 2004; Sutherland et al., 2018). To extend my previous correlational findings in Studies 1-3, experimental research is needed to establish causal and directional claims about the impact of sexual growth and destiny beliefs on causal attributions and sexual and relationship quality in the face of common sexual challenges.

5 Study 4

Study 4 is an experimental study of individuals in romantic relationships (N = 323). Experimental research has begun to test causal associations between implicit (lay) beliefs about sexual desire and responses to hypothetical desire challenges. Specifically, in a study by Sutherland and Rehman (2018), women who were oriented to the belief that sexual desire is malleable (i.e., akin to sexual growth beliefs) were less likely to endorse maladaptive coping strategies when faced with such challenges (e.g., disengagement, denial, and humour), compared to women oriented to the belief that desire is fixed (akin to sexual destiny beliefs). In the current

study, my goals were to test whether manipulating implicit beliefs about sexuality shifted people's attributions for low sexual desire and in turn, their reports of sexual (satisfaction, desire, distress) and relationship (satisfaction, commitment) well-being and responses to the situation (thoughts of breaking up, motivation to do something to resolve the sexual issue, how challenging the situation would be). New to this study was the inclusion of these items about how motivated participants would be to resolve the sexual issue and how challenging they would view the situation. These measures allowed me to test more proximal effects of how manipulating beliefs might shift people's perspective of a hypothetical situation of low desire. That is, I tested whether implicit sexual beliefs cause changes in attributions for low desire, well-being and responses, as well as indirect effects whereby attributions mediate links between implicit sexual beliefs and well-being and responses. To test these associations, I experimentally manipulated sexual growth and destiny beliefs via a bogus article paradigm which has been used to successfully shift around people's implicit sexual and relationship beliefs in past work (e.g., Maxwell et al., 2017). Next, I assessed participants' causal attributions for a hypothetical low-desire situation in their relationship, as well as their sexual and relationship well-being and expected responses to the situation.

I predicted that people in the sexual growth condition would report greater sexual well-being (i.e., higher sexual satisfaction and desire, and lower sexual distress) and relationship well-being (i.e., higher relationship satisfaction and commitment) than those in the sexual destiny condition. Finally, I predicted that people in the sexual growth condition would respond more adaptively to the situation of low desire (i.e., greater motivation to do something to resolve the sexual issue, and fewer thoughts about ending their relationship) compared to those in the sexual

destiny beliefs condition. I also exploratorily tested differences in perceptions of how challenging the situation would be as a response to low desire across conditions.

Based on my findings in Studies 1 and 3, I predicted that one reason why people manipulated to endorse sexual growth beliefs would experience better outcomes in the face of their sexual challenges might be because of the attributions they make for these challenges. Specifically, I predicted that people who were oriented toward sexual growth beliefs (compared to those oriented toward sexual destiny beliefs) would report attributions for a situation of low desire that are more controllable and less their partner's responsibility, and that those attributions would account for (i.e., mediate) differences between sexual growth and destiny beliefs and sexual and relationship outcomes. I also exploratorily tested differences between sexual growth and destiny beliefs and external, specific, and unstable attributions.

Previous research has demonstrated the significance of sexual compatibility (e.g., sexual disagreements, unmet sexual ideals/needs) and sexual behaviors in understanding the connections between lay sexual beliefs and their outcomes (Maxwell et al., 2017; Uppot et al., 2023), such that the differences between sexual growth and destiny beliefs in relationship and sexual outcomes tend to be most pronounced in the presence of sexual challenges. Therefore, in the current research, I exploratorily tested whether the relationships between sexual growth and destiny beliefs and key variables (attributions and relationship and sexual quality) were moderated by compatibility (relationship, sexual) and sexual frequency, which may serve as proxies for sexual need fulfillment or the presence of sexual challenges within relationships.

5.1 Methods

5.1.1 Participants and Procedure

Participants were recruited on Prolific Academic, an online recruitment platform (https://www.prolific.co/), in November and December 2023. Eligible participants were in a current romantic relationship of at least four months, 18 years of age or older, living with their partner, sexually active in the past year, living in Canada, the USA, the UK, Australia, or New Zealand, and able to read/understand English. Additionally, I restricted recruitment to Prolific users with approval rates of 95-100% to ensure high-quality data and excluded those who had recently participated in a separate study by our lab which assessed the same key measures.

I ran an a priori power analysis using G*Power (Faul et al., 2007) to determine our sample size. To achieve 80% power at an alpha of 0.05 for an effect size of d = .3, the effect size of a previous manipulation of sexual growth and destiny beliefs (Maxwell et al., 2017), I determined that the necessary sample size was N = 278 (139 per condition). However, I planned to oversample and recruit a total of 400 participants to account for possible data exclusions. Based on previous research using a similar manipulation (Maxwell et al., 2017), I anticipated that destiny beliefs would be more difficult to manipulate. I over-recruited slightly for this condition due to greater anticipated exclusions (i.e., I randomized at a rate of 55% for the sexual destiny beliefs condition, and 45% for the sexual growth beliefs condition to aim for equal cell sizes in the end). These considerations resulted in our initial goal of recruiting 400 participants (N = 220 for sexual destiny beliefs, N = 180 for sexual growth beliefs).

After initial recruitment, given a large number of data exclusions based on non-compliance with study instructions (i.e., those who demonstrated low effort throughout the survey, failed to re-consent following the manipulation, did not demonstrate comprehension of

the study material, only completed part of the study, and attempted to complete the study more than once; $N = 47$), I recruited an additional $N = 60$ participants for whom I randomized at a rate of 75% ($N = 45$) for the sexual destiny beliefs condition and 25% ($N = 15$) for the sexual growth beliefs condition. Participants who failed to meet our pre-registered exclusion criteria were excluded from the final analysis. The exclusion criteria included not meeting the study's eligibility criteria (based on responses to our screening questions), spending 45 seconds or less on the randomized article page, scoring 3.5 or below on the manipulation check item corresponding to their assigned condition, expressing suspicion (as indicated by responses to open-ended items probing for suspicion at the end of the survey), or failing the comprehension check for their assigned article.

Of the 480 participants recruited, the final sample included 323 participants ($n = 143$ in the sexual growth condition; $n = 180$ in the sexual destiny condition). This sample had a gender breakdown of 149 men, 169 women, one indigenous or other cultural identity, and four non-binary, ranged in age from 22 to 79 years old ($M = 43.8$, $SD = 12.4$) and reported an average relationship length of 17.2 years ($SD = 11.5$ years, range = 1.1 years to 55.5 years). Participants were primarily White (86.4%), married (68.1%), monogamous (99.1%), and identified as straight/heterosexual (87.3%). See Table 18 for all sample characteristics

Table 18

Sample Characteristics (N = 323)

Characteristic	*M* (range) or *n*	*SD* or %
Age (years)	43.8 (22 – 79)	12.39
Gender		
Man	149	46.1%
Woman	169	52.3%

Indigenous (e.g., Two-Spirit) or gender identity or other cultural gender identity (e.g., Fa'afafine)	1	.3%
Non-binary (e.g., genderfluid, genderqueer)	4	1.2%
Ethnicity		
White (e.g., North American, European, etc.)	279	86.4%
Black (e.g., African, Caribbean, etc.)	12	3.7%
East Asian (e.g., Chinese, Korean, etc.)	6	1.9%
South Asian (e.g., Indian, Pakistani, etc.)	11	3.4%
Latin American (e.g., Mexican, Columbian, etc.)	3	.9%
Middle Eastern (e.g., Egyptian, Saudi Arabian, etc.)	1	.3%
Bi- or multi-ethnic/ racial (e.g., White/Black, East Asian/South Asian, etc.)	11	3.4%
Relationship status		
Seriously dating	38	11.8%
Common-law	32	9.9%
Engaged	26	8%
Married	220	68.1%
Not listed	7	2.2%
Sexual Orientation		
Asexual	1	.3%
Bisexual	26	8%
Gay	7	2.2%
Lesbian	2	.6%
Straight/ Heterosexual	282	87.3%
Pansexual	2	.6%
Queer	1	.3%
Questioning	1	.3%
Relationship duration (years)	17.21 (1.08– 55.50)	11.53

Note. "Not listed" includes participants who did not identify with one of the categories.

Participants who met eligibility screening criteria were able to view an invitation to a two-part online survey titled “Research Article Feedback and a Study on Romantic Relationships.” Interested participants were directly linked to the Qualtrics survey from Prolific. After consenting, participants responded to additional eligibility screening items embedded into the survey, followed by items assessing their demographics and relationship characteristics. To minimize demand effects, I told participants they were participating in a study with two separate parts, such that Part 1 of the study (i.e., the article manipulation of sexual growth and destiny beliefs) was not linked to Part 2 (i.e., the assessment of outcomes). However, in reality, these were linked and formed a single, cohesive study so that I could assess the impact of the manipulation on outcome variables post-manipulation.

Part 1 of the study involved participants being randomly assigned to read one of two articles designed to manipulate sexual growth and sexual destiny beliefs, respectively. Participants were told that researchers were interested in gathering feedback on a recent research article intended for publication in the popular media; however, this was an article created by researchers. The articles contained fabricated anecdotes and research findings and were based on a previous successful manipulation of sexual growth and destiny beliefs (for full articles, see Appendix C). Participants randomly assigned to the sexual destiny beliefs condition (N = 143) read an article titled “Secrets to an Amazing Sex Life: It’s in That Initial Spark”, which reported findings supporting the belief that the maintenance of sexual satisfaction over time in a relationship is the result of natural compatibility with a partner. Participants randomly assigned to the sexual growth beliefs condition (N = 180) read an article titled “Secrets to an Amazing Sex Life: You May Need to Work at It”, which reported findings supporting the belief that the maintenance of sexual satisfaction over time in a relationship requires continuous effort.

Following the articles, participants were required to provide their feedback, which was used as a comprehension check, and respond to a manipulation check and two attention checks to assess the degree to which participants understood their assigned article and agreed with the article's key message.

In Part 2 of the study, participants completed a series of measures that they were led to believe were part of a separate study about relationships. Participants were first instructed to imagine a situation of low desire as if it were happening with their current partner in the near future. Then, they provided a single, open-ended cause for the situation and reported their attributions for this cause of low desire. Finally, participants completed measures assessing how they would respond to the situation (i.e., whether it has happened in the past, how challenging they think it would be, their motivation to do something to resolve the issue, the likelihood of considering ending their relationship if this occurred), their relationship and sexual well-being (i.e., relationship satisfaction, commitment, sexual satisfaction, sexual desire, sexual distress), and two potential moderators (i.e., compatibility and frequency). Participants were then probed for suspicion and debriefed. The study took an average of 15.28 minutes to complete, and participants were compensated the equivalent of CAD 3.88. This research was pre-registered, and the pre-registration, data, and syntax are available on the OSF: https://osf.io/sb5hk/?view_only=8e4cd6bc4af24afbadf7c17b3562e4ed.

5.1.2 Manipulation Measures

For descriptive statistics, see Table 20.

Experimental conditions. Participants were assigned to one of two conditions designed based on a previous manipulation of implicit sexual beliefs (Maxwell et al., 2017). In the *sexual destiny (SD) condition* (*n* = 143), participants read a fabricated article titled "Secrets to an

Amazing Sex Life: It's in that Initial Spark", which was intended to orient participants to the belief that sexual satisfaction occurs naturally between compatible partners. In the *sexual growth (SG) condition* (*n* = 180), participants read a fabricated article titled "Secrets to an Amazing Sex Life: You May Need to Work at It", which was intended to orient participants to the belief that sexual satisfaction requires effort to maintain.

5.1.3 Post-Manipulation Measures

Attention checks. Two multiple choice questions asking which University the researchers mentioned in the article are from (61.9% responded correctly), and the name of the lab that conducted the research (70% responded correctly).

Manipulation checks, comprehension checks, and suspicion. I included nine items to assess the effectiveness of our manipulation and to use as criteria for data exclusions. First, to assess their comprehension of the article after reading it, participants responded to a multiple-choice item asking them to select the article's key message from a dropdown list. Then, participants responded to the two attention check items. In the initial data cleaning, many participants did not answer the attention checks correctly (*N* = 47 total, *N* = 20 for sexual destiny, *N* = 27 for sexual growth) but demonstrated an understanding of the article's main message with no other flagged issues. I decided to exclude this criterion and include participants who failed both checks in our analyses if they correctly identified the key takeaway message and met all other inclusion criteria. Participants also responded to one manipulation check item to indicate their endorsement of sexual growth and destiny beliefs. Participants were asked to rate their agreement with two items adapted from Maxwell et al. (2017): "A couple is either destined to have a satisfying sex life or they are not" (sexual destiny beliefs), and "In order to maintain a good sexual relationship, a couple needs to exert time and energy" (sexual growth beliefs), each

rated on a 7-point scale (1 = “Strongly disagree” to 7 = “Strongly agree”). At the end of the study, participants were probed for suspicion using three open-ended questions: “Do you have any thoughts about the studies?”, “Did you notice anything odd or unusual about the studies?”, and “What do you think the studies are about?”. As an additional exploratory check, I assessed differences in the ability to imagine the situation happening with the item “How easy is it for you to imagine the situation happening in the past 4 weeks?” (1 = “It is impossible to imagine this situation happening”, 7 = “It is very easy to imagine this situation happening”; *M* = 4.96, *SD* = 1.92).

Attributions. To measure attributions, I used an adapted version of the Sexual Attributional Style Questionnaire (for similar applications, see Jodoin et al., 2011; Vannier et al., 2018). In Part 2 of the study, participants were asked to imagine a hypothetical scenario about low desire as if it was happening in their relationship in the near future and indicate what they believed to be the main cause of the low desire. Then, participants rated the cause of low desire on five 7-point Likert scales: (1) *external/internal*: “Does the cause have something to do with you, or does it have something to do with other people or circumstances?” (1 = “Other people or circumstances”, 7 = “Completely with me”; *M* = 4.69, *SD* = 1.85), (2) *partner responsibility* “What is the responsibility of your partner in this situation?” (1 = “Not at all caused by my partner”, 7 = “Completely caused by my partner”; *M* = 3.02, *SD* = 1.76), (3) *unstable/stable*: “How likely is it that the cause you gave will continue to affect you?” (1 = “Will never affect me again”, 7 = “Will always affect me”; *M* = 4.84, *SD* = 1.21), (4) *specific/global*: “Is the cause you gave something that just affects your sexual desire, or does it affect other areas of your life?” (1 = “Just affects my sexual desire”, 7 = “Affects all other areas”; *M* = 5.10, *SD* = 1.81), (5) *control*: “Are you able to control the cause you gave, or is it outside of your control?” (1 = “It is

outside of my control", 7 = "I can control it"; *M* = 3.52, *SD* = 1.71). Higher scores on the subscales represented greater internal, partner responsibility, stable, global, and control attributions. See Table 19 for correlations between attributions across conditions.

Table 19

Correlations Between Attributions (Collapsed Across Conditions)

	1	2	3	4	5
1. Internal	–	-.54***	.04	.20***	.06
2. Partner		–	.18**	-.24***	-.01
3. Stable			–	.02	-.20***
4. Global				–	-.004
5. Control					–

Note. ***$p < .001$, ** $p = .001$.

I also asked participants about their experience with the situation of low desire and how they think they would respond. To gauge their experience with low desire, I asked participants to rate the question "Has this situation happened to you in the past 4 weeks?" using a dichotomous ("yes" or "no") response format (Yes = 169, No =154). For their anticipated responses to low desire, I asked "How challenging do you think this situation would be?" (*M* = 5.00, *SD* = 1.30) and "How motivated would you be to do something to resolve this situation?" (*M* = 5.66, *SD* = 1.22) on a 7-point scale (1 = "Not at all" to 7 = "Extremely"). Finally, I assessed participants' likelihood of considering ending their relationship based on the situation with a single item "Would a situation like this lead you to consider ending your relationship?" (1 = "I would not consider ending my relationship" to 7 = "I would strongly consider ending my relationship") (*M* = 2.09, *SD* = 1.70).

Table 20

Descriptive Statistics for Attributions (Sexual) Across Conditions, Relationship and Sexual Well-Being, and Responses to the Situation

Variable	Sexual Destiny Condition *M(SD)*	Sexual Growth Condition *M(SD)*	*p*
Attributions			
Internal	4.64(1.89)	4.73(1.81)	.659
Partner responsibility	3.05(1.86)	2.99(1.68)	.761
Stable	4.90(1.33)	4.79(1.10)	.404
Global	5.04(1.85)	5.14(1.79)	.591
Control	**3.15(1.72)**	**3.81(1.66)**	**< .001**
Relationship and Sexual Quality			
Relationship satisfaction	5.66(1.34)	5.69(1.17)	.791
Commitment	6.58(.93)	6.67(.81)	.373
Sexual satisfaction	5.38(1.53)	5.24(1.44)	.413
Sexual desire	5.24(1.65)	5.12(1.62)	.509
Sexual distress	2.83(1.83)	2.61(1.58)	.237
Responses to Situation			
Motivation	5.73(1.15)	5.60(1.28)	.327
Breakup	**2.41(1.90)**	**1.84(1.48)**	**.003**

Challenging	**5.20(1.37)**	**4.84(1.22)**	**.012**
Imagine	4.82(2.03)	5.07(1.83)	.249

Note. Bolded values indicate significant differences across conditions.

Relationship satisfaction and commitment. I measured relationship satisfaction and commitment following the manipulation using items adapted from the PRQC (Fletcher et al., 2000). *Relationship satisfaction* was measured using a single item, "Right now, how satisfied are you with your relationship?" (*M* = 5.68, *SD* = 1.24). *Commitment* was measured with a single item, "Right now, how committed are you with your relationship?" (*M* = 6.63, *SD* = .86). The items were rated on a 7-point scale (1 = "Not at all" to 7 = "Extremely").

Sexual satisfaction: I measured sexual satisfaction using the GMSEX (Lawrance & Byers, 1998). Participants rated the quality of their sexual relationship on five 7-point bipolar scales (e.g., bad vs. good), in reference to how they are feeling about their sexual relationship right now (*M* = 5.30, *SD* = 1.48, α = .95).

Sexual desire: I measured sexual desire with one item adapted from Muise et al. (2019; see also Impett et al., 2008; Muise et al., 2013), "Right now, I feel a great deal of sexual desire for my partner", using a 7-point Likert scale (1 = "Strongly disagree" to 7 = "Strongly agree"; *M* = 5.17, *SD* = 1.63).

Sexual distress: I measured sexual distress using a single item which asked participants, "Right now, how distressed do you feel about your sex life?", rated on a 7-point scale from 1 = "Not at all" to 7 = "Extremely" (*M* = 2.70, *SD* = 1.70).

Moderators. Moderators included relationship and sexual compatibility, and sexual frequency.

Compatibility. I assessed partner compatibility using two items from Maxwell et al. (2017). Participants indicated their agreement with the statements "My partner is as close to ideal as a *sexual* partner as I ever expect to find" (M = 5.07, SD = 1.69), and "My partner is as close to ideal as a *relationship* partner as I ever expect to find" (M = 5.78, SD = 1.45) on a 7-point scale (1 = "Strongly disagree" to 7 = "Strongly agree"). Sexual and relationship compatibility were only moderated correlated (r = .62, p < .001), so I assessed each item separately instead of combining them.

Sexual frequency. I measured how often participants engaged in four sexual activities (i.e., kissing, caressing/touching, sexual activity, sexual intercourse) in the past 30 days. The frequency of each act was assessed on a 7-point scale (0 = "Not at all" to 6 = "More than once a day"; M = 3.10, SD = 1.29, α = .81). I also tested both sexual activity-related items (i.e., sexual activity, sexual intercourse) only (M = 1.92, SD = 1.27, r = .86, p < .001).

5.1.4 Data Analysis Strategy

Using regression analyses, I tested the main effect of condition (coded as 0 = sexual destiny and 1 = sexual growth) predicting sexual and relationship well-being outcomes and expected responses. Specifically, I assessed whether people in the sexual growth (versus destiny) beliefs condition reported higher sexual satisfaction and desire, relationship satisfaction, commitment, and motivation to do something to resolve the sexual issue, as well as fewer thoughts of breaking up, thinking the situation would be less challenging (exploratory), and lower sexual distress. I also tested the effect of condition on attribution dimensions. Specifically, I assessed whether people in the sexual growth (versus destiny) beliefs condition reported attributions about low sexual desire that were more controllable and less the partner's

responsibility. Exploratorily, I assessed the effect of condition on all other attribution dimensions (i.e., internal/external, stable/unstable, and global/specific).

I conducted mediation analyses using model 4 of Hayes' PROCESS macro to test whether attributions explained differences between conditions on relationship and sexual well-being. Specifically, I tested whether people in the sexual growth (vs. destiny) beliefs condition made attributions that were more controllable and less their partner's responsibility and, in turn, report greater relationship and sexual well-being. If there were differences between conditions for any of the other attributions, I tested whether they mediated the effects of condition on well-being outcomes. In each mediation model, I tested 10,000 bootstrap resamples. I included condition (sexual growth beliefs vs. sexual destiny beliefs) as the predictor variable, one attribution dimension as the mediator (i.e., I did not control for other attribution dimensions in the same model), and one outcome variable per model.

I used model 1 of Hayes' PROCESS macro to exploratorily test whether sexual frequency, relationship compatibility, and sexual compatibility (in separate models) moderated the associations between condition and outcomes of interest (sexual attributions and key outcomes). I probed significant moderations by testing the simple effects at one standard deviation value below and above the mean of the moderator to test the effects at low and high levels of each moderator (i.e., I tested the relationship between condition and attributions at high and low levels of relationship compatibility, sexual compatibility, and sexual frequency).

5.2 Results

5.2.1 Manipulation Checks

First, I tested whether the manipulation successfully shifted people's sexual beliefs. As expected, people in the sexual growth beliefs condition scored significantly higher than those in

the sexual destiny beliefs condition on the item, "In order to maintain a good sexual relationship, a couple needs to exert time and energy" (b = .77, SE = .11, t(321) = 6.80, p < .001; sexual growth condition: M = 5.90, SD = .75; sexual destiny condition: M = 5.13, SD = 1.28). Also as expected, people in the sexual destiny beliefs condition scored significantly higher than those in the sexual growth beliefs condition on the item, “A couple is either destined to have a satisfying sex life or they are not” (b = -2.92, SE = .12, t(321) = -23.78, p < .001; sexual growth condition: M = 2.43, SD = 1.27; sexual destiny condition: M = 5.34, SD = .82). I also tested whether it was easier for participants in either condition to imagine the sexual situation happening in the past four weeks, but there was no significant difference (b = .25, SE = .22, t(321) = 1.16, p = .249; sexual growth condition: M = 5.07, SD = 1.83; sexual destiny condition: M = 4.82, SD = 2.03). These findings confirm that the manipulation successfully enhanced the intended beliefs, and the ease with which participants were able to imagine the situation was comparable across both conditions.

5.2.2 Differences in Sexual and Relationship Well-Being Across Conditions

Second, I tested the effect of the manipulation on key outcomes. Diverging from my prediction, there were no significant differences between conditions on sexual satisfaction (b = -.14, SE = .17, t(321) = -.82, p = .413), sexual desire (b = -.12, SE = .18, t(321) = -.66, p = .509), sexual distress (b = -.23, SE = .19, t(320) = -1.19, p = .237), relationship satisfaction (b = .04, SE = .14, t(321) = .27, p = .791), or commitment (b = .09, SE = .10, t(321) = .89, p = .373). Beyond these key outcomes, I tested the effect of the manipulation on secondary outcomes—responses to hypothetical low sexual desire. Specifically, I tested whether conditions would differ in their likelihood of considering breaking up due to the situation and their motivation to resolve the sexual issue. Compared to those in the sexual destiny beliefs condition, people in the sexual

growth beliefs condition reported that they were less likely to consider breaking up because of low desire (b = -.57, SE = .19, t(321) = -3.02, p = .003). There were no significant differences between conditions in their motivation to resolve the issue (b = -.13, SE = .14, t(321) = -.98, p = .327). However, exploratorily, I also found that compared to those in the sexual destiny beliefs condition, people in the sexual growth condition thought the sexual situation would be significantly less challenging (b = -.36, SE = .14, t(321) = -2.52, p = .012).

5.2.3 Differences in Sexual Attributions Across Conditions

Third, I tested the effect of the manipulation on attributions for low desire. As predicted, compared to those in the sexual destiny beliefs condition, people in the sexual growth condition made higher control attributions (b = .66, SE = .19, t(321) = 3.52, p < .001). However, there were no significant differences between conditions in partner responsibility attributions (b = -.06, SE = .20, t(321) = -.30, p = .761). Exploratorily, I also assessed whether conditions would differ in internal, global, or stable attributions, but I did not find any significant differences: internal (b = .09, SE = .21, t(321) = .44, p = .659), global (b = .11, SE = .20, t(321) = .54, p = .591), or stable attributions (b = -.11, SE = .14, t(321) = -.84, p = .404).

5.2.4 Mediations: Control Attributions as Mechanisms for the Effect of the Implicit Sexual Beliefs Manipulation and Outcomes

Fourth, I tested attributions as a potential mechanism for the links between condition and outcomes (i.e., relationship and sexual well-being, as well as responses to hypothetical low desire). As previously outlined, the manipulation only impacted control attributions. However, in turn, control attributions were not significantly associated with sexual satisfaction (b = .02, SE = .05, t(320) = .47, p = .641), sexual desire (b = .03, SE = .05, t(320) = .53, p = .599), sexual distress (b = -.05, SE = .06, t(319) = -.82, p = .416), relationship satisfaction (b = .04, SE = .04,

t(320) = .85, *p* = .399), commitment (*b* = .02, *SE* = .03, *t*(320) = .67, *p* = .503), how motivated they would be to resolve the situation (*b* = .06, *SE* = .04, *t*(320) = 1.36, *p* = .176), or how likely they would be to consider breaking up because of the situation (*b* = -.03, *SE* = .06, *t*(320) = -.49, *p* = .622).

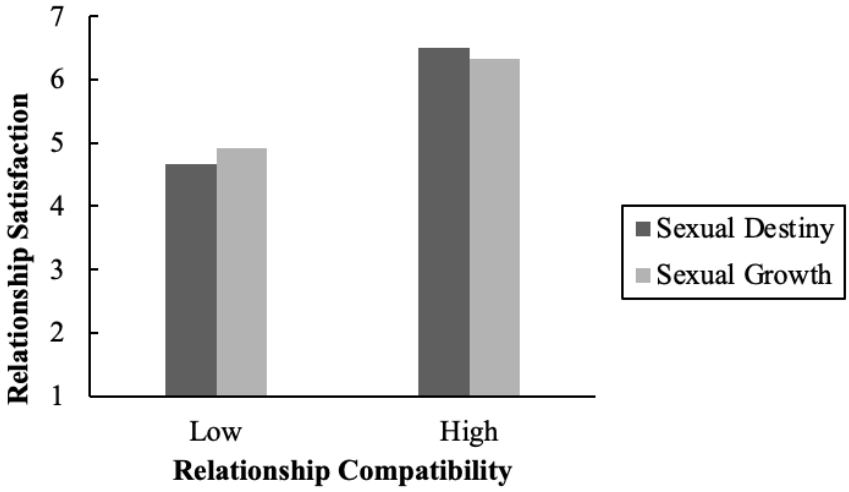
Exploratorily, I also tested whether control attributions would be associated with other responses to hypothetical low desire. People who attributed the cause of hypothetical low desire to being more controllable reported that they would find experiencing low sexual desire to be less challenging (*b* = -.11, *SE* = .04, *t*(320) = -2.53, *p* = .012). That is, there was a significant indirect effect (*b* = -.07, *SE* = .04, 95% CI [-.16, -.01] of condition on the appraisal of how challenging it would be to manage a situation of low desire in their relationship through control attributions (direct effect: *b* = -.29, SE = .15, *t*(321) = -2.01, *p* = .046).

5.2.5 Moderations

Finally, I conducted exploratory moderation analyses to test whether compatibility (i.e., sexual and relationship) and sexual frequency moderated the relationships between condition and our outcomes of interest (attributions and key outcomes). None of the effects were significantly moderated by sexual frequency. Out of the 39 moderations I tested, two were significant. First, relationship compatibility significantly moderated the relationship between condition and relationship satisfaction (*b* = -.16, *SE* = .07, *t*(319) = -2.32, *p* = .021). However, simple effects were non-significant at both lower levels of relationship compatibility (one standard deviation below the mean; *b* = .24, *SE* = .14, *t*(319) = 1.71, *p* = .088; see Figure 1) and at higher levels of relationship compatibility (one standard deviation above the mean; *b* = -.18, *SE* = .13, *t*(319) = -1.42, *p* = .157).

Figure 1

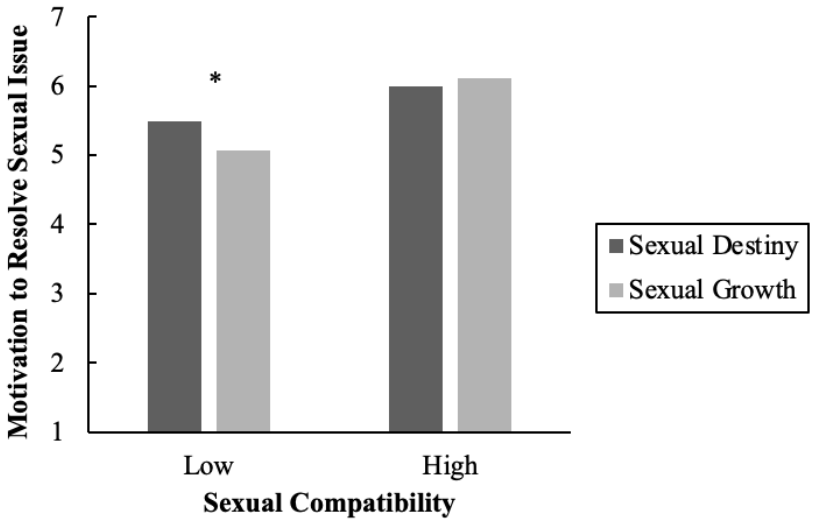
Condition Predicting Relationship Satisfaction at Low Versus High Relationship Compatibility



Second, sexual compatibility significantly moderated the relationship between condition and motivation to resolve the sexual issue (b = .16, SE = .08, t(319) = 2.10, p = .037). At lower levels of sexual compatibility, people in the sexual growth condition (vs. the sexual destiny condition) reported lower motivation to resolve the sexual issue (b = -.43, SE = .18, t(319) = -2.34, p = .020; see Figure 2). At higher levels of sexual compatibility, there was no significant difference between conditions in motivation to resolve the sexual issue (b = .12, SE = .18, t(319) = .63, p = .529).

Figure 2

Condition Predicting Motivation to Resolve the Sexual Issue at Low Versus High Sexual Compatibility



Note. $*p < .05$.

5.3 Footnotes

[1]I also assessed a hypothetical scenario about the unequal division of household labour; however, I only reported results for the scenario about low desire as it was this scenario that was included to test my key predictions.

5.4 Brief Discussion

As predicted, I found that people oriented toward sexual destiny (vs. sexual growth) beliefs were more likely to consider breaking up because of low desire, which aligns with past work showing a greater likelihood for people high in fixed (i.e., destiny) sexual beliefs to disengage when faced with challenges (Sutherland & Rehman, 2018). In contrast, people oriented toward sexual growth (vs. sexual destiny) beliefs said that they would find the situation of low desire to be less challenging, which supports past work showing that people higher (vs.

lower) in growth beliefs view challenges as opportunities to grow and are better positioned to maintain their relationships and well-being in the face of sexual challenges (Maxwell et al., 2017; Raposo et al., 2020; Rossi et al., 2023; Sutherland & Rehman, 2018; Uppot et al., 2023). Together, these findings demonstrate associations between beliefs and responses to low desire (outcomes more closely linked to the situation), though not broader relationship and sexual outcomes.

I was also interested in whether shifting people's implicit sexual beliefs would influence how they would assign meaning to (i.e., make attributions about) low desire. In line with my predictions, people oriented toward sexual growth (vs. sexual destiny) beliefs felt more in control over the cause of low desire, which is consistent with existing research showing that people high in growth beliefs make fewer helpless attributions and problem-solve more adaptively, and with regards to intelligence and achievement, make more control attributions and exert greater effort (Blackwell et al., 2007; Dweck, 1999; Dweck et al., 1993; Hong et al., 1999; Robins & Pals, 2002; Sutherland & Rehman, 2018). This study also extends past work that assessed the effects of lay beliefs on responses to sexual challenges (e.g., Maxwell et al., 2017; Rossi et al., 2023; Sutherland & Rehman, 2018; Uppot et al., 2023) by showing that greater control attributions were one reason why people oriented toward sexual growth beliefs reported that they would find the situation of low desire to be less challenging. In contrast, I did not find that people oriented toward sexual destiny beliefs assigned the cause of their low desire to their partner, and attributions did not explain links between sexual destiny beliefs and responses to low desire or broader relationship and sexual well-being outcomes. Although the manipulation of sexual beliefs was successful, the lack of significant differences between conditions, and the lack of significant effects for those in the sexual destiny beliefs condition, might be because people in

the sexual destiny beliefs condition were still fairly high in sexual growth beliefs (i.e., beliefs are distinct and can be simultaneously endorsed). That is, because people in the sexual destiny beliefs condition were also high in sexual growth beliefs, this may have dampened the negative effects that people oriented toward sexual destiny beliefs might have otherwise reported and, therefore, resulted in a lack of findings for sexual destiny beliefs. The limited differences between conditions found in this study were also reflected in work by Maxwell et al. (2017), in which they found considerably smaller differences between primed sexual growth and destiny beliefs in relationship and sexual satisfaction in their experimental study, compared to their five assessments of naturally occurring trait beliefs. While the moderate-to-high levels of sexual growth beliefs found in both conditions here reflect general levels of sexual growth beliefs in people in relationships more broadly (as shown in Studies 1-3, and in other work, Maxwell et al., 2018; Uppot et al., 2023), effects may differ in a sample in which people are higher in sexual destiny beliefs and, at the same time, lower in sexual growth beliefs.

Finally, I found differences in effects by relationship and sexual compatibility (but not sexual frequency). Specifically, when people in the sexual growth beliefs (vs. sexual destiny beliefs) condition felt their partner was less sexually compatible with them, they said they would be less motivated to resolve the sexual issue. While seemingly counterintuitive, these findings coincide with research on implicit sexual beliefs showing that, even when faced with relationship issues, people high in sexual growth beliefs are buffered and still report greater relationship satisfaction (Maxwell et al., 2017). This finding also related to other work on implicit beliefs about the maintenance of sexual desire, in which Sutherland and Rehman (2018) did *not* find that women primed to hold higher incremental (akin to sexual growth) beliefs reported significantly more adaptive coping than those primed to hold higher entity (akin to sexual destiny) beliefs

(i.e., the effect was non-significant in their first study, and only marginally significant in their second study). In their work, Sutherland and Rehman (2018) postulated that, for women primed to hold higher incremental beliefs, language in their priming article about sexual desire changing regularly over time may have dampened their drive to put effort into resolving the sexual desire issue—that is, they may have believed that if sexual desire naturally fluctuates, the issue should resolve on its own and their efforts are not necessary. Applied to this study, it may be the case that some of the language in my sexual growth beliefs priming article (e.g., "Our sex life hasn't been perfect…it's had its share of ups and downs over the years") also contributed to a slightly lower motivation to do something to resolve the sexual issue (compared to those in the sexual destiny beliefs condition, who read about the importance of persistent compatibility). However, my finding contrasts with other work showing that higher sexual growth beliefs were linked with greater responsiveness in the face of sexual challenges (Uppot et al., 2023)—i.e., a more proactive/reactive response to sexual challenges. It is also possible that people in the sexual growth condition did not feel as motivated to resolve a situation of low desire when faced with greater incompatibility, given that low levels of compatibility (1 SD below the mean) in this sample were still relatively high (close to the midpoint of the scale). Findings might differ among samples coping with more extreme levels of incompatibility—a direction for future work to consider.

CHAPTER FIVE: General Discussion

Low sexual desire is commonly experienced by partners in long-term relationships (McNulty et al., 2019; Muise et al., 2016) and can have consequences for both partners' sexual and relationship well-being (Brezsnyak & Whisman, 2004; Regan, 2000; Rosen et al., 2009; Stephenson & Meston, 2010). My dissertation had two key goals. First, extend implicit theories of sexual beliefs to understand the role of sexual growth and destiny beliefs in the sexual, relational, and personal well-being of couples coping with one person's clinically low desire. Second, test causal attributions as a key mechanism explaining the associations between sexual growth and destiny beliefs and key outcomes when people are faced with (or imagine experiencing) low sexual desire in romantic relationships. Across four studies, drawing on both community samples of people responding to imagined situations of low desire and clinical samples of couples coping with chronic low desire, I tested my predictions using ecologically valid methods that tracked couples' experiences over time and considered both partners' perspectives, as well as with experimental methods that allowed me to manipulate people's sexual beliefs to test causal effects on attributions and outcomes.

In Study 1, I conducted a cross-sectional study of people in relationships who were asked to think about a *hypothetical* situation of low desire in their relationship. My goals were to test whether implicit sexual beliefs predicted people's attributions about the main cause of low desire and arousal, as well as to test attributions as a mechanism for the links between implicit sexual beliefs and well-being. I also analyzed participants' open-ended responses to gain insight into the common causes people naturally anticipate for imagined low sexual desire and arousal. In Studies 2 and 3, I focused on clinical samples of couples coping with one person's clinically low desire. Study 2 was a longitudinal study of couples coping with SIAD, in which I aimed to test

whether the associations between implicit sexual beliefs and well-being from previous work with community couples (Maxwell et al., 2017; Sutherland & Rehman, 2018) extended to couples coping with low sexual desire. Study 3 was a daily diary study of couples coping with SIAD, in which my key goals were to test whether the associations between implicit sexual beliefs and attributions for low sexual desire from Study 1 extended to couples coping with SIAD, and whether either partner's chronic attributions for the person with SIAD's daily levels of desire accounted for the associations between implicit beliefs and well-being in daily life. Lastly, in Study 4, I conducted an experimental study of people in relationships who were oriented toward sexual growth or destiny beliefs to test the effect on the attributions they made for hypothetical low desire, and in turn, their reports of well-being and responses to low desire. What follows is a summary of my findings across studies, situated in previous research and theory, and a discussion of theoretical and practical implications and suggestions for future research.

6 Summary of Findings

Overall, I found that people higher in sexual destiny beliefs reported poorer well-being. In fact, sexual destiny beliefs were particularly detrimental in clinical samples (a novel extension of the implicit beliefs literature), showing more negative associations with well-being than any associations—positive or negative—found for sexual growth beliefs. Women coping with sexual dysfunction, including low desire, tend to report feelings of shame and inadequacy as a romantic partner and as a woman more broadly (Parish & Hahn, 2016; Shallcross et al., 2018; Trudel et al., 2001), and it is conceivable that partners might feel similar emotions in addition to feeling sexually rejected. Higher sexual destiny beliefs in the context of sexual dysfunction such as SIAD are likely to reinforce these negative emotions, given the incongruence between sexual destiny beliefs and lived experience (i.e., a belief in natural sexual compatibility vs. experiencing sexual

problems), and may promote greater avoidance (e.g., of sex and non-sexual touch, and of communication about the sexual problem). In fact, in a study of women coping with hypoactive sexual desire, when they reported more perfectionist views of sex (i.e., believed that love should occur naturally and spontaneously, rather than being planned), they had more negative thoughts about their relationship, including partner doubts and incompatibility (in line with sexual destiny beliefs; Trudel et al., 2001). Similarly, research has shown that men with secondary erectile dysfunction tend to hold perfectionistic views about themselves—both in general and regarding their sexual performance, and they tend to blame themselves for their sexual challenges rather than the relationship or circumstances, even when they had other explanations for them (Quadland, 1980). In contrast to what I found for sexual destiny beliefs, people higher in sexual growth beliefs reported greater well-being when faced with sexual challenges. In fact, in both Studies 2 and 3, sexual growth beliefs were associated with higher sexual desire, even among women with a diagnosis of clinically low desire. It is possible that beliefs about sexual satisfaction requiring work and effort to maintain—especially in the clinical samples of couples coping with a distressing sexual issue—encourage partners to engage in more adaptive coping strategies by practicing patience when navigating their sexual challenges and searching for ways to overcome them. Taken together, these findings align with theory suggesting that sexual destiny beliefs should detract from well-being in the face of challenges, whereas sexual growth beliefs should promote more adaptive coping strategies, like putting in the effort to resolve them, which would help to maintain their well-being (Maxwell et al., 2017; Raposo et al., 2020; Raposo et al., 2021; Uppot et al., 2023).

For anticipated responses to imagined low desire scenarios (Studies 1 and 4), those higher in sexual destiny beliefs were also more likely to consider breaking up (compared to those lower

in sexual destiny beliefs, or those oriented toward sexual growth beliefs), which is consistent with past work showing that people who prioritize finding a soulmate to marry are more open to ending their relationship when their needs are not met (Amato, 2009), and that those high in passion decay beliefs (the belief that declines in romantic passion are irreversible) report lower commitment when passion is low (Carswell & Finkel, 2018). In contrast, in Study 4, those oriented toward sexual growth beliefs said they would find low desire to be less challenging to deal with, again supporting past work showing that they tend to better maintain their relationships and well-being during challenging times and view challenges as opportunities for growth (Maxwell et al., 2017; Raposo et al., 2020; Raposo et al., 2021; Uppot et al., 2023).

Across studies, consistent with past work (Maxwell et al., 2017; Rossi et al., 2022), people endorsed sexual growth beliefs to a greater extent than sexual destiny beliefs, and partners' beliefs were closely aligned, even in samples in which one partner had a clinical diagnosis of low desire (Studies 2 and 3). Sexual growth and destiny beliefs were negatively correlated (*r*s ranging from -.17 to -.27), indicating that more strongly endorsing one type of belief corresponded with a lower endorsement of the other, replicating past work (Maxwell et al., 2017). Moreover, the effects of implicit sexual beliefs held above and beyond effects of implicit beliefs about relationships more broadly, highlighting their unique role in maintaining sexual satisfaction. This provides additional support for the sexual domain being related to, but distinct from, the relationship more broadly (*r* between sexual and relationship growth beliefs = .44, $p < .001$; *r* between sexual and relationship destiny beliefs = .41, $p < .001$; also demonstrated by Maxwell et al., 2017), and demonstrates that sexual beliefs have unique associations with relationship and sexual well-being.

When asked, people attributed low sexual desire and arousal in Study 1 to various causes, such as psychological (e.g., poor mood, anxiety, depression, stress, etc.), lack of sleep (e.g., feeling exhausted), physical (e.g., aging, illness, medication, menopause), and relationship/partner-focused (e.g., feeling unloved, lack of effort, unmet needs). This wide array of causal themes reinforces past work emphasizing the importance of considering unique experiences with low desire (rather than average levels of desire overall; Sutherland et al., 2020; for a review, see O'Sullivan & Vannier, 2016), the biopsychosocial determinants of sexual desire (Carvalho & Nobre, 2011), and the impact of causal attributions about medical conditions on emotional responses above and beyond diagnosed somatic risk (Rowland et al., 2013). People higher in sexual destiny beliefs experienced difficulty with identifying one main cause in both hypothetical scenarios (low desire and arousal), which was not surprising given that destiny beliefs have been associated with making more helpless attributions in the face of challenges (Dweck & Leggett, 1988; Henderson & Dweck, 1990; Robins & Pals, 2002). They also made more partner responsibility attributions and, unexpectedly, higher control attributions for low desire. Those with higher sexual growth beliefs also made higher control attributions, as predicted and consistent with past work showing they tend to use more adaptive problem-solving strategies, make fewer helpless attributions, and better maintain their relationships and well-being (Blackwell et al., 2007; Dweck, 1999; Dweck et al., 1993; Hong et al., 1999; Maxwell et al., 2017; Raposo et al., 2020; Robins & Pals, 2002; Uppot et al., 2023). Overall, I demonstrated that attributions are a novel mechanism used by those higher in sexual growth *and* destiny beliefs when facing sexual challenges. Across studies, I also found additional links between sexual beliefs and other attribution dimensions, but these were largely inconsistent.

I also demonstrated that attributions were associated with well-being in the face of sexual challenges. Attributing the cause of low desire to a partner (i.e., partner responsibility attribution) was associated with lower well-being, which corroborates past work showing the detriments of making partner responsibility attributions for challenges in relationships. For example, in a study of women experiencing sexual dysfunction, partner responsibility attributions were linked to lower well-being (Stephenson & Meston, 2016). Similarly, in another study, new mothers who attributed their postpartum sexual challenges to their partner felt less satisfied with their sex lives and relationships (Vannier et al., 2018), which also reflects similar patterns found in romantic relationships more broadly (e.g., Durtschi et al., 2011; Péloquin et al., 2018; Shnaider et al., 2014). In contrast, feeling more in control over the cause of low desire was linked to greater well-being, which has been consistently shown to be a positive strategy in other research. For example, greater internal control (a combination of both internal causality and feelings of control) have been associated with greater sexual frequency, orgasm frequency, affection, sexual satisfaction, and lower anxiety in sexual situations (Catania et al., 1984), and in contrast, feeling less in control was correlated with higher distress among people coping with sexual challenges (Fichten et al., 1988). Past work has similarly shown that being higher in sexual self-efficacy (i.e., being confident in one's ability to experience sexual pleasure) was linked to greater sexual communication, showcasing the importance of feeling sexually capable of achieving a positive outcome–i.e., more in control – and associations with sexual maintenance strategies (Kohlberger et al., 2019). Attribution dimensions were generally significantly correlated with one another, and partners were aligned on all attribution dimensions (all correlations were significant and positive). Given that attributions were all correlated with each other, some of my null effects might have been due to the shared variance between the different attributions.

A key novel contribution of my dissertation was drawing on theory and research on attributions as a key explanation for why sexual growth and destiny beliefs are often differentially associated with well-being in the face of sexual challenges. I found that the attributions people made for their own (or partner's) low sexual desire accounted for associations between implicit sexual beliefs and sexual and relational well-being—in ways that were in line with my predictions, but also in ways that deviated from my predictions. Most robustly and in line with my predictions, attributing low desire to a partner's responsibility accounted for the poorer well-being that people higher in sexual destiny beliefs—or their partners—tended to report. This finding is consistent with prior research showing that people higher in sexual destiny beliefs tended to anticipate using more maladaptive coping strategies (Sutherland & Rehman, 2018), and that greater partner responsibility attributions were correlated with less effort to improve the sexual relationship among couples coping with sexual dysfunctions (Fichten et al., 1988).

Although greater control attributions tended to explain links between higher sexual growth beliefs and greater well-being, global attributions were also higher for those higher (compared to lower) in sexual growth beliefs, and global attributions were in turn associated with lower well-being. These negative effects of global attributions align with past work showing that global attributions for sexual pain disorders were linked with greater psychological distress and lower sexual functioning (Jodoin et al., 2011), as well as poorer dyadic adjustment, higher distress, and lower sexual satisfaction among partners of women with a sexual pain disorder (Jodoin et al., 2008). However, although endorsing greater growth beliefs may help people to construct more realistic perspectives of the broad impact sexual challenges may have on relationships overall, this link was not expected and does not tend to align with what attribution

theory might suggest. Overall, these findings show that attributing low desire to more controllable causes is associated with greater well-being for people higher in sexual growth beliefs, whereas seeing the cause as impacting all areas of the relationship explains the detriments to their well-being.

7 Theoretical Contributions

My dissertation extends research on implicit sexual beliefs in five key ways. First, I extended associations from community samples in my dissertation and past work to couples dealing with clinically low desire. Overall, results were generalizable to clinical couples, and sexual destiny beliefs (compared to sexual growth beliefs) tended to be particularly detrimental for well-being in clinical samples (compared to community samples). In line with past work demonstrating that people higher in sexual destiny beliefs tend to report poorer well-being in the face of sexual incompatibilities (Maxwell et al., 2017), I showed for the first time that in couples coping with one person's chronic sexual challenge (i.e., a context that may signal threatened sexual compatibility for those higher in sexual destiny beliefs), sexual destiny beliefs were consistently associated with poorer well-being. These findings provide an important contribution to the small but growing literature on how implicit sexual beliefs function when couples are less satisfied or coping with a challenging issue.

Second, I found evidence for a key mechanism that accounts for associations between sexual growth and destiny beliefs and well-being. People hold different beliefs about sex and these beliefs are differentially associated with key outcomes. In my dissertation, I explained *why* sexual beliefs are linked with well-being outcomes—through the attributions people assign to causes of low desire. Of note, one reason why people higher in sexual destiny beliefs reported poorer well-being and responses to low desire was that they tended to make more partner

responsibility attributions (and in Study 3 only, more stable attributions) for their lower desire. I also showed that sexual destiny beliefs were associated with being more likely to consider breaking up because of low desire. These findings align with past work showing that destiny beliefs have been associated with blaming and punishing others for negative behaviours (Erdley & Dweck, 1993), that both partners in couples coping with women's hypoactive sexual desire attributed the cause of the sexual issue to both partners' negative personality traits and behaviors and perceived malicious behaviors (Trudel et al., 2001), and that those who prioritize soulmates are more open to ending their relationship when they have unmet needs (Amato, 2009).

In contrast, one reason why people higher in sexual growth beliefs or destiny beliefs reported greater well-being and responses to low desire was that they tended to make more control attributions. That is, I found that control attributions were consistently associated with greater well-being, but across studies, control attributions were unexpectedly associated with both sexual growth *and* destiny beliefs. In related implicit beliefs research (e.g., about achievement, intelligence, and relationships), people higher in growth beliefs have been shown to exert more effort to resolve the issue, maintain more adaptive problem-solving strategies, persist longer in the face of prolonged failure, and report greater positive affect (Bergen, 1991; Blackwell et al., 2007; Dweck, 1999; Dweck & Leggett, 1988; Hong et al., 1999; Robins & Pals, 2002), suggesting a greater sense of control. However, past research is mixed for those higher in destiny beliefs—they are especially threatened by cues of incompatibility, react more negatively in the face of conflict (Knee, 1998; Knee et al., 2003), and make more helpless attributions for challenging events (Dweck & Leggett, 1988; Henderson & Dweck, 1990; Robins & Pals, 2002), suggesting a lack of control. But, when they are confident that their partner is compatible with them, they experience more positive relationship outcomes (Burnette & Franiuk, 2010) and have

more relationship-enhancing thoughts (Franiuk et al., 2004). In my studies, the hypothetical or real sexual challenges may not have threatened their views of their partner as their soulmate given that couples were established and highly satisfied, which may have helped them to sustain a greater sense of control. Overall, I demonstrated for the first time that implicit sexual beliefs shape sexual attributions, advancing the current understanding of how implicit sexual beliefs influence cognitive processes, relationship dynamics, and relationship and sexual well-being.

Unlike much of the attribution literature that has focused on non-sexual contexts (e.g., romantic relationships, friendships, academic performance, etc.), I specifically focused on sexual attributions, which helped to shed additional light on how people make sense of sexual challenges and adds to the existing literature on how people explain events in the sexual domain. Past research has shown some differences in attributions for sexual vs. non-sexual issues, with certain attribution dimensions (e.g., internal attributions) being thought of as more "positive" than "negative" in some sexual contexts. For example, women with vestibulodynia reported better dyadic adjustment when they made internal attributions (Jodoin et al., 2011; also supported by work on coping and health by Low et al., 1993), and in a study on desire challenges, women categorized as having average levels of desire made more internal attributions, compared to those categorized as being globally distressed (i.e., very low relationship satisfaction, low sexual satisfaction, poor communication) who made more external attributions for their low desire (Sutherland et al., 2020). However, whereas internal attributions were linked to greater well-being and a lower likelihood of considering breaking up in Study 1, in some other research, internal attributions for negative events have been associated with more negative factors and outcomes (Kinderman & Bentall, 1996; Klein et al., 1976; Weiner, 1985), including poorer dyadic adjustment and higher distress (Jodoin et al., 2008), weaker erectile

response and sexual arousal (Weisberg et al., 2001), and more depressive and anxious symptoms (as assessed with self-blame; Péloquin et al., 2018). Although the outcomes of internal attributions have been somewhat inconsistent in the literature, my findings demonstrate that the sexual domain may be a domain in which control (and potentially also internal) attributions have benefits, such that people are more willing to take ownership over the problem and put greater effort into resolving it (echoing similar sentiments by Vannier et al., 2018).

Third, I also provided novel insights into partner dynamics. Higher sexual destiny beliefs were negatively associated with both partners' relationship, sexual, and personal well-being, whereas this was not generally the case for sexual growth beliefs. I also found some unexpected partner effects, such that when a partner had higher sexual destiny beliefs, the person with SIAD reported greater personal well-being (i.e., lower anxiety and fewer depressive symptoms). Although this seems counterintuitive, women with low desire generally feel worse (i.e., more guilt, anxiety, and depression) compared to their partners when thinking about their sexual relationship (Graham et al., 2017; Tiefer et al., 2015). If people with low desire perceive that their partner views sexual satisfaction as the result of natural sexual compatibility (rather than the result of continuous effort and maintenance), then this perception may actually relieve their distress about the impact of their low desire on their relationship, and as a result, help them to feel less negatively affected by their diagnosis. In other words, having a partner who holds high sexual destiny beliefs may buffer people with low desire's symptoms of anxiety and depression by limiting their attention on or pressure to "fix" their low desire (i.e., reducing the expectations placed on them, feeling relieved to be partnered with someone who does not subscribe to a belief that more effort will fix the problem) or by leading them to be more accepting of their low desire. Conversely, when a person with SIAD reported higher sexual growth beliefs, their partner

reported lower sexual desire, which aligns with findings from another study on changes in desire due to the transition to parenthood (Rossi et al., 2022), as well as with a study demonstrating that greater sexual script flexibility (i.e., adjusting sexual approaches in the face of sexual challenges) was linked to lower desire for people (four months later) and their partners (at baseline; Bouchard et al., 2023). Endorsing higher sexual growth beliefs may translate into people with SIAD being more persistently focused on working through the distressing sexual problem with their partners (e.g., being more motivated to do things to trigger their desire), which, as noted, is linked to their own higher sexual desire. However, at the same time, these efforts might feel like a "turn off" to their partners; that is, people with SIAD's focused attention on working through their low desire may contradict the "spontaneity narrative" that some people want in their relationship (e.g., Sims & Meana, 2010; Kovacevic et al., 2023), which could ultimately dampen their partners' desire.

In Study 3 in which I examined both partners' attributions for daily levels of desire (i.e., people with SIAD's attributions for their own desire, and partners' attributions for the people with SIAD's desire), I was able to test the interplay between both partner's beliefs and attributions. Specifically, when a person with SIAD was higher in sexual destiny beliefs or sexual growth beliefs, their partner made higher partner responsibility and control attributions (i.e., believed the cause was due to themselves and something the person with SIAD could control; in addition to other, more exploratory attribution dimensions). Mediation analyses further confirmed that one person's sexual beliefs were associated with how their partner assigned meaning to challenges, which was subsequently linked with their partner's relationship and sexual well-being. Taken together, I showed that attributions for low desire are not only shaped by people's own beliefs, but also by their partners' beliefs. These findings emphasize the

importance of considering both partners' perspectives in research and clinical practice for couples coping sexual challenges.

Fourth, in addition to rating attributions, I also asked an open-ended question about what people thought the main cause of low desire and arousal would be. In their own words, participants described a number of causes demonstrating that the causes of low desire and arousal are multifaceted, with enduring vulnerabilities (depression, health, body image, menstruation) and situational factors (feeling tired or stressed, having a bad day), and more personal (did not feel good about myself) and relational causes (fight with partner, partner's poor hygiene). At times, low desire might also be warranted due to people not wanting to experience unfulfilling sex (i.e., sex that is not satisfying), being mistreated by a partner, or feeling neglected (e.g., unappreciated, ignored, or unloved). Beyond identifying causes, the control people feel over the cause, and their attributions to their partner, might be especially important for how they appraise the situation and ultimately feel about their relationship and sex life. My qualitative findings coincide with past work highlighting the wide array of factors that can impact desire and other sexual changes, including low energy (Murray & Millhausen, 2012), stress and mental health (Bodenmann et al., 2005; Simkins-Bullock, 1992; Trudel et al., 2001), hormonal and non-cyclical changes across the menstrual cycle–including menopause-related conditions (Kiesner et al., 2023; Mansfield et al., 2000; Marcinkowska et al., 2022), unsatisfying sexual experiences (Trudel et al., 2001), wanting more equality in their relationship (Mansfield et al., 1998), and negative feelings toward a partner (Trudel et al., 2001). My findings also echoed qualitative research by Sims and Meana (2010) on the reasons why women believe they lost desire for their partner, which included routine sex, over-familiarity with a partner, family and financial obligations, lack of sexual spontaneity, lack of romance from a partner, declines in

physical care in oneself and partner (e.g., physical attractiveness, weight gain), distractions, and not feeling sexually desirable, although relationship difficulties and physical problems (e.g., fatigue, hormones, contraceptive use) were more commonly mentioned in my research. Importantly, these findings suggest that the causes identified in a small group of women currently experiencing declined sexual desire (Sims & Meana, 2010) also extend to a larger mixed-gender group assigning causes to hypothetical declines in sexual desire and arousal, demonstrating the generalizability in my work and the work conducted by others. For the first time, I also showed how the endorsement of causes for low desire and arousal differs by implicit sexual beliefs. Out of 26 themes across situations, only six differed by implicit sexual beliefs. This finding suggests that, although people higher (vs. lower) in sexual growth or destiny beliefs are not typically more likely to endorse a specific cause, they do seem to assign different attributions for the same type of cause, which might be most critical for well-being.

Fifth, theory suggests that, especially for those high in sexual destiny beliefs, situations of incompatibility should be associated with lower well-being (Maxwell et al., 2017). I assessed incompatibility in multiple ways (i.e., relationship and sexual compatibility, conflict) in community couples and clinical couples coping with low desire. Overall, the effects of incompatibility were inconsistent, and in some cases counterintuitive. In Study 2 (clinical sample), when a person with SIAD's partner perceived them as being highly sexually compatible, people with SIAD who were higher (vs. lower) in sexual destiny beliefs reported higher—rather than lower—conflict in the relationship, contrasting with what theory suggests. It is possible that the impact of sexual destiny beliefs on well-being did not vary as much with low sexual compatibility as anticipated because couples were more established and had been coping with low desire for an average of 4.55 years (Study 2) and 7.30 years (Study 3; i.e., they may

have habituated to signs of threat that chronic low desire might otherwise signal to newer couples, or couples who are newly experiencing it). In contrast, in Study 4 (non-clinical sample), I found potential resilience effects of sexual growth beliefs in the face incompatibility. Specifically, when people oriented toward sexual growth beliefs were less sexually compatible with their partner, they said they would be less—rather than more—motivated to do something to resolve the low desire. Although these findings suggest that people higher in sexual growth beliefs are buffered and still report greater relationship quality, even when faced with relationship and sexual issues (Maxwell et al., 2017), they contrast with other work showing that higher sexual growth beliefs were linked with greater responsiveness in the face of sexual challenges (Uppot et al., 2023). In Study 4, people oriented toward sexual growth beliefs may have said they would be less motivated when faced with low compatibility given that "low" levels in this sample were still relatively high (i.e., close to the midpoint of the scale), highlighting the need for further research with samples experiencing more extreme incompatibility. It is also possible that, despite being less sexually compatible with their partner, believing that issues require work and promote growth may have buffered the extent to which low desire would seem troubling and as a result, lessen their drive to do something to resolve the issue. Taken together, these findings suggest that the effects of incompatibility are inconsistent and potentially less critical in understanding responses to low desire in both clinical and non-clinical samples.

8 Practical Implications

My dissertation provides implications for clinicians, therapists, and educators working with couples facing sexual challenges. I have shown that endorsing sexual destiny beliefs in the face of low desire has detriments for not only people's relationship, sexual, and personal well-

being, but also for how they explain the causes of low desire to be their partner's responsibility and something that they can control. The scalability of the manipulation of implicit sexual beliefs in Study 4 also implies broad implications for couples, given that I showed (along with past work; e.g., Maxwell et al., 2017; Sutherland & Rehman, 2018) how easily people can be guided to adopt more adaptive beliefs about the maintenance of sexual satisfaction, and how impactful doing so can be for shaping how challenging low desire feels depending on one's sexual beliefs. For example, in cognitive behavioral therapy, more adaptive beliefs (such as sexual growth beliefs) are promoted, and less adaptive beliefs (such as sexual destiny beliefs) are challenged and reframed using a variety of techniques (e.g., cognitive restructuring), which have subsequently been linked to more adaptive coping strategies (Beck & Haigh, 2014). Interventions for couples coping with low desire and other sexual challenges should target implicit sexual beliefs when promoting relationship awareness programs and psycho-educational materials to enhance people's awareness and understanding of their sexual beliefs. Practitioners should also seek to identify and explain the consequences of sexual destiny beliefs amidst sexual challenges and consider shifting people's focus toward working on resolving these challenges, instead, given that endorsing sexual growth beliefs was generally shown to be associated with more adaptive attributions and greater well-being. Although I demonstrated some boundary effects of the benefits of sexual growth beliefs for people with low desire's partners (also demonstrated by Maxwell et al., 2017), I also showed that being higher in sexual growth beliefs might help people to feel less threatened by relationship and sexual incompatibility (Study 4), further highlighting the potential benefits of promoting sexual growth beliefs in couples coping with sexual challenges.

Interventions could also target sexual attributions, although more work is needed to fully understand which types and combinations of attribution dimensions would be particularly adaptive in the context of coping with a sexual challenge for those higher vs. lower in sexual growth and destiny beliefs. For example, I showed that control attributions consistently explained greater well-being for those higher in either sexual growth or destiny beliefs, whereas seeing the causes of low desire as being a partner's responsibility was associated with poorer well-being. Promoting control attributions and guiding couples away from making partner responsibility attributions may help couples improve their interactions and maintain greater well-being, even while coping with sexual challenges. For example, in an interventional study for couples coping with women's hypoactive desire, women believed they had personal control over their sex life and both partners believed they could improve, and yet women were pessimistic that things could or would change (Trudel et al., 2001). However, after completing cognitive behavioral therapy (using a variety of techniques including communication training and sensate focus exercises), they more strongly believed in their couple's ability to change (Trudel et al., 2001). Focusing on attributions for sexual issues in therapy might also help to uncover how partners are making sense of the issues they are facing and identify new opportunities for developing more adaptive attribution tendencies.

To help facilitate these suggestions, practitioners may consider guiding couples toward more adaptive communication strategies that would help them to better understand each other's experiences without assumptions, and seek clarification as needed to avoid unnecessary conflict or blame (e.g., Mitchell et al., 2011). Couples may also benefit from learning how to counter problematic communication patterns with techniques like mindfulness, reframing, and greater partner support (Metz & McCarthy, 2003; Rowland et al., 2016), taking into consideration the

ways in which their attribution tendencies may vary based on their unique experiences of low desire (Sutherland et al., 2020). Indeed, while couples coping with SIAD tend to engage in poorer quality sexual communication compared to non-clinical control couples (Rosen et al., 2019), research shows that communication is one of the most frequently used strategies to help long-term couples get back on track when desire is out of sync (Herbenick et al., 2014), and regular sexual communication is an effective way of maintaining desire (Mark & Lasslo, 2018; Murray & Milhausen, 2012) and buffering against negative outcomes (Rehman et al., 2011). Lastly, I observed several partner effects in Studies 2 and 3, and past work has also shown the consequences of a person's SIAD on their partner's relationship and sexual well-being (Rosen et al., 2019). These findings suggest that involving both partners in therapy or treatment for sexual issues may be critical to ensure relationship dynamics are accounted for, and to target and benefit everyone in the couple.

Beyond couples coping with low desire or other sexual challenges, results may also broadly benefit couples during major life transitions like the transition to parenthood or those experiencing the stress of entering a new job—times when desire particularly tends to fluctuate, as well as those experiencing more minor desire discrepancies with their partners. Additionally, this work supports past research highlighting the impact of positive belief systems in couples dealing with challenges like erectile dysfunction, pain, and orgasm difficulties. For example, positive sexual schemas (e.g., believing one's sexual response is positive and healthy) are associated with greater physiological and subjective sexual arousal (compared to negative sexual schemas; Middleton et al., 2008; for a review of psychological factors linked with women's sexual dysfunctions, see Brotto & Klein, 2010). Another positive belief system involves greater approach goals for sex (i.e., engaging in sex to pursue positive outcomes), which helps people to

focus on the positive reasons for engaging in sex and leads to higher desire, sexual satisfaction, and relationship satisfaction (Muise et al., 2017). Leveraging positive belief systems (like sexual growth beliefs) may promote more adaptive attribution tendencies in couples coping with sexual challenges—a direction for future work to explore.

9 Limitations and Future Directions

My dissertation has several strengths, including the use of community and clinical samples and multiple methods. In the community samples, I used hypothetical situations of low desire following the approach taken in many other studies on sexual attributions (e.g., Davis et al., 2015; Jodoin et al., 2008, 2011; Rowland et al., 2016; Scepkowski et al., 2004), which allowed me to test initial ideas and assess attributions in an experimental manipulation before some people may have already experienced low desire in their relationship. I also extended this approach to an ecologically valid sample and assessment of couples coping with chronic low desire, which included daily attributions for levels of desire (Study 3). Including both clinical and non-clinical samples allowed me to assess diverse perspectives, highlight the generalizability of my findings and the findings from past work, and show that effects were generally consistent across both types of samples. In both clinical samples, I also assessed nuanced partner dynamics and attributions for a *partner's* level of desire (Study 3 only), showcasing the roles of interdependence and partner dynamics in shaping beliefs, attributions, and sexual experiences more broadly. Finally, the multi-method approach that I took allowed for a more robust assessment of my questions. Specifically, daily diary methods with repeated assessments provided a more accurate depiction of attributions in daily life, whereas the experimental approach of Study 4 demonstrated causal effects and directionality from implicit sexual beliefs to attributions and well-being.

However, this research is not without its limitations, and there are potential alternative explanations that I could not assess. I examined *anticipated* responses to low desire in community samples (Studies 1 and 4), which may not map onto how people would *actually* cope with low desire. For example, although I assessed people's motivation to resolve low desire and their likelihood of considering breaking up if they were to hypothetically face low desire in the near future, it is unclear whether they would indeed put in the work to resolve low desire or decide to breakup, and at what point these behaviours might occur. Although I combined these insights with clinical samples of couples currently experiencing low desire, the behavioural and cognitive *responses* to low desire (i.e., how challenging the situation would be, how motivated they would be to resolve the issue, how likely they would be to consider breaking up) were not assessed in the clinical samples.

I assessed partner responsibility attributions, which have been argued to be conceptually different from blame attributions which tend to reflect an intent to bring about the given situation (Bradbury & Fincham, 1990; Fincham et al., 1987). It is possible that blame and responsibility were conflated in my research and that people would have responded differently to the responsibility measure had they been prompted to consider the extent to which they would blame their partner. This consideration might be especially relevant in the clinical samples, as it is possible that the partner of the person with SIAD might attribute more responsibility to them (as opposed to themselves) but may not necessarily *blame* them for experiencing low desire. As previously discussed, the literature on sexual challenges has identified a myriad of causes, and it may not be inherently clear what the cause of SIAD is (compared to the causes people may assign to the onset of low desire more generally, such as a new medication). In Study 1, I identified 13 key themes of causes for low desire and arousal, and in some cases, the causes

people assigned were not within their control (e.g., aging, injury, etc.). Including both responsibility and blame attribution dimensions in future research would help to disentangle how people with higher sexual destiny and growth beliefs differentiate between partner responsibility and blame, and whether sexual destiny beliefs are more strongly linked to blame above and beyond responsibility.

As with self-report work more broadly, being asked to rate causes using the specific attribution dimensions I provided may have triggered thought processes that might not have otherwise occurred in people's everyday lives outside of the context of a survey. Observational studies may provide different insights into how people naturally discuss the causes of low desire, without survey prompts for specific attribution dimensions. Past observational work has used the CAVE method (i.e., content analysis of verbatim explanations) to code verbal expressions of causal attributions (e.g., "this resulted in", etc.) in discussions, which has been described as a "reasonable alternative" to self-report hypothetical attribution measures (Adler et al., 2006, p. 40). For example, in a study that conducted life narrative interviews, researchers coded participants' spontaneously mentioned stable and global attributions (measured as a composite and referred to as a "depressogenic attribution style") and found they were positively correlated with self-reported depression, and negatively correlated with life satisfaction and physical health (Adler et al., 2006). Future research should explore which attribution dimensions naturally emerge based on implicit sexual beliefs. For example, might people higher (vs. lower) in sexual destiny beliefs naturally attribute responsibility to their partner, and say the cause is something they can control, as I have shown across studies, and would one type of attribution dimension be particularly salient in their verbal discussions?

Another limitation is that all samples assessed in my dissertation predominantly focused on established couples who were satisfied and compatible on average, and mostly White and straight, which means my results cannot speak to potential differences in samples of newer or younger couples, or couples of different ethnicities or sexual orientations. At this stage, I do not have evidence from this research that sexual attributions about low desire change as people age or relationships progress, but I anticipate these differences might depend on their nuanced relationship dynamics and attribution tendencies. For example, on the one hand, it is possible that prolonged exposure to sexual challenges over time (across the lifespan or within the same relationship) may provide greater insight into the accurate cause(s), realistic impacts (specific vs. global), and stability in the context of someone's unique relationship and attribution tendencies. On the other hand, it is equally possible that with prolonged exposure to sexual challenges over time, people may feel less in control and more helpless after having not seen natural improvements to their sexual challenges. It is also worth considering how effects may have differed in more distressed and less satisfied couples, as beliefs and attributions have been shown to vary among more vulnerable or unsatisfied partners. For example, in research on male erectile dysfunction, poorer marital adjustment was linked with greater partner blame, especially among men (Simkins-Bullock et al., 1992). Similarly, distressed spouses tend to make more partner responsibility attributions for their difficulties (Fincham, 1985), which has also been shown in research on people who are dissatisfied with their marriage (see Bradbury & Fincham, 1990). People who are less satisfied with, or distressed in, their relationships also tend to report higher internal or self-blame, global, and stable attributions (Bradbury & Fincham, 1990; Neff & Karney, 2004; Péloquin et al., 2018). Turning to happily married couples coping with various sexual dysfunctions, people experiencing sexual dysfunction who were happily married

attributed responsibility to themselves (i.e., internal), felt more in control, and said they would exert more effort to improve the sexual relationship; in contrast, happily married partners of people with sexual dysfunction were less likely to blame themselves (Fichten et al., 1988). In addition to demographic and descriptive factors, it is unclear the extent to which my findings might generalize to people at different life stages, such as those undergoing major transitions (e.g., transitioning to parenthood, starting a new job, relocating) or health issues which may involve new medications that can impact people's thoughts and sexual quality—a prominent theme identified in Study 1.

Although I showed evidence of directionality in a community sample for the effects of implicit sexual beliefs on attributions and appraisals of low desire in Study 4, future research should aim to manipulate attributions (i.e., the mediator) to test their causal role on well-being, as it is unclear whether they would subsequently shape well-being (as my mediation models imply. Future work should also seek to extend these links to clinical samples to assess whether implicit sexual beliefs shape sexual attributions in the context of couples coping with low desire (i.e., in Study 3, I showed that implicit sexual beliefs at baseline predicted sexual attributions at the daily level, but causality could not be inferred). Although previous research has shown that experimentally boosting sexual growth beliefs can increase satisfaction (Maxwell et al., 2017) and reduce maladaptive coping styles with hypothetical sexual desire problems (Sutherland & Rehman, 2018), it remains unclear whether similar interventions could also improve well-being among couples chronically coping with clinically low desire. Experimentally manipulating implicit sexual beliefs for couples currently undergoing sexual challenges could reveal how beliefs function as a coping mechanism, which would provide an extension of past work on

hypothesized reactions to desire problems (Sutherland & Rehman, 2018), as well as the malleability of beliefs over time.

Finally, I could not determine the trajectory of implicit sexual beliefs, attributions, and well-being over time. In Study 2, I found that on average, people with low desire's level of desire and sexual distress naturally improved over time, but this study design with only two time points (and no assessment of attributions) did not allow me to assess whether beliefs predicted this trajectory over time. It is possible that coping with chronic sexual dysfunctions may alter a person's sexual beliefs and attribution tendencies over time as a result of the onset or progression of low desire, making examining the trajectory of sexual beliefs and sexual and relationship quality a crucial next step to explore. To confirm the effectiveness, persistence, and causality of these effects, future research should manipulate beliefs (as in Study 4) and longitudinally assess couples more regularly over time (as in Study 3) to explore the factors that might be at play in changed well-being over time.

10 Conclusion

My dissertation extended theory and previous research to glean new insights into the association between people's implicit (lay) sexual beliefs and their relationship, sexual, and personal well-being. Across four multi-method studies of community and clinical samples coping with low desire, using cross-sectional, daily experience, dyadic, and experimental methods, I emphasize the critical role of cognition (i.e., beliefs and attributions) in shaping how people respond to sexual challenges in their relationships. Specifically, across studies, I generally found that higher (vs. lower) sexual destiny beliefs were associated with poorer well-being and greater partner responsibility and control attributions. In contrast, higher (vs. lower) sexual growth beliefs were associated with greater well-being and control attributions. For the first time,

I demonstrated the important, yet nuanced role of attributions for causes of low desire in understanding associations with sexual beliefs and well-being. Taken together, my dissertation showed robust links between implicit sexual beliefs and well-being in both clinical and non-clinical samples, as well as the key role of sexual attributions in explaining such links.

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Appendix A: Study 1

Attributions about the Main Cause Across Situations

In this section, I present the effects separated by situation: low desire and low arousal.

Low Sexual Desire Situation

Are implicit sexual beliefs associated with the attributions people make for their causes of hypothetical situations of low sexual desire?

People who were higher in sexual destiny beliefs attributed the causes of their hypothetical low desire to being their partner's responsibility (see Table A1). In contrast, people who were higher in sexual growth beliefs attributed the causes of their hypothetical low desire to being more global. There were no other significant associations. When controlling for implicit relationship beliefs, the association between sexual growth beliefs and global attributions was reduced to non-significance (b = .19, SE = .10, t(458) = 1.84, p = .066). In contrast, the non-significant association between sexual destiny beliefs and control attributions became statistically significant (b = .15, SE = .08, t(458) = 1.98, p = .049), and the significant effect of sexual destiny beliefs on partner responsibility attributions remained significant.

Table A1

Associations Between Implicit Sexual Beliefs and Attributions (Hypothetical Low Sexual Desire)

	Internal		Partner responsibility		Stability		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Sexual destiny	.15(.08)	1.94	.24(.07)	3.25**	-.06(.05)	-1.14	-.03(.06)	-.48	.14(.07)	1.95
Sexual growth	.17(.12)	1.43	-.02(.11)	-.16	.07(.08)	.85	.23(.09)	2.55*	.11(.11)	1.04

Note. **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients.

I was also interested in whether implicit sexual beliefs would be associated with how people expected to respond to the hypothetical situation about low sexual desire (see Table A2). People who were higher in sexual destiny beliefs reported that they were more likely to consider breaking up because of their hypothetical low desire, whereas there was no association with sexual growth beliefs. This significant effect held when controlling for implicit relationship beliefs, and the association between sexual growth beliefs and likelihood of considering breaking up became statistically significant (b = -.24, SE = .09, t(458) = -2.66, p = .008). As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual desire happening in the past four weeks. People who were higher in sexual growth beliefs found it easier to imagine low desire in the past four weeks, whereas there was no association with sexual destiny beliefs. This significant effect held controlling for implicit relationship beliefs, and the association between sexual destiny beliefs and ease of imagining the situation happening became statistically significant (b = -.17, SE = .07, t(458) = -2.30, p = .022). Given that it was easier for sexual growth believers to imagine the situation happening, I tested whether the significant effects of implicit sexual beliefs on attributions and likelihood of breaking up held controlling for ease of recall. With two exceptions, effects held controlling for ease of recall. The exceptions were that the non-significant association between sexual destiny beliefs and internal attributions became significant (b = .16, SE = .08, t(459) = 2.05, p = .041), and the effect of sexual growth beliefs on global attributions was reduced to non-significance (b = .18, SE = .09, t(459) = 1.96, p = .051).

Table A2

Associations Between Implicit Sexual Beliefs, Relationship Dissolution, and Ease of Recall (Hypothetical Low Sexual Desire)

	Breakup		Ease of recall	
	b(SE)	*t*	*b*(SE)	*t*
Sexual destiny	.26(.05)	4.87***	-.09(.07)	1.39
Sexual growth	-.14(.08)	-1.70	.36(.10)	3.55***

Note. ***$p < .001$. Beta values are unstandardized coefficients. Breakup = likelihood of considering breaking up.

Are the attributions people make for their causes of hypothetical situations of low sexual desire associated with relationship and sexual well-being?

First, I explored whether attributions for low desire predicted relationship and sexual well-being. People who attributed the causes of their hypothetical low desire to being their partner's responsibility reported lower relationship satisfaction, sexual satisfaction, and commitment (see Table A3). People who made more stable attributions reported lower relationship and sexual satisfaction, and desire. Lastly, people who felt that they could control the causes of their hypothetical low desire reported higher sexual satisfaction and desire. There were no other significant associations.

Again, I was interested in whether attributions would be associated with how people expected to respond to the situation (see Table A3). People reported that they were more likely to consider breaking up when they attributed the cause of their hypothetical low desire to being their partner's responsibility and stable. There were no other significant associations. As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation

about low sexual desire happening in their relationships in the past four weeks. People found it more difficult to imagine the situation happening in the past four weeks when they made higher partner responsibility attributions (b = -.11, SE = .04, t(457) = -2.57, p = .011), but it was easier to imagine when they made higher stable (b = .32, SE = .06, t(457) = 5.43, p < .001) and global attributions (b = .14, SE = .05, t(457) = 2.61, p = .009). Given differences in ease of recall across attributions, I tested whether the significant effects of attributions on well-being and likelihood of considering breaking up held controlling for ease of recall. All significant effects held controlling for ease of recall.

Table A3

Associations Between Attributions and Relationship and Sexual Well-Being (Hypothetical Low Sexual Desire)

	Relationship satisfaction		Commitment		Sexual satisfaction		Sexual desire		Breakup	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Internal	.02(.02)	.88	.002(.02)	.09	.03(.03)	1.14	-.01(.02)	-.25	-.03(.03)	-1.10
Partner responsibility	-.15(.03)	-5.90***	-.09(.02)	-4.25***	-.14(.03)	-4.74***	-.03(.03)	-1.19	.35(.03)	10.98***
Stable	-.14(.03)	-3.96***	-.06(.03)	-1.93	-.19(.04)	-4.73***	-.12(.03)	-3.62***	.11(.04)	2.50*
Global	-.01(.03)	-.46	-.01(.03)	-.20	.00(.03)	-.004	-.003(.03)	-.11	.04(.04)	1.04
Control	.04(.03)	1.36	.01(.02)	.44	.08(.03)	2.81**	.10(.03)	4.17***	.01(.03)	.24

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Breakup = likelihood of considering breaking up.

Second, I explored the reverse direction whereby relationship and sexual well-being predicted attributions for low desire (see Table A4). People who were higher in sexual satisfaction were lower in partner responsibility and stable attributions, whereas those who were more likely to consider breaking up were higher in partner responsibility and stable attributions, and lower in internal attributions. Finally, people who were higher in sexual desire were higher in control attributions.

As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual desire happening in their relationships in the past four weeks. People found it more difficult to imagine the situation happening in the past four weeks when they were higher in relationship satisfaction (b = -.35, SE = .12, t(456) = -3.01, p = .003), sexual desire (b = -.29, SE = .10, t(456) = -2.94, p = .003), and likelihood of breaking up (b = -.21, SE = .06, t(456) = -3.47, p < .001), but there were no other significant associations. Given differences in ease of recall across well-being, I tested whether the significant effects of well-being on attributions and likelihood of considering breaking up held controlling for ease of recall, and indeed, all significant effects held.

Table A4

Associations Between Relationship and Sexual Well-Being and Attributions (Hypothetical Low Sexual Desire)

	Internal		Partner responsibility		Stable		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Relationship sat.	.10(.14)	.71	-.20(.11)	-1.83	-.14(.09)	-1.58	-.03(.11)	-.32	.002(.12)	.01
Commitment	-.15(.15)	-1.00	.15(.12)	1.21	.12(.10)	1.24	.03(.12)	.26	-.10(.13)	-.73
Sexual sat.	.18(.11)	1.67	-.26(.09)	-2.97**	-.18(.07)	-2.50*	.03(.09)	.29	.11(.10)	1.13
Sexual desire	-.13(.12)	-1.16	.17(.09)	1.77	-.13(.08)	-1.72	-.07(.09)	-.75	.35(.10)	3.36***
Breakup	-.20(.07)	-2.74**	.59(.06)	10.14***	.13(.05)	2.63**	-.01(.06)	-.15	.04(.06)	.69

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Sat. = satisfaction. Breakup = likelihood of considering breaking up.

Attributions as mechanisms for links between sexual destiny beliefs and relationship and sexual well-being

Partner responsibility attributions. Sexual destiny beliefs were significantly associated with higher partner responsibility attributions. In turn, this was associated with lower relationship satisfaction (b = -.16, SE = .02, t(459) = -6.68, p < .001), commitment (b = -.09, SE = .02, t(459) = -4.40, p < .001), and sexual satisfaction (b = -.17, SE = .03, t(458) = -6.11, p < .001), and a greater likelihood of considering breaking up (b = .35, SE = .03, t(459) = 11.76, p < .001). Therefore, I tested whether partner responsibility attributions explained the associations between sexual destiny beliefs and all well-being variables (see Table A5). I found four significant indirect effects, such that people who were higher in sexual destiny beliefs reported higher partner responsibility attributions and, in turn, lower relationship satisfaction, commitment, sexual satisfaction, and a greater likelihood of considering breaking up.

All significant indirect effects held controlling for implicit relationship beliefs, as well as when controlling for all other attribution dimensions. However, when all other attributions were included in the model, the direct effect of sexual destiny beliefs on sexual satisfaction was reduced to non-significance (b = .08, SE = .04, t(454) = 1.82, p = .070).

Table A5

Partner Responsibility, Internal, and Control Mediations

Model	Total Effect	Direct Effect	Indirect Effect	95% Confidence Interval (bootstrapped)	
	b(SE)	*b*(SE)	*b*(BSE)	Lower Bound	Upper Bound
SD → partner resp. → rel satisfaction	-.08(.04)	-.04(.04)	**-.04(.02)**	-.07	-.01
SD → partner resp. → comm	-.09(.03)**	-.07(.03)*	**-.02(.01)**	-.04	-.01
SD → partner resp. → sex satisfaction	.07(.05)	.11(.04)*	**-.04(.02)**	-.08	-.01
SD → partner resp. → breakup	.26(.05)***	.18(.05)***	**.08(.03)**	.03	.15

Note. ***$p < .001$, **$p < .01$, *$p < .05$. BSE = bootstrapped SE. SD = sexual destiny beliefs. Rel = relationship. Sex = sexual. Resp. = responsibility. Bolded indirect effects indicate a significant effect (i.e., the confidence interval did not include 0).

Attributions as mechanisms for links between sexual growth beliefs and relationship and sexual well-being

Global attributions. Sexual growth beliefs were significantly associated with higher global attributions. However, in turn, this was not significantly associated with relationship satisfaction (b = -.02, SE = .03, t(459) = -.72, p = .470), commitment (b = -.01, SE = .03, t(459) = -.45, p = .655), sexual satisfaction (b = -.03, SE = .04, t(458) = -.77, p = .440), sexual desire (b = -.03, SE = .03, t(459) = -1.14, p = .255), or likelihood of considering breaking up (b = .01, SE = .04, t(459) = .34, p = .735). Therefore, I did not proceed with testing indirect effects or covariates.

Low Sexual Arousal Situation

Are implicit sexual beliefs associated with the attributions people make for their causes of hypothetical situations of low sexual arousal?

People who were higher in sexual destiny beliefs attributed the causes of their hypothetical low arousal to being their partner's responsibility (see Table A6). In contrast, people who were higher in sexual growth beliefs attributed the causes of their hypothetical low arousal to being more internal, global, and controllable. There were no other significant associations, and all significant effects held when controlling for implicit relationship beliefs.

Table A6

Associations Between Implicit Sexual Beliefs and Attributions (Hypothetical Low Sexual Arousal)

	Internal		Partner responsibility		Stability		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Sexual destiny	-.01(.08)	-.15	.21(.07)	2.80**	.01(.06)	.17	.003(.08)	.04	.10(.07)	1.44
Sexual growth	.31(.12)	2.53*	-.15(.11)	-1.38	.08(.08)	1.00	.35(.12)	2.89**	.30(.11)	2.71**

Note. **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients.

I was also interested in whether implicit sexual beliefs would be associated with how people expected to respond to the hypothetical situations about low sexual arousal that they were asked to imagine (see Table A7). People who were higher in sexual destiny beliefs reported that they were more likely to consider breaking up as a result of their hypothetical low arousal, whereas people higher in sexual growth beliefs reported that they were less likely to consider ending their relationship. Both effects held controlling for implicit relationship beliefs. As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual desire happening in their relationships in the past four weeks. People who were higher in sexual destiny beliefs found it more difficult to imagine experiencing lower arousal in the past four weeks, whereas there was no association with sexual growth beliefs. Given that destiny believers found it more difficult to imagine lower arousal in the past four weeks, I tested whether the significant effects of implicit sexual beliefs on attributions and likelihood of considering breaking up held controlling for ease of recall, and indeed, all effects held.

Table A7

Associations Between Implicit Sexual Beliefs, Relationship Dissolution, and Ease of Recall (Hypothetical Low Sexual Arousal)

	Breakup		Ease of recall	
	b(SE)	*t*	*b*(SE)	*t*
Sexual destiny	.28(.05)	5.93***	-.17(.07)	-2.43*
Sexual growth	-.16(.07)	-2.22*	.09(.11)	.88

Note. ***$p < .001$, *$p < .05$. Beta values are unstandardized coefficients. Breakup = likelihood of considering breaking up.

Are the attributions people make for their causes of hypothetical situations of low sexual arousal associated with relationship and sexual well-being?

First, I explored whether attributions for low arousal predicted relationship and sexual well-being. People who attributed the causes of their hypothetical low arousal to being their partner's responsibility reported lower relationship satisfaction, sexual satisfaction, and commitment (see Table A8). People who made more stable attributions reported lower relationship and sexual satisfaction, commitment, and desire. People who made more global attributions reported lower relationship satisfaction. Lastly, people who felt that they could control the cause of their hypothetical low arousal reported higher sexual desire. There were no other significant associations.

Again, I was interested in whether attributions would be associated with how people expected to respond to the situation (see Table A8). People reported that they were more likely to consider breaking up when they attributed the cause of their hypothetical low arousal to being their partner's responsibility, stable, and global. There were no other significant associations. As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual arousal happening in their relationships in the past four weeks. People found it easier to imagine the situation happening in the past four weeks when they made higher internal (b = .11, SE = .04, t(448) = 2.69, p = .007), stable (b = .42, SE = .06, t(448) = 7.24, p < .001), and global attributions (b = .13, SE = .04, t(448) = 3.29, p = .001). Given differences in ease of recall across attributions, I tested whether the significant effects of attributions on well-being and likelihood of considering breaking up held controlling for ease of recall, and indeed, all effects held.

Table A8

Associations Between Attributions and Relationship and Sexual Well-Being (Hypothetical Low Sexual Arousal)

	Relationship satisfaction		Commitment		Sexual satisfaction		Sexual desire		Breakup	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Internal	-.01(.03)	-.46	.01(.02)	.70	-.01(.03)	-.25	-.04(.02)	-1.59	-.01(.03)	-.34
Partner responsibility	-.15(.03)	-5.57***	-.08(.02)	-3.37***	-.13(.03)	-4.09***	-.05(.03)	-1.88	.28(.03)	8.56***
Stable	-.14(.03)	-3.98***	-.10(.03)	-3.64***	-.20(.04)	4.94***	-.15(.03)	-4.65***	.15(.04)	3.61***
Global	-.07(.02)	-2.86**	-.001(.02)	-.06	-.04(.03)	-1.31	.01(.02)	.41	.09(.03)	3.04**
Control	.03(.03)	1.00	.01(.02)	.40	.04(.03)	1.34	.08(.03)	3.10**	.02(.03)	.64

Note. ***$p < .001$, **$p < .01$. Beta values are unstandardized coefficients. Breakup = likelihood of considering breaking up.

Second, I explored the reverse direction whereby relationship and sexual well-being predicted attributions for low arousal (see Table A9). People who were higher in relationship satisfaction and commitment were lower in global attributions. People who were higher in sexual desire were lower in stable attributions and higher in control attributions. Finally, people who were more likely to consider ending their relationship made lower internal attributions, and higher partner responsibility and stable attributions. As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual arousal happening in their relationships in the past four weeks. People found it more difficult to imagine the situation happening in the past four weeks when they were higher in relationship satisfaction (b = -.31, SE = .12, t(450) = -2.67, p = .008) and sexual desire (b = -.56, SE = .10, t(450) = -5.60, p < .001), but there were no other significant associations. Given differences in ease of recall across well-being, I tested whether the significant effects of well-being on attributions held controlling for ease of recall, and with one exception, all effects held. The exception was that the significant effect of sexual desire on stable attributions was reduced to non-significance (b = -.10, SE = .08, t(449) = -1.34, p = .182).

Table A9

Associations Between Outcomes and Attributions (Hypothetical Low Sexual Arousal)

	Internal		Partner responsibility		Stable		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Relationship sat.	-.01(.14)	-.06	-.19(.12)	-1.62	-.08(.09)	-.86	-.37(.14)	-2.68**	.07(.12)	.59
Commitment	.12(.16)	.73	.11(.13)	.82	-.02(.10)	-.15	.37(.16)	2.39*	-.01(.14)	-.04
Sexual sat.	.11(.12)	.93	-.12(.10)	-1.28	-.13(.07)	-1.71	-.03(.11)	-.30	.05(.10)	.45
Sexual desire	-.11(.12)	-.87	-.01(.10)	-.13	-.26(.08)	-3.36***	.02(.12)	.15	.31(.11)	2.96**
Breakup	-.25(.09)	-2.84**	.53(.07)	7.46***	.17(.06)	3.15**	.11(.08)	1.32	-.07(.08)	-.96

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Sat. = satisfaction. Breakup = likelihood of considering breaking up.

Attributions as mechanisms for links between sexual destiny beliefs and relationship and sexual well-being

Partner responsibility attributions. Sexual destiny beliefs were significantly associated with higher partner responsibility attributions. In turn, this was associated with lower relationship satisfaction (b = -.14, SE = .03, $t(454)$ = -5.63, $p < .001$), commitment (b = -.08, SE = .02, $t(454)$ = -4.09, $p < .001$), and sexual satisfaction (b = -.14, SE = .03, $t(454)$ = -4.79, $p < .001$), sexual desire (b = -.06, SE = .02, $t(454)$ = -2.53, p = .012), and a greater likelihood of considering breaking up (b = .25, SE = .03, $t(454)$ = 8.74, $p < .001$). Therefore, I tested whether partner responsibility attributions explained the associations between sexual destiny beliefs and all well-being variables (see Table A10). I found five significant indirect effects, such that people who were higher in sexual destiny beliefs reported higher partner responsibility attributions and, in turn, lower relationship satisfaction, commitment, sexual satisfaction, sexual desire, and a greater likelihood of considering breaking up.

All significant indirect effects held controlling for implicit relationship beliefs, as well as when controlling for all other attribution dimensions.

Table A10

Partner Responsibility Mediations

Model	Total Effect	Direct Effect	Indirect Effect	95% Confidence Interval (bootstrapped)	
	b(SE)	*b*(SE)	*b*(BSE)	Lower Bound	Upper Bound
SD → partner resp. → rel satisfaction	-.07(.04)	-.04(.04)	**-.03(.01)**	-.06	-.01
SD → partner resp. → comm	-.09(.03)**	-.08(.03)*	**-.02(.01)**	-.04	-.003
SD → partner resp. → sex satisfaction	.07(.05)	.10(.04)*	**-.03(.01)**	-.06	-.01
SD → partner resp. → sex desire	.12(.04)**	.13(.04)***	**-.01(.01)**	-.03	-.001
SD → partner resp. → breakup	.28(.05)***	.23(.05)***	**.05(.02)**	.01	.10

Note. ***$p < .001$, **$p < .01$, *$p < .05$. BSE = bootstrapped SE. SD = sexual destiny beliefs. Rel = relationship. Sex = sexual. Resp. = responsibility. Bolded indirect effects indicate a significant effect (i.e., the confidence interval did not include 0).

Attributions as mechanisms for links between sexual growth beliefs and relationship and sexual well-being

Internal attributions. Sexual growth beliefs were significantly associated with higher internal attributions. In turn, this was associated with higher commitment (b = .04, SE = .02, t(453) = 2.27, p = .023) and a lower likelihood of considering breaking up (b = -.10, SE = .03, t(453) = -3.64, p < .001). However, internal attributions were not significantly associated with relationship satisfaction (b = .04, SE = .02, t(453) = 1.92, p = .056), sexual satisfaction (b = .04, SE = .03, t(453) = 1.42, p = .155) or sexual desire (b = -.01, SE = .02, t(453) = -.24, p = .808). Therefore, I tested whether internal attributions explained the associations between sexual growth beliefs and commitment and likelihood of considering breaking up (see Table A11). I found two significant indirect effects, such that people who were higher in sexual growth beliefs reported higher internal attributions and, in turn, higher commitment and a lower likelihood of considering breaking up.

All significant indirect effects held controlling for implicit relationship beliefs. However, when controlling for all other attribution dimensions, the effects of internal attributions on commitment (b = .01, SE = .02, t(448) = .61, p = .544; indirect effect 95% CI [-.01, .01]) and likelihood of considering breaking up (b = -.01, SE = .03, t(448) = -.33, p = .740; indirect effect 95% CI [-.02, .01]) were reduced to non-significance.

Global attributions. Sexual growth beliefs were significantly associated with higher global attributions. In turn, this was associated with lower relationship satisfaction (b = -.08, SE = .02, t(454) = -3.21, p = .001) and sexual satisfaction (b = -.07, SE = .03, t(454) = -2.53, p = .012), and a higher likelihood of considering breaking up (b = .07, SE = .03, t(454) = 2.42, p = .016). However, global attributions were not significantly associated with commitment (b = -.01,

SE = .02, *t*(454) = -.63, *p* = .528) or sexual desire (*b* = -.03, *SE* = .02, *t*(454) = -1.44, *p* = .151). Therefore, I tested whether global attributions explained the associations between sexual growth beliefs and relationship satisfaction, sexual satisfaction, and likelihood of considering breaking up (see Table A11). I found three significant indirect effects, such that people who were higher in sexual growth beliefs reported higher global attributions and, in turn, lower relationship and sexual satisfaction, and a higher likelihood of considering breaking up.

All significant indirect effects held controlling for implicit relationship beliefs. However, when controlling for all other attribution dimensions, the effect of global attributions on sexual satisfaction (*b* = -.05, *SE* = .03, *t*(448) = -2.03, *p* = .043; indirect effect 95% CI [-.04, .00]) was reduced to non-significance.

Control attributions. Sexual growth beliefs were significantly associated with higher control attributions. In turn, this was associated with higher relationship satisfaction (*b* = .08, *SE* = .03, *t*(453) = 2.89, *p* = .004), commitment (*b* = .04, *SE* = .02, *t*(453) = 2.00, *p* = .047), sexual satisfaction (*b* = .08, *SE* = .03, *t*(453) = 2.86, *p* = .005), sexual desire (*b* = .09, *SE* = .02, *t*(453) = 3.85, *p* < .001), and a lower likelihood of considering breaking up (*b* = -.06, *SE* = .03, *t*(453) = -2.00, *p* = .047). Therefore, I tested whether control attributions explained the associations between sexual growth beliefs and relationship satisfaction, commitment, sexual satisfaction, sexual desire, and likelihood of considering breaking up (see Table A11). I found five significant indirect effects, such that people who were higher in sexual growth beliefs reported higher control attributions and, in turn, higher relationship satisfaction, commitment, sexual satisfaction, sexual desire, and a lower likelihood of considering breaking up.

With one exception, all significant indirect effects held controlling for implicit relationship beliefs. The exception was that the indirect effect of control attributions on the

likelihood of considering breaking up was reduced to non-significance (*b* = -.06, *SE* = .03, *t*(451) = -2.00, *p* = .046; indirect effect 95% CI [-.05, .000]). The main effect of control attributions on commitment was reduced to non-significance (*b* = .04, *SE* = .02, *t*(451) = 1.94, *p* = .053). In contrast, with one exception controlling for all other attribution dimensions, the effects of control attributions on relationship satisfaction (*b* = .02, *SE* = .03, *t*(448) = .75, *p* = .456; indirect effect 95% CI [-.01, .02]), commitment (*b* = .01, *SE* = .02, *t*(448) = .26, *p* = .797; indirect effect 95% CI [-.01, .02]), sexual satisfaction (*b* = .02, *SE* = .03, *t*(448) = .61, *p* = .543; indirect effect 95% CI [-.01, .03]), and likelihood of considering breaking up (*b* = .02, *SE* = .03, *t*(448) = .63, *p* = .529; indirect effect 95% CI [-.01, .02]) were reduced to non-significance.

Table A11

Internal, Global, and Control Mediations

Model	Total Effect	Direct Effect	Indirect Effect	95% Confidence Interval (bootstrapped)	
	B(SE)	*b*(SE)	*b*(BSE)	Lower Bound	Upper Bound
SG → internal → commitment	.12(.05)*	.11(05)*	**.01(.01)**	.001	.03
SG → internal → breakup	-.16(.07)*	-.13(.07)	**-.03(.02)**	-.07	-.01
SG → global → rel satisfaction	.14(.06)*	.17(.06)**	**-.03(.01)**	-.05	-.01
SG → global → sex satisfaction	.34(.07)***	.36(.07)***	**-.02(.01)**	-.05	-.003
SG → global → breakup	-.16(.07)*	-.18(.07)*	**.02(.01)**	.003	.05
SG → control → rel satisfaction	.15(.06)*	.13(.06)*	**.02(.01)**	.004	.05
SG → control → commitment	.13(.05)**	.12(.05)*	**.01(.01)**	.000	.030
SG → control → sex satisfaction	.34(.07)***	.32(.07)***	**.03(.01)**	.004	.05
SG → control → sex desire	.23(.06)***	.20(.06)***	**.03(.01)**	.01	.06

SG → control → breakup	-.16(.07)*	-.14(.07)	**-.02(.01)**	-.05	-.001

Note. ***p < .001, **p < .01, *p < .05. BSE = bootstrapped SE. SG = sexual growth beliefs. Rel = relationship. Sex = sexual. Bolded indirect effects indicate a significant effect (i.e., the confidence interval did not include 0).

Correlations Between Hypothetical Scenarios and Implicit Sexual and Relationship Beliefs

All corresponding attribution dimensions were significantly positively correlated across hypothetical situations (desire vs. arousal), with *r*'s ranging from .28 to .43, suggesting that these dimensions were not multicollinear (see Table A12). Similarly, corresponding relationship and sexual growth beliefs, and relationship and sexual destiny beliefs, were significantly positively correlated with each other (*r*'s = .44 and .41, respectively).

Table A12

Correlations Between Hypothetical Scenarios and Implicit Sexual and Relationship Beliefs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Internal (SD)	–	-.26***	.06	.09	.10*	**.28*** **	-.04	-.001	.06	.09*	.05	.08	-.004	.13**
2. Partner (SD)		–	.16***	-.13**	.06	-.09	**.32*** **	.15**	.01	-.03	-.04	.15***	.07	.01
3. Stable (SD)			–	.18***	-.15**	.08	.10*	**.43*** **	.15**	-.10*	.05	-.06	.07	.04
4. Global (SD)				–	-.04	.04	-.002	.14**	**.29*** **	-.13**	.13**	-.05	.10*	-.004
5. Control (SD)					–	.07	.01	-.0	-.11*	**.38*** **	.03	.08	.000	.01
6. Internal (SA)						–	-.45***	-.01	.10*	.26***	.12**	-.03	.06	.003
7. Partner (SA)							–	.11*	-.19***	-.13**	-.09	.15**	-.02	-.02
8. Stable (SA)								–	.22***	-.26***	.05	-.001	.03	-.03
9. Global (SA)									–	-.13**	.14**	-.03	.09	.003
10. Control (SA)										–	.12*	.04	.06	.03
11. Sex. growth											-	-.20***	**.44*** **	-.15**
12. Sex. destiny												-	-.07	**.41*** **
13. Rel. growth													-	-.22***
14. Rel. destiny														-
Mean	4.47	2.86	4.66	5.35	3.37	4.72	2.77	4.49	4.33	3.70	5.76	3.09	5.15	4.11
SD	2.14	2.00	1.45	1.63	1.91	2.23	2.01	1.49	2.16	1.95	.85	1.29	.67	.94

Note. ***p < .001, **p < .01, *p < .05. *SD* = hypothetical low sexual desire. SA = hypothetical low sexual arousal. Sex. = Sexual. Rel. = Relationship. Bolded values correlations between same attributions across situations. Attributions across situations are all significantly positively correlated with each other.

Combined Attributions

Are people's implicit sexual beliefs associated with relationship and sexual well-being?

People who were higher in sexual destiny beliefs reported lower commitment and higher sexual desire (see Table A13). In contrast, people who were higher in sexual growth beliefs reported higher relationship satisfaction, commitment, sexual satisfaction, and sexual desire. There were no other significant associations. All significant effects held controlling for implicit relationship beliefs, and the non-significant association between sexual destiny beliefs and relationship satisfaction became statistically significant (b = -.11, SE = .04, t(459) = -2.60, p = .010).

Table A13

Associations Between Implicit Sexual Beliefs and Outcomes

	Relationship satisfaction		Commitment		Sexual satisfaction		Sexual desire	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Sexual destiny	-.08(.04)	-1.90	-.09(.03)	-2.99**	.07(.05)	1.54	.12(.04)	3.21**
Sexual growth	.14(.06)	2.35*	.12(.05)	2.53*	.34(.07)	5.01***	.22(.06)	3.86***

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients.

Do relationship and sexual well-being predict the attributions people make for their causes of hypothetical situations of low sexual desire and arousal?

As reported in Table A14, people who were higher in relationship satisfaction reported lower partner responsibility and global attributions. People who were higher in sexual satisfaction reported lower partner responsibility and stable attributions. People higher in sexual desire made reported lower stable attributions and higher control attributions. Finally, people considering ending their relationship reported lower internal attributions and higher partner responsibility and stable attributions. There were no other significant associations.

As a covariate, I also tested how easy it was for participants to imagine the hypothetical situation about low sexual desire and arousal happening in their relationships in the past four weeks. People found it more difficult to imagine the situation happening in the past four weeks when they were higher in relationship satisfaction (b = -.33, SE = .10, t(456) = -3.52, p < .001), sexual desire (b = -.42, SE = .08, t(456) = -5.19, p < .001), and the likelihood of considering breaking up (b = -.16, SE = .06, t(456) = -2.65, p = .008), but there were no other significant associations. Given differences in ease of recall across well-being, I tested whether the significant effects of well-being on attributions held controlling for ease of recall, and with two exceptions, all effects held. The exceptions were that the effect of sexual desire on stable attributions was reduced to non-significance (b = -.09, SE = .06, t(455) = -1.41, p = .159), as was the effect of relationship satisfaction on global attributions (b = -.11, SE = .10, t(455) = -1.18, p = .238).

Table A14

Associations Between Relationship and Sexual Well-Being and Combined Attributions

	Internal		Partner responsibility		Stable		Global		Control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Relationship sat.	.04(.11)	.34	-.19(.09)	-2.15*	-.11(.08)	-1.52	-.21(.10)	-2.11*	.02(.10)	.22
Commitment	-.01(.12)	-.05	.12(.10)	1.20	.07(.08)	.83	.20(.11)	1.86	-.05(.11)	-.43
Sexual sat.	.15(.09)	1.67	-.20(.07)	-2.76**	-.15(.06)	-2.44*	-.001(.08)	-.01	.09(.08)	1.06
Sexual desire	-.13(.10)	-1.32	.08(.08)	1.04	-.20(.06)	-3.10**	-.02(.08)	-.27	.32(.09)	3.78***
Breakup	-.21(.07)	-2.92**	.55(.06)	9.47***	.17(.05)	3.46***	.05(.07)	.81	-.02(.07)	-.31

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Sat. = satisfaction. Breakup = likelihood of considering breaking up. Each attribution was combined across hypothetical situations.

Appendix B: Study 3

Main Effects Between Daily (Within-Person) Attributions and Well-Being

First, I tested whether daily attributions predicted daily well-being. I analyzed data using two-level distinguishable (by diagnosis: person with SIAD vs. their partner) cross models, guided by the Actor-Partner Interdependence Model (APIM; Kenny et al., 2006), to account for the interdependence between partners within couples and across. Models included two intercepts (i.e., I modeled separate intercepts for the person with SIAD and their partner) and the covariance between individuals with low desire and their partner. For the independent variables (attribution dimensions), I applied grand-mean centering (between-person) and person-mean centering (within-person) to decompose the between and within-person variance. I tested random slopes, but the models did not converge; therefore, models included random intercepts and fixed slopes. All attribution dimensions were tested simultaneously in the same models. Outcome variables were tested in separate models.

Person with SIAD

I tested whether daily attributions predicted daily well-being. On days when the person with SIAD made higher *internal* attributions than they typically did, both partners reported higher relationship and sexual satisfaction, sexual desire and sexual distress (see Table B1). On days when the person with SIAD made higher *stable* attributions than they typically did, they reported lower sexual distress and both partners reported lower relationship satisfaction, sexual satisfaction, and sexual desire. Similarly, on day when the person with SIAD made higher *global* attributions than they typically did, they reported higher sexual distress and both partners reported lower relationship satisfaction, sexual satisfaction, and sexual desire. On days when the person with SIAD made higher *partner responsibility attributions* than they typically did, they

reported higher sexual satisfaction and distress, and both partners reported lower relationship satisfaction and higher sexual desire. Lastly, on days when the person with SIAD made higher *control* attributions than they typically did, both partners reported higher relationship satisfaction, sexual satisfaction, and sexual desire, and lower sexual distress.

Table B1

Associations Between Person with SIAD's Attributions and Both Partners' Daily Well-Being

	SIAD internal		SIAD stable		SIAD global		SIAD partner resp.		SIAD control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Within-person (group-mean centered) effects										
SIAD relationship sat.	**.09(.02)**	**4.85*** **	**-.05(.02)**	**-2.50***	***-.27(.02)***	***-12.76**** **	***-.29(.02)***	***12.36**** **	**.24(.02)**	**10.02*** **
Partner relationship sat.	***.07(.02)***	***4.06**** **	**-.05(.02)**	**-2.21***	**-.13(.02)**	**-6.21*** **	***-.13(.02)***	***-5.94**** **	***.16(.02)***	***6.97**** **
SIAD sexual sat.	**.02(.01)**	**2.85****	***-.04(.01)***	***-5.69**** **	***-.04(.01)***	***-5.91**** **	***.02(.01)***	***3.27****	***.09(.01)***	***12.19**** **
Partner sexual sat.	**.03(.01)**	**4.35*** **	***-.04(.01)***	***-5.51**** **	***-.02(.01)***	***-3.62**** **	.01(.01)	1.36	***.07(.01)***	***8.98**** **
SIAD sexual desire	***.05(.01)***	***7.39**** **	**-.09(.01)**	**-12.22*** **	**-.03(.01)**	**-3.53*** **	***.12(.01)***	***13.92**** **	**.11(.01)**	**12.47*** **
Partner sexual desire	**.06(.01)**	**6.91*** **	**-.06(.01)**	**-6.12*** **	**-.03(.01)**	**-3.19****	***.04(.01)***	***3.27****	**.08(.01)**	**6.93*** **
SIAD sexual distress	**.04(.004)**	**8.43*** **	***-.03(.01)***	***-7.05**** **	**.02(.01)**	**3.02****	***.02(.01)***	***3.60**** **	***-.01(.01)***	***-2.49****
Partner sexual distress	**.01(.003)**	**2.33***	-.002(.004)	-.69	.004(.004)	1.16	.004(.004)	.96	**-.01(.004)**	**-3.50*** **
Between-person (aggregated) effects										
SIAD relationship sat.	.16(.16)	.98	-.24(.13)	-1.93	**-.35(.14)**	**-2.44***	**-1.64(.23)**	**-7.09*** **	**.57(.20)**	**2.90****
Partner relationship sat.	.23(.18)	1.25	**-.33(.14)**	**-2.34***	**-.33(.16)**	**-2.08***	**-.64(.26)**	**-2.47***	.16(.22)	.72
SIAD sexual sat.	.003(.06)	.05	-.04(.05)	-.76	**-.12(.05)**	**-2.32***	-.03(.08)	-.34	.12(.07)	1.66

Partner sexual sat.	.07(.07)	1.08	**-.12(.05)**	**-2.26***	-.06(.06)	-.98	**-.19(.09)**	**-2.02***	.14(.08)	1.81
SIAD sexual desire	-.03(.04)	-.84	-.05(.03)	-1.57	-.02(.03)	-.54	-.003(.05)	-.05	**.16(.05)**	**3.37****
Partner sexual desire	-.05(.07)	-.62	-.08(.06)	-1.32	-.09(.07)	-1.39	-.02(.11)	-.20	.01(.09)	.14
SIAD sexual distress	.03(.05)	.60	-.04(.04)	-.96	.02(.04)	.58	-.06(.07)	-.91	-.06(.06)	-.98
Partner sexual distress	.01(.04)	.14	.01(.03)	.33	-.03(.03)	-.99	-.03(.06)	-.52	.02(.05)	.38

Note. ***$p < .001$, **$p < .01$, *$p < .05$. Beta values are unstandardized coefficients. Models included partner attributions. SIAD = person with SIAD. Partner = partner of person with SIAD. Partner resp. = Partner responsibility. Bolded effects were statistically significant. Italicized effects were significantly moderated by sex days.

Partner of person with SIAD

On days when a partner made higher *internal* attributions than they typically did, both partners reported higher sexual desire and distress (see Table B2). On days when a partner made higher *stable* attributions than they typically did, they reported lower sexual distress, and both partners reported higher relationship satisfaction. On days when a partner made higher *global* attributions than they typically did, they reported higher sexual distress, and both partners reported lower relationship satisfaction, sexual satisfaction, and sexual desire. On days when a partner made higher *partner responsibility attributions* than they typically did, they reported higher sexual distress, the person with SIAD reported lower relationship satisfaction, and both partners reported higher sexual satisfaction and desire. Lastly, on days when a partner made higher *control* attributions than they typically did, the person with SIAD reported higher sexual satisfaction. Of the within-person effects that were not statistically significant, none were moderated by sex days.

Table B2

Associations Between a Partner's Attributions and Both Partners' Daily Well-Being

	Partner internal		Partner stable		Partner global		Partner partner resp.		Partner control	
	b(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*	*b*(SE)	*t*
Within-person (group-mean centered) effects										
SIAD relationship sat.	.01(.02)	.28	**.09(.03)**	**3.58*** **	***-.21(.03)***	***-7.56*** **	***-.09(.03)***	***-3.36*** **	.03(.03)	.91
Partner relationship sat.	*-.04(.02)*	*-1.73*	**.15(.03)**	**5.76*** **	***-.48(.03)***	***-18.10*** **	*.01(.03)*	*.35*	-.04(.03)	-1.31
SIAD sexual sat.	*.01(.01)*	*1.43*	.001(.01)	.18	***-.06(.01)***	***-7.47*** **	**.02(.01)**	**2.90** **	**.02(.01)**	**2.97** **
Partner sexual sat.	*-.01(.01)*	*-1.14*	.002(.01)	.20	***-.09(.01)***	***-10.16*** **	***.07(.01)***	***7.68*** **	*.01(.01)*	*1.02*
SIAD sexual desire	**.02(.01)**	**2.54***	-.01(.01)	-.91	***-.03(.01)***	***-2.97*** **	**.06(.01)**	**5.59*** **	.02(.01)	1.86
Partner sexual desire	**.06(.01)**	**6.05*** **	-.02(.01)	-1.86	***-.08(.01)***	***-6.46*** **	***.03(.01)***	***2.54****	.02(.01)	1.43
SIAD sexual distress	***.03(.01)***	***4.83*** **	*-.004(.01)*	*-.72*	*.01(.01)*	*1.84*	.001(.01)	.18	-.01(.01)	-1.38
Partner sexual distress	**.02(.004)**	**6.08*** **	***-.02(.004)***	***-3.51*** **	***.05(.01)***	***10.92*** **	***.01(.01)***	***3.09*** **	*-.003(.01)*	*-.55*
Between-person (aggregated) effects										
SIAD relationship sat.	-.18(.15)	-1.22	.10(.12)	.84	**-.33(.13)**	**-2.53***	.01(.21)	.05	.08(.17)	.45
Partner relationship sat.	-.23(.17)	-1.37	.14(.13)	1.05	**-.75(.14)**	**-5.20*** **	-.32(.23)	-1.38	.25(.19)	1.29
SIAD sexual sat.	-.04(.05)	-.70	.03(.04)	.68	-.09(.05)	-1.89	.02(.08)	.22	.03(.06)	.46

Partner sexual sat.	**-.13(.06)**	**-2.10***	-.03(.05)	-.62	**-.15(.05)**	**-2.98****	.03(.08)	.39	.10(.07)	1.50
SIAD sexual desire	.02(.04)	.52	-.04(.03)	-1.33	-.002(.03)	-.08	.06(.05)	1.25	.02(.04)	.51
Partner sexual desire	.13(.07)	1.87	**-.15(.06)**	**-2.81****	**.12(.06)**	**2.00***	-.07(.10)	-.72	-.01(.08)	-.08
SIAD sexual distress	.06(.04)	1.28	-.03(.03)	-.77	.06(.04)	1.69	-.01(.06)	-.13	-.02(.05)	-.42
Partner sexual distress	.07(.04)	1.81	-.05(.03)	-1.58	**.18(.03)**	**5.75*****	**.17(.05)**	**3.30****	-.08(.04)	-1.86

Note. ****p* < .001, ***p* < .01, **p* < .05. Beta values are unstandardized coefficients. Models included actor attributions. SIAD = person with SIAD. Partner = partner of person with SIAD. Partner resp. = Partner responsibility. Bolded effects were statistically significant. Italicized effects were significantly moderated by sex days.

Sex Day Moderations for Associations Between Daily (Within-Person) Attributions and Well-Being

Next, I tested whether daily variations of attributions on relationship and sexual well-being (within-person effects) were moderated by sex days (i.e., days in which participants reported engaging in sex with their partner that day). I only included those who indicated they had sex once or more than once *and* with their partner (which included those who said they also had sex alone or with another partner). Participants who met these criteria were coded as 1 (10.1%), and all other participants were coded as 0 (66.4%) or missing (23.5%). Below, I report all significant moderations by sex days, separated by role (i.e., people with SIAD vs. their partner) and well-being.

Person with SIAD

Relationship satisfaction. For *relationship satisfaction*, I found that:

1. the effect of the person with SIAD's daily internal attributions on their partner's daily relationship satisfaction was significantly moderated by sex days (b = -.10, SE = .05, t(8842.67) = -2.09, p = .037). On days when the person with SIAD made more internal attributions than they typically did, their partner reported significantly higher relationship satisfaction on days when they did not engage in sex (b = .06, SE = .02, t(8417.61) = 3.38, p < .001), whereas the effect was no longer significant on days when they did engage in sex (b = -.04, SE = .05, t(8792.22) = -.88, p = .378).
2. the effect of the person with SIAD's daily global attributions on their own daily relationship satisfaction was significantly moderated by sex days (b = .27, SE = .05, t(8733.18) = 4.94, p < .001). On days when the person with SIAD made more global attributions than they typically did, they reported significantly lower relationship

satisfaction on days when they did not engage in sex (b = -.32, SE = .02, t(8407.82) = -14.27, p < .001), whereas the effect was buffered on days when they did engage in sex (b = -.06, SE = .05, t(8673.01) = -1.17, p = .244).

3. the effect of the person with SIAD's daily partner responsibility attributions on their own daily relationship satisfaction was significantly moderated by sex days (b = .54, SE = .06, t(8794.12) = 9.40, p < .001). On days when the person with SIAD made more partner responsibility attributions than they typically did, they reported significantly lower relationship satisfaction on days when they did not engage in sex (b = -.48, SE = .03, t(8439.03) = -18.73, p < .001), whereas the effect was buffered on days when they did engage in sex (b = .06, SE = .05, t(8734.58) = 1.13, p = .260).
4. the effect of the person with SIAD's daily partner responsibility attributions on their partner's daily relationship satisfaction was significantly moderated by sex days (b = .25, SE = .06, t(8797.35) = 4.61, p < .001). On days when the person with SIAD made more partner responsibility attributions than they typically did, their partner reported significantly lower relationship satisfaction on days when they did not engage in sex (b = -.27, SE = .02, t(8444.20) = -11.14, p < .001), whereas the effect was buffered on days when they did engage in sex (b = -.02, SE = .05, t(8738.54) = -.35, p = .724).
5. the effect of the person with SIAD's daily control attributions on their partner's daily relationship satisfaction was significantly moderated by sex days (b = .13, SE = .06, t(8768.89) = 2.26, p = .024). On days when the person with SIAD made more control attributions than they typically did, their partner reported significantly higher relationship satisfaction on days when they did not engage in sex (b = .06, SE = .03, t(8427.21) = 2.59,

p = .010), and the effect was even stronger on days when they did engage in sex (b = .19, SE = .05, t(8707.10) = 3.75, p < .001).

Sexual satisfaction. For *sexual satisfaction*, I found that:

6. the effect of the person with SIAD's daily stable attributions on their own daily sexual satisfaction was significantly moderated by sex days (b = -.04, SE = .02, t(8440.71) = -2.61, p = .009). On days when the person with SIAD made more stable attributions than they typically did, they reported significantly lower sexual satisfaction on days when they engaged in sex (b = -.05, SE = .01, t(8418.03) = -4.03, p < .001), but this effect was slightly attenuated on days when they did not engage in sex (b = -.02, SE = .01, t(8328.90) = -2.33, p = .020).
7. the effect of the person with SIAD's daily stable attributions on their partner's daily sexual satisfaction was significantly moderated by sex days (b = -.05, SE = .02, t(8456.43) = -3.41, p < .001). On days when the person with SIAD made more stable attributions than they typically did, their partner reported significantly lower sexual satisfaction on days when they engaged in sex (b = -.06, SE = .01, t(8435.06) = -4.38, p < .001), whereas the effect was no longer significant when they did not engage in sex (b = -.01, SE = .01, t(8343.81) = -1.25, p = .211).
8. the effect of the person with SIAD's daily global attributions on their own daily sexual satisfaction was significantly moderated by sex days (b = .03, SE = .02, t(8409.78) = 2.16, p = .031). On days when the person with SIAD made more global attributions than they typically did, they reported significantly lower sexual satisfaction on days when they did not engage in sex (b = -.04, SE = .01, t(8314.02) = -6.17, p < .001), but this effect was

buffered on days when they did engage in sex (b = -.01, SE = .01, t(8391.71) = -.47, p = .639).

9. the effect of the person with SIAD's daily global attributions on their partner's daily sexual satisfaction was significantly moderated by sex days (b = .04, SE = .02, t(8433.74) = 2.28, p = .023). On days when the person with SIAD made more global attributions than they typically did, their partner reported significantly lower sexual satisfaction on days when they did not engage in sex (b = -.03, SE = .01, t(8336.11) = -4.06, p < .001), whereas the effect was buffered on days when they did engage in sex (b = .01, SE = .01, t(8415.38) = .66, p = .512).
10. the effect of the person with SIAD's daily partner responsibility attributions on their own daily sexual satisfaction was significantly moderated by sex days (b = .12, SE = .02, t(8430.45) = 7.35, p < .001). On days when the person with SIAD made more partner responsibility attributions than they typically did, they reported significantly higher sexual satisfaction on days when they engaged in sex (b = .07, SE = .01, t(8412.46) = 4.79, p < .001), but significantly lower sexual satisfaction on days when they did not engage in sex (b = -.05, SE = .01, t(8325.10) = -6.90, p < .001).
11. the effect of the person with SIAD's daily control attributions on their own daily sexual satisfaction was significantly moderated by sex days (b = .09, SE = .02, t(8427.06) = 5.28, p < .001). On days when the person with SIAD made more control attributions than they typically did, they reported significantly higher sexual satisfaction on days when they did engage in sex (b = .12, SE = .02, t(8408.39) = 8.21, p < .001), and this link was slightly attenuated on days when they did not engage in sex (b = .04, SE = .01, t(8328.71) = 4.80, p < .001).

12. the effect of the person with SIAD's daily control attributions on their partner's daily sexual satisfaction was significantly moderated by sex days (b = .04, SE = .02, t(8449.47) = 2.49, p = .013). On days when the person with SIAD made more control attributions than they typically did, their partner reported significantly higher sexual satisfaction on days when they did not engage in sex (b = .02, SE = .01, t(8343.18) = 3.06, p = .002), and they reported even higher sexual satisfaction on days when they did engage in sex (b = .07, SE = .02, t(8429.39) = 4.24, p < .001).

Sexual desire. For *sexual desire*, I found that:

13. the effect of the person with SIAD's daily internal attributions on their own daily sexual desire was significantly moderated by sex days (b = .05, SE = .02, t(8437.78) = 2.90, p = .004). On days when the person with SIAD made more internal attributions than they typically did, they reported significantly higher sexual desire on days when they engaged in sex (b = .08, SE = .02, t(8431.38) = 4.81, p < .001), but this link was slightly attenuated on days when they did not engage in sex (b = .03, SE = .01, t(8362.67) = 4.28, p < .001).
14. the effect of the person with SIAD's daily partner responsibility attributions on their own daily sexual desire was significantly moderated by sex days (b = .12, SE = .02, t(8421.03) = 6.28, p < .001). On days when the person with SIAD made more partner responsibility attributions than they typically did, they reported significantly higher sexual desire on days when they engaged in sex (b = .16, SE = .02, t(8416.34) = 8.89, p < .001), but this effect was slightly attenuated on days when they did not engage in sex (b = .03, SE = .01, t(8364.23) = 3.77, p < .001).
15. the effect of the person with SIAD's daily partner responsibility attributions on their partner's daily sexual desire was significantly moderated by sex days (b = .08, SE = .03,

t(8399.45) = 2.85, *p* = .004). On days when the person with SIAD made more partner responsibility attributions than they typically did, their partner reported significantly lower sexual desire on days when they did not engage in sex (*b* = -.04, *SE* = .01, *t*(8356.53) = -3.05, *p* = .002), whereas the effect was buffered on days when they did engage in sex (*b* = .04, *SE* = .02, *t*(8393.68) = 1.69, *p* = .091).

Sexual distress. For *sexual distress*, I found that:

16. the effect of the person with SIAD's daily stable attributions on their own daily sexual distress was significantly moderated by sex days (*b* = .03, *SE* = .01, *t*(8443.20) = 1.96, *p* = .050). On days when the person with SIAD made more stable attributions than they typically did, they reported significantly lower sexual distress on days when they did not engage in sex (*b* = -.04, *SE* = .01, *t*(8365.46) = -6.67, *p* < .001), but this effect was no longer significant on days when they did engage in sex (*b* = -.01, *SE* = .01, *t*(8429.12) = -1.00, *p* = .316).
17. the effect of the person with SIAD's daily partner responsibility attributions on their own daily sexual distress was significantly moderated by sex days (*b* = -.03, *SE* = .01, *t*(8439.95) = -2.51, *p* = .012). On days when the person with SIAD made more partner responsibility attributions than they typically did, they reported significantly higher sexual distress on days when they did not engage in sex (*b* = .02, *SE* = .01, *t*(8365.75) = 3.84, *p* < .001), but this effect was buffered on days when they did engage in sex (*b* = -.01, *SE* = .01, *t*(8429.10) = -.90, *p* = .368).
18. the effect of the person with SIAD's daily control attributions on their own daily sexual distress was significantly moderated by sex days (*b* = -.05, *SE* = .01, *t*(8436.26) = -3.56, *p* < .001). On days when the person with SIAD made more control attributions than they

typically did, they reported significantly lower sexual distress on days when they did engage in sex (b = -.06, SE = .01, t(8423.52) = -4.30, p < .001), but this effect was no longer significant on days when they did not engage in sex (b = -.004, SE = .01, t(8362) = -.70, p = .486).

Summary of Moderations for Person with SIAD

I exploratorily assessed whether within-person effects of the person with SIAD's attributions on either partner's daily well-being would differ based on whether the couples engaged in sex that day or not. Out of 36 significant effects, 18 were significantly moderated by sex days (internal = 2 out of 8, stable = 3 out of 7, global = 3 out of 7, partner responsibility = 6 out of 6, control = 4 out of 8). Of the 18 significant moderations, 14 included situations in which well-being was greater, or lower well-being was buffered, on days in which couples engaged in sex (compared to days in which they did not engage in sex). For example, although global and partner responsibility attributions tended to be associated with lower well-being on non-sex days, they were either attenuated, positively associated, or no longer associated with lower well-being on sex days. In addition, although internal and control attributions were occasionally linked to higher well-being on non-sex days, these associations were even stronger on sex days. Moreover, seven of the 18 significant moderations involved a partner effect (i.e., person with SIAD's attributions predicting their partner's well-being; internal = 1, stable = 1, global = 1, partner responsibility = 2, control = 2). Most of the significant moderations were for relationship satisfaction (n = 5) sexual satisfaction (n = 7).

Partner of person with SIAD

Below, I report all significant moderations by sex days for partners of the person with SIAD, separated by well-being.

Relationship satisfaction. For *relationship satisfaction*, I found that:

1. the effect of a partner's daily global attributions on their own daily relationship satisfaction was significantly moderated by sex days (b = .30, SE = .07, t(8747) = 4.60, p < .001). On days when a partner made more global attributions than they typically did, they reported lower relationship satisfaction on days when they did not engage in sex (b = -.50, SE = .03, t(8426.02) = -17.64, p < .001), whereas this effect was slightly attenuated on days when they engaged in sex (b = -.20, SE = .06, t(8681.59) = -3.46, p < .001).
2. the effect of a partner's daily global attributions on the person with SIAD's daily relationship satisfaction was significantly moderated by sex days (b = .17, SE = .07, t(8740.83) = 2.45, p = .014). On days when a partner made more global attributions than they typically did, the person with SIAD reported significantly lower relationship satisfaction on days when they did not engage in sex (b = -.21, SE = .03, t(8417.12) = -7.26, p < .001), whereas the effect was buffered on days when they did engage in sex (b = -.05, SE = .06, t(8675.53) = -.76, p = .448).
3. the effect of a partner's daily partner responsibility attributions on the person with SIAD's daily relationship satisfaction was significantly moderated by sex days (b = .28, SE = .07, t(8802.34) = 4.08, p < .001). On days when a partner made more partner responsibility attributions than they typically did, the person with SIAD reported significantly lower relationship satisfaction on days when they did not engage in sex (b = -.20, SE = .03, t(8431.58) = -6.78, p < .001), whereas the effect was buffered on days when they did engage in sex (b = .08, SE = .06, t(8733.58) = 1.26, p = .209).
4. I also found the following significant moderations by sex days for within-person effects that were not significant as main effects:

a. the effect of a partner's daily internal attributions on their own relationship satisfaction was significantly moderated by sex days (b = .13, SE = .06, t(8824.20) = 2.30, p = .022). On days when a partner made more internal attributions than they typically did, they reported lower relationship satisfaction on days when they did not engage in sex (b = -.10, SE = .02, t(8423.25) = -4.29, p < .001), whereas the effect was buffered on days when they did engage in sex (b = .03, SE = .05, t(8766.63) = .59, p = .554).

b. the effect of a partner's partner responsibility attributions on their own relationship satisfaction was significantly moderated by sex days (b = .32, SE = .07, t(8809.19) = 4.89, p < .001). On days when a partner made more partner responsibility attributions than they typically did, they reported lower relationship satisfaction on days when they did not engage in sex (b = -.13, SE = .03, t(8449.78) = -4.67, p < .001), whereas they reported higher relationship satisfaction on days when they did engage in sex (b = .18, SE = .06, t(8739.14) = 3.16, p = .002).

Sexual satisfaction. For *sexual satisfaction*, I found that:

5. the effect of a partner's daily global attributions on their own daily sexual satisfaction was significantly moderated by sex days (b = .04, SE = .02, t(8437.18) = 1.98, p = .048). On days when a partner made more global attributions than they typically did, they reported significantly lower sexual satisfaction on days when they did not engage in sex (b = -.08, SE = .01, t(8337.77) = -9.18, p < .001), but this effect was slightly attenuated on days when they did engage in sex (b = -.04, SE = .02, t(8417.20) = -2.23, p = .026).
6. the effect of a partner's daily global attributions on the person with SIAD's daily sexual satisfaction was significantly moderated by sex days (b = .07, SE = .02, t(8409.83) = 3.84,

$p < .001$). On days when a partner made more global attributions than they typically did, the person with SIAD reported significantly lower sexual satisfaction on days when they did not engage in sex ($b = -.06$, $SE = .01$, $t(8317) = -7.16$, $p < .001$), whereas the effect was buffered on days when they did engage in sex ($b = .02$, $SE = .02$, $t(8389.90) = .85$, $p = .397$).

7. the effect of a partner's daily partner responsibility attributions on their own daily sexual satisfaction was significantly moderated by sex days ($b = .15$, $SE = .02$, $t(8461.46) = 7.50$, $p < .001$). On days when a partner made more partner responsibility attributions than they typically did, they reported significantly higher sexual satisfaction on days when they did engage in sex ($b = .14$, $SE = .02$, $t(8439.17) = 7.88$, $p < .001$), but this effect was no longer significant on days when they did not engage in sex ($b = -.01$, $SE = .01$, $t(8349.02) = -1.07$, $p = .286$).
8. I also found the following significant moderations by sex days for within-person effects that were not significant as main effects:
    a. the effect of a partner's internal attributions on their own sexual satisfaction was significantly moderated by sex days ($b = .04$, $SE = .02$, $t(8466.48) = 2.41$, $p = .016$). On days when a partner made more internal attributions than they typically did, they reported lower sexual satisfaction on days when they did not engage in sex ($b = -.04$, $SE = .01$, $t(8340.42) = -5.45$, $p < .001$), whereas the effect was buffered on days when they did engage in sex ($b = .003$, $SE = .02$, $t(8447.56) = .21$, $p = .837$).
    b. the effect of a partner's daily control attributions on their own daily sexual satisfaction was significantly moderated by sex days ($b = .08$, $SE = .02$, $t(8452.33)$

= 3.70, $p < .001$). On days when a partner made more control attributions than they typically did, they reported significantly lower sexual satisfaction on days when they did not engage in sex ($b = -.02$, $SE = .01$, $t(8342.84) = -2.58$, $p = .010$), whereas they reported significantly higher sexual satisfaction on days when they did engage in sex ($b = .05$, $SE = .02$, $t(8431.60) = 2.90$, $p = .004$).

Sexual desire. For *sexual desire*, I found that:

9. the effect of a partner's daily global attributions on their own daily sexual desire was significantly moderated by sex days ($b = .09$, $SE = .03$, $t(8384.94) = 2.96$, $p = .003$). On days when a partner made more global attributions than they typically did, they reported significantly lower desire on days when they did not engage in sex (sex ($b = -.09$, $SE = .01$, $t(8350.99) = -6.26$, $p < .001$), but this effect was buffered on days when they did engage in sex ($b = .01$, $SE = .03$, $t(8378.59) = .28$, $p = .778$).
10. the effect of a partner's daily global attributions on the person with SIAD's daily sexual desire was significantly moderated by sex days ($b = .09$, $SE = .02$, $t(8399.19) = 3.65$, $p < .001$). On days when a partner made more global attributions than they typically did, the person with SIAD reported significantly higher sexual desire on days when they did engage in sex ($b = .06$, $SE = .02$, $t(8390.60) = 2.69$, $p = .007$), but lower sexual desire on days when they did not engage in sex ($b = -.03$, $SE = .01$, $t(8357.94) = -2.87$, $p = .004$).
11. the effect of a partner's daily partner responsibility attributions on their own daily sexual desire was significantly moderated by sex days ($b = .17$, $SE = .03$, $t(8401.31) = 5.50$, $p < .001$). On days when a partner made more partner responsibility attributions than they typically did, they reported significantly higher sexual desire on days when they engaged

in sex (*b* = .13, *SE* = .03, *t*(8392.79) = 4.58, *p* < .001), but lower sexual desire on days when they did not engage in sex (*b* = -.04, *SE* = .01, *t*(8354.35) = -3.22, *p* = .001).

Sexual distress. For *sexual distress*, I found that:

12. the effect of a partner's daily internal attributions on the person with SIAD's daily sexual distress was significantly moderated by sex days (*b* = -.03, *SE* = .01, *t*(8445.72) = -2.38, *p* = .017). On days when a partner made more internal attributions than they typically did, the person with SIAD reported significantly higher sexual distress on days when they did not engage in sex (*b* = .03, *SE* = .01, *t*(8359.03) = 4.88, *p* < .001), but this effect was buffered on days when they did engage in sex (*b* = -.01, *SE* = .01, *t*(8434.02) = -.46, *p* = .646).
13. the effect of a partner's daily stable attributions on their own daily sexual distress was significantly moderated by sex days (*b* = -.03, *SE* = .01, *t*(8445.66) = -2.60, *p* = .009). On days when a partner made more stable attributions than they typically did, they reported significantly lower sexual distress on days when they engaged in sex (*b* = -.04, *SE* = .01, *t*(8432.31) = -3.62, *p* < .001), but this effect was no longer significant on days when they did not engage in sex (*b* = -.01, *SE* = .01, *t*(8359.35) = -1.67, *p* = .095).
14. the effect of a partner's daily global attributions on their own daily sexual distress was significantly moderated by sex days (*b* = -.05, *SE* = .01, *t*(8420.04) = -4.47, *p* < .001). On days when a partner made more global attributions than they typically did, they reported significantly higher sexual distress on days when they did not engage in sex (*b* = .06, *SE* = .01, *t*(8356.09) = 11.73, *p* < .001), but this effect was buffered on days when they did engage in sex (*b* = .01, *SE* = .01, *t*(8407.52) = .68, *p* = .499).

15. the effect of a partner's daily partner responsibility attributions on their own daily sexual distress was significantly moderated by sex days (b = -.04, SE = .01, t(8437.35) = -3.15, p = .002). On days when a partner made more partner responsibility attributions than they typically did, they reported significantly higher sexual distress on days when they did not engage in sex (b = .02, SE = .01, t(8361.35) = 4.63, p < .001), but this effect was buffered on days when they did engage in sex (b = -.01, SE = .01, t(8423.01) = -1.26, p = .209).
16. I also found the following significant moderations by sex days for within-person effects that were not significant as main effects:
    a. the effect of a partner's daily stable attributions on the person with SIAD's daily sexual distress was significantly moderated by sex days (b = -.04, SE = .02, t(8454.16) = -2.53, p = .012). On days when a partner made more stable attributions than they typically did, there was no association with the person with SIAD sexual distress on days when they did not engage in sex (b = .01, SE = .01, t(8363.58) = .74, p = .460), whereas they reported significantly lower sexual distress on days when they did engage in sex (b = -.04, SE = .02, t(8439.62) = -2.45, p = .014).
    b. the effect of a partner's daily global attributions on the person with SIAD's daily sexual distress was significantly moderated by sex days (b = -.04, SE = .02, t(8423.86) = -2.46, p = .014). On days when a partner made more global attributions than they typically did, the person with SIAD reported significantly higher sexual distress on days when they did not engage in sex (b = .02, SE = .01, t(8359.49) = 2.78, p = .005), whereas this effect was buffered on days when they did engage in sex (b = -.02, SE = .02, t(8411.39) = -1.40, p = .161).

c. the effect of a partner's daily control attributions on their own daily sexual distress was significantly moderated by sex days (b = -.03, SE = .01, t(8430.78) = -2.23, p = .026). On days when a partner made more control attributions than they typically did, there was no association with their sexual distress on days when they did not engage in sex (b = .003, SE = .01, t(8356.78) = .56, p = .574), but they reported significantly lower sexual distress on days when they did engage in sex (b = -.03, SE = .01, t(8417.97) = -2.21, p = .027).

Summary of Moderations for Partner of Person with SIAD

I exploratorily assessed whether within-person effects of a partner's attributions on either partner's daily well-being would differ based on whether the couples engaged in sex that day or not. Out of 21 significant effects, 13 were significantly moderated by sex days (internal = 1 out of 4, stable = 1 out of 3, global = 7 out of 7, partner responsibility = 4 out of 6, control = 0 out of 1). Of the 13 significant moderations, 11 included contexts in which well-being was greater, or lower well-being was buffered, on days in which couples engaged in sex (compared to days in which they did not engage in sex). For example, although global and partner responsibility attributions tended to be associated with lower well-being on non-sex days, they were either attenuated, positively associated, or no longer associated with lower well-being on sex days (I saw a similar effect for internal and stable attributions). Moreover, five of the 13 significant moderations involved a partner effect (i.e., partners' attributions predicting the person with SIAD's well-being; internal = 1, global = 3, partner responsibility = 1). Most of the significant moderations were for relationship satisfaction (n = 3), sexual satisfaction (n = 3), or sexual distress (n = 3). Of the within-person effects that were not statistically significant, seven were moderated by sex days.

Main Effects Between Daily (Between-Person) Attributions and Well-Being

Person with SIAD

I assessed whether chronic attributions across the diary study (i.e., between-person) predicted daily well-being. When the person with SIAD made more *stable* attributions over the course of the study, their partner reported lower relationship satisfaction and sexual satisfaction (see Table B1). When the person with SIAD made more *global* attributions over the course of the study, they reported lower sexual satisfaction and both partners reported lower relationship satisfaction. When the person with SIAD made more *partner responsibility* attributions over the course of the study, both partners reported lower relationship satisfaction, and their partner reported lower sexual satisfaction. Lastly, when the person with SIAD made more *control attributions* over the course of the study, they reported higher relationship satisfaction and sexual desire.

Partner of person with SIAD

When a partner made higher *internal* attributions, they reported lower sexual satisfaction (see Table B2). When a partner made higher *stable* attributions, they reported lower sexual desire. When a partner made higher *global* attributions over the course of the study, both partners reported lower relationship satisfaction, and they reported lower sexual satisfaction and higher sexual desire and distress. Lastly, when a partner made higher *partner responsibility* attributions over the course of the study, they reported higher sexual distress.

Appendix C: Study 4

Differences in Relationship and Sexual Quality Across Sexual Attributions

People who made higher stable attributions reported lower relationship satisfaction (b = -.23, SE = .06, t(317) = -4.00, p < .001), commitment (b = -.11, SE = .04, t(317) = -2.85, p = .005), sexual satisfaction (b = -.26, SE = .07, t(317) = -3.81, p < .001), and sexual desire (b = -.24, SE = .08, t(317) = -3.16, p = .002), as well as higher sexual distress (b = .26, SE = .08, t(316) = 3.16, p = .002). People who made higher global attributions reported higher sexual satisfaction (b = .11, SE = .05, t(317) = 2.32, p = .021). People who made higher partner responsibility attributions reported lower relationship satisfaction (b = -.18, SE = .05, t(317) = -3.86, p < .001), commitment (b = -.13, SE = .03, t(317) = -4.19, p < .001), and sexual desire (b = -.12, SE = .06, t(317) = -2.00, p = .046). However, there were no other significant effects.

In addition to relationship and sexual well-being, I also tested secondary outcomes—responses to hypothetical low sexual desire. People who made higher stable attributions reported that they would find the situation more challenging (b = .25, SE = .06, t(317) = 4.16, p < .001) and they would be more likely to consider breaking up because of the low desire (b = .37, SE = .07, t(317) = 5.09, p < .001). People who made higher global attributions reported that they would be more motivated to resolve the issue (b = .08, SE = .04, t(317) = 2.16, p = .032) and they would be less likely to consider breaking up because of the low desire (b = -.10, SE = .05, t(317) = -2.01, p = .045). People who made higher partner responsibility attributions reported they would be more likely to consider breaking up because of the low desire (b = .29, SE = .06, t(317) = 4.87, p < .001). People who made more control attributions reported that they would find the situation less challenging (b = -.09, SE = .04, t(317) = -2.18, p = .030). However, there were no other significant effects.

Manipulation: Bogus Articles

Sexual Destiny Beliefs Condition

"Secrets to an Amazing Sex Life: It's in That Initial Spark"

Jennifer and her husband Rob seem to have done the impossible: despite having been married for over twenty years, they manage to have an active, satisfying sex life. What's their secret? Rob admits that keeping their sexual satisfaction high is easy: "When you are with a partner who is compatible with you in the bedroom, sex comes naturally." Jennifer agrees: "We are a perfect sexual match for each other. We like all the same things and have similar needs, so our sex life has always been smooth."

Mark and his partner are another long term couple of fifteen years that seem to have sexual satisfaction figured out. Mark and his partner both say their sex life is "excellent." Mark admits, "Since day 1 our sex life has been great. I knew right away that the way we 'clicked' in the bedroom meant this was the real deal." Mark notes that he and his ex partner differed in how often they would like to have sex, which ultimately led to their relationship demise. Mark says "I think disagreements in terms of sex are a sign that the relationship is not meant to be." With his current partner Mark says, "We agree on just about everything about our sex lives."

These couples were among the 2459 couples we have collected so far as part of the Sexual Health and Relationships (SHaRe) Lab, and they are typical examples of how sexual relationships develop over time. In the SHaRe Lab, a research lab in the Psychology Department at York University in Toronto, Canada, we are interested in how sexual relationships develop over time and characteristics that contribute to long-term sexual success. We have launched one of the largest-scale longitudinal studies of sexual relationships ever conducted, following couples over 10 years. As a result, we have collected extensive data on the couples' sexual satisfaction.

In an article soon to be published in the journal Personal Relationships, Dr. Muise and colleagues will report recent findings from our extensive project. Dr. Muise concluded that "We have observed repeatedly that people's sex lives succeed when individuals find the 'right' sexual match for them. We found that sexual success depended on an individual's initial impressions of their sex life. Couples who had the best sex life at the outset of the study had the highest levels of sexual desire and sexual satisfaction over time. It was the couples who faced sexual issues early on who had the poorest prognosis for sexual satisfaction later on."

When asked what "sex tips" our participants have for newlywed couples, Jennifer suggests, "Don't worry…if you believe you have found the right sexual partner for you, you are all set." Rob adds, "Don't listen to people who say marriage means the end of your sex life. If you have great sex early on, your sex will stay great."

Sexual Growth Beliefs Condition

"Secrets to an Amazing Sex Life: You May Need to Work at It"

Jennifer and her husband Rob seem to have done the impossible: despite having been married for over twenty years, they manage to have an active, satisfying sex life. What's their secret? Rob admits that keeping their sexual satisfaction high isn't always easy, "Like any part of a relationship, sometimes it takes work to keep the sex great." Jennifer agrees: "Sometimes you need to make compromises and communicate about your sexual issues in order to work through any problems."

Mark and his partner are another long term couple of fifteen years that seem to have sexual satisfaction figured out. Mark and his partner both say their sex life is "excellent." However, despite being so satisfied today, Mark admits "Our sex life hasn't been perfect…it's had its share of ups and downs over the years." Mark notes that he and his partner differ in how

often they would like to have sex, which was hard to deal with early on in their relationship. But, over time and through working through their sexual differences, Mark and his partner have been able to nurture a satisfying sex life.

These couples were among the 2459 couples we have collected so far as part of the Sexual Health and Relationships (SHaRe) Lab, and they are typical examples of how sexual relationships develop over time. In the SHaRe Lab, a research lab in the Psychology Department at York University in Toronto, Canada, we are interested in how sexual relationships develop over time and characteristics that contribute to long-term sexual success. We have launched one of the largest-scale longitudinal studies of sexual relationships ever conducted, following couples over 10 years. As a result, we have collected extensive data on the couples' sexual satisfaction.

In an article soon to be published in the journal Personal Relationships, Dr. Muise and colleagues will report recent findings from our extensive project. Dr. Muise concluded that "We have observed repeatedly that people's sex lives succeed when individuals work through differences and overcome obstacles together. We found that sexual success did not depend on a couple always having amazing sex at every stage of their relationship. For example, couples who had the best sex life at the outset of the study were not necessarily more satisfied over time. Instead, couples who reported the most success overcoming sexual challenges also reported having the highest levels of sexual desire and sexual satisfaction."

When asked what "sex tips" our participants have for newlywed couples, Jennifer suggests, "Don't worry if you don't see eye to eye on everything in the bedroom. You can work through many issues by communicating with your partner and working to meet each other's needs." Rob adds, "Don't listen to people who say marriage means the end of your sex life. If you don't neglect your sex life it won't disappear."