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## SEXUAL DESIRE TRAJECTORIES: HETEROSEXUAL INDIVIDUALS' PERCEPTIONS OF THE STATE AND TRAIT CHARACTERISTICS OF DESIRE

By

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Bachelor of Arts McGill University 2008

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A dissertation submitted in partial fulfillment of the requirements for the

Doctor of Philosophy – Psychology

Department of Psychology College of Liberal Arts The Graduate College

University of Nevada, Las Vegas December 2017



## **Dissertation Approval**

The Graduate College The University of Nevada, Las Vegas

October 31, 2017

This dissertation prepared by

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Sexual Desire Trajectories: Heterosexual Individuals' Perceptions of the State and Trait Characteristics of Desire

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#### ABSTRACT

### Sexual Desire Trajectories: Heterosexual Individuals' Perceptions of the State and Trait Characteristics of Desire

by

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Significant theoretical and empirical attention has aimed to classify sexual desire in a way that accounts for its complexities. A recent question to arise from this discussion is whether desire is best conceptualized as a state or a trait. Limited data examine patterns of desire spanning several years, and most data emanate from cross-sectional or short-term follow-up studies. Long-term accounts of desire level variability remain a gap in the literature, as does research inquiring directly about the question of trait desire.

Thirteen heterosexual women and ten heterosexual men, ages 40-63, participated in a semi-structured interview focusing on desire level and variability across the lifespan, causal factors for desire changes, and perception of trait and state-level desire. Men and women also provided a graphic representation of desire level across their lifetime.

The sample of women in this study were generally desirous, and content with their desire level. What emerged from narratives of their desire trajectories was a model of desire development, beginning in adolescence and evolving through middle adulthood, composed of three relatively distinct stages. In their adolescent years, desire was not experienced as its own entity with a connection to their own wants. Instead, what was salient during this time was sexual activity driven by a yearning for validation or by a pressure to fulfill societal or partner expectations, often followed by feelings of shame for having been sexual. Then, as women progressed through their adult lives, they accumulated personal and relational experiences that clarified exactly what and how they desire. Finally, at the time of the interviews they appeared to have defined what desire is to them, to have developed their own expectations for sex and relationships, and to place high value on enacting their desire in line with these expectations. The majority of women in this sample viewed themselves as having a trait level of desire, with fluctuations seen as circumstantial deviations from this trait level. Men's trajectories did not reveal a developmental model. They largely viewed their desire level as a trait and had a clear sense of desire from late adolescence or early adulthood. In most cases, there were two or three key causal factors that influenced men's trajectories, falling broadly into categories of Individual (self-esteem, well-being, stress, physical health, and aging) and Relational (positive relationship characteristics, and novelty and stagnation).

Results support the characterization of desire level as a trait characteristic in some men and women. Interestingly, the way in which women determine their trait level of desire, given potentially significant variability across time, appears influenced by satisfaction with desire level. The graphic representations of lifespan desire level indicate a distinction between causal factors that influence the direction of the overall trajectory, versus those that were not sufficiently significant to factor into the trajectory. Results highlight the importance of intraindividual factors in desire development.

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#### ACKNOWLEDGEMENTS

I am indebted to many individuals whose support and kindness allowed me to see this project through. First and foremost, to my research supervisor, Marta Meana – for your generosity of spirit, and for the countless hours you invested in this project and in my development over the past six years. You have always pushed me to be better, and have done so with genuine kindness, warmth, and good humor. I am so grateful to you. To my committee members, Chris Heavey, Katherine Hertlein, and Noelle Lefforge - thank you for your excitement about this project, and for your thoughtful feedback. I value each of your contributions tremendously. To Michelle Paul, for being a model of strength and grace that I aspire to. To Kim Barchard, for always being willing to consult. Your dedication to students is inspiring, and I have gained so much from working with you. To my lab mates and dear friends, Sarah Jones and Evan Fertel – I could not have asked for a better group to share ideas with, and to have supporting and challenging me through this process. To the strong, intelligent women I had the pleasure to begin and end my graduate school journey with – you are inspiring creatures, and I am so excited to see where your lives take you. To Deb, for SCI - for your unwavering encouragement, honesty, and humor. There has never been a better cheerleader. To my parents, my sister, and all my family – you have provided emotional and financial support that has made this possible. A simple "thank you" does not even begin to cover it. To Oscar and Callie, for their tireless dedication to keeping my lap warm. And finally, to the 24 men and women who generously shared their stories with me – this project would not have been possible without you. I extend to you my heartfelt gratitude.

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#### CHAPTER 1

#### **INTRODUCTION**

As the most subjective component of the human sexual response, sexual desire can be difficult to characterize. Early attempts to theorize the nature of the sexual response resulted in a linear, triphasic model that positioned sexual desire as a spontaneously-ignited force that drove individuals to seek out sexual activity (Kaplan, 1977). As data accumulated, it became clear that this early characterization of desire did not accurately reflect the way in which many individuals, especially women, experienced desire. The sexual response, in particular desire, appeared more complex than a simple linear model could account for. Significant theoretical and empirical attention has thus turned toward the aim of classifying sexual desire in a way that accounts for its complexities.

Sexual desire is not a discrete experience with clearly defined boundaries and observable markers to indicate its presence. As such, the quest to define and operationalize desire has proven challenging. Definitions offered by researchers often diverge from those endorsed by women. Qualitative research on the experience of desire, conducted primarily with women, has proven valuable in expanding our understanding of desire to account for more nuance and variability in the experience (e.g., Brotto, Heiman, & Tolman, 2009; Graham, Sanders, Milhausen, & McBride, 2004). Sexual desire is no longer thought of exclusively as a spontaneous motivational drive towards sexual activity. Desire may indeed be spontaneous, but it can also be responsive to internal or external stimuli. Desire may reflect a wish for individual sexual activity (solitary desire) or partnered sexual activity (dyadic desire), and some recent data point towards important differences in these experiences (van Anders, 2012). The most recent theoretical question to arise from the discussion of how to characterize sexual desire is whether it is best conceptualized as a state or trait.

In the absence of direct empirical attention to this question, sexual desire has informally been given the designation of a trait. This assumption likely stems from historical conceptualizations of desire that emphasize its innateness and biological imperative (Freud, 1953; Kaplan, 1977). Validated sexual function and sexual desire questionnaires are assumed to assess trait desire, as they ask participants to reflect on time periods of four or more weeks, longer than what is typically considered a state. However, investigating the extent to which sexual desire reflects the two basic characteristics of traits – temporal stability and predictive ability – reveals some conflicting data. An individual's level of sexual desire can vary, sometimes dramatically, in response to numerous biological and psychological factors. While limited data do examine long-term patterns of desire spanning several years, most data emanates from cross-sectional or short-term follow-up studies. Long-term accounts of desire variability remain a gap in the literature, which this study will attempt to address.

The question of whether or not sexual desire levels predict behavior is a complicated one. Data generally do show correlations between sexual desire level and sexual activity frequency, most apparent on the extremes of the desire-level spectrum. However, issues with the way that sexual desire is conceptualized and assessed in validated questionnaires require that the relationship between sexual desire and sexual activity be interpreted with caution.

Though sexual desire has been assumed to be a trait, some researchers are calling this designation into question, arguing that sexual desire is actually more representative of a state. The lack of stability of desire levels over time coupled with ample data on the responsive nature of desire support the argument for state desire. There remains disagreement about what time

boundaries isolate a state experience, though. While much research focuses on laboratoryinduced desire, some argue that longer-term changes to desire resulting from pregnancy, relationship conflict, or illness should be considered states as well (Stark et al, 2015).

As the question of state and trait desire is a very recent one, the theoretical distinction between them is not well developed. In an attempt to add some clarity to this important classification discussion, we will first review the literature on the history and evolution of sexual desire classification, current approaches to sexual desire assessment, and literature that can address both trait and state conceptualizations of desire. We will then present the results of a qualitative investigation of men and women's experience of sexual desire variability over the course of their lives, and the extent to which they perceive their level of sexual desire to be a trait characteristic, a state, or a combination of both with varying emphases on its state vs trait qualities.

#### CHAPTER 2

#### LITERATURE REVIEW

In the following section, the literature relevant to the proposed study is reviewed. This literature review will cover: 1) a brief history of conceptualizations of the sexual response and the classification of desire disorders; 2) definitional and conceptual challenges of sexual desire; 3) existing approaches to the assessment of sexual desire; and 4) investigation of state and trait conceptualizations of desire.

#### History of the early classification of sexual desire

The construct of sexual desire has been the subject of much debate, ideological battles, and considerable confusion. It is a nearly universal human experience, and yet as a wholly subjective and highly complex one, it has been difficult to define and assess. Is not entirely surprising, then, that the first empirical attempt to characterize the human sexual response neglected to mention desire at all. This effort, undertaken by Masters and Johnson in the 1960s, involved an assessment of the physiological changes associated with arousal and orgasm in over 700 men and women. As a result of their investigation, outlined in their groundbreaking work *Human Sexual Response* (1966), they proposed a four-stage linear model of human sexual response that was purportedly identical for men and women. According to Masters and Johnson, human sexual response began with sexual arousal, was followed by a plateau of sexual excitement, and continued to orgasm and subsequent resolution of sexual excitement.

A decade after, Helen Singer Kaplan (1977) and Harold Leif (1977) independently remarked that Masters and Johnson's conceptualization of the sexual response was missing an essential component. They argued that the sexual response does not begin when a person enters a state of arousal, but when they become motivated to seek out sexual stimulation. Kaplan thus reworked Masters and Johnson's model to account for the motivational force of sexual desire. Her revised triphasic model consisted of sexual desire, followed by sexual arousal (encompassing the arousal and plateau stages of Masters and Johnson's model) and orgasm. Kaplan's model retained the assumption of a linear and sequential progression through the sexual response, as well as the original model's lack of gender differentiation. Despite the important addition of a desire phase, Kaplan did not elaborate on the specific physiological or psychological processes that were involved in the experience of desire. Unlike the arousal and orgasm phase that were based on specific physiological changes per Masters and Johnson's assessment, the characterization of the desire experience was not attempted.

Nonetheless, Kaplan's triphasic model served as the basis for classifying sexual disorders in the *Diagnostic and Statistical Manual of Mental Disorders* from DSM-III (American Psychological Association, 1980) through DSM-IV-TR (APA, 2000). Sexual dysfunctions were separated into disorders of sexual desire [Hypoactive Sexual Desire Disorder (HSDD), Sexual Aversion Disorder (SAD)], sexual arousal [Female Sexual Arousal Disorder (FSAD), Male Erectile Disorder (ED)], and orgasm [Female Orgasmic Disorder (FOD), Male Orgasmic Disorder (MOD), and Premature Ejaculation (PE)], and were considered to represent abnormal progression through their associated phase of the sexual response cycle. A fourth category of sexual pain disorders (Dyspareunia and Vaginismus) was added in DSM III-R (APA, 1987), standing outside of the sexual response cycle. Aside from obvious differences in anatomy and physiology, the DSM did not highlight differences in sexual function between men and women. Further, the DSM offered no definition of desire.

The success of such an approach to classification, wherein distinct disorders are associated with distinct phases of the sexual response, relies on a sexual response that is actually

as clear-cut as the triphasic model suggests. As research has accumulated over the past 20 years, it has become abundantly clear that this was not the case. Of particular concern were the construct of sexual desire and the diagnosis of HSDD. The first sign that something was amiss was the high prevalence rate of complaints of low sexual desire, far beyond that of other sexual disorders. While neither Kaplan nor the DSM provided a definition of sexual desire, per se, a diagnosis of HSDD required "persistently or recurrently deficient (or absent) sexual fantasies and desire for sexual activity" that caused "marked distress or interpersonal difficulty" (APA, 2000). According to multiple large-scale, epidemiological surveys, up to 40% of women and 15% of men endorsed the symptomatic criterion of HSDD (low desire) (Laumann et al, 2005; Laumann, Paik, & Rosen, 1999; Mercer, et al. 2003; Shifren, Monz, Russo, Segreti, & Johannes, 2008), and about half reported associated distress (Dennerstein, Koochaki, Barton, & Grazziotin, 2006; Fugl-Meyer & Fugl-Meyer, 1999; Oberg, Fugl-Meyer, & Fugl-Meyer, 2004). Arguably, when the sole symptom of a clinical disorder captures nearly half of the female population, this certainly raises questions about its validity.

Several researchers suggested that the problem lay in the assumption that women's sexual response is analogous to that of men's (e.g., Basson, 2000; Tiefer, 2001). As more research delved into the desire experience of men and women, there was growing evidence that women did not uniformly endorse a sexual response that was linear and sequential, wherein desire sparks the sexual response and acts as a precursor to arousal. While male desire is often reported to be spontaneous (Baumeister, Catanese, & Vohs, 2001; Reagan & Berscheid, 1999), women's desire may be more responsive in nature (see Meana, 2010, for review). Relatedly, the goal of sexual desire (or engagement in sexual behavior) may not necessarily be arousal and orgasm, as the triphasic model suggests. Sexual desire has been shown to be aimed at many alternate goals (e.g.,

intimacy, relationship enhancement; Basson, 2000), including the pleasure some women derive from the experience of desire itself (Meana, 2010).

Further evidence against a strictly linear model of sexual response for women came from research that revealed a conflation between sexual desire and sexual arousal. It is important to note that the triphasic model, based on the results of Masters and Johnson's physiological assessment, equated arousal with genital vasocongestion. However, arousal also carries a subjective component – the mental or emotional feeling of being "turned on." It is this subjective sexual arousal which, for women, is often indistinguishable from sexual desire (Goldhammer & McCabe, 2011b; Graham, Sanders, Milhausen, & McBride, 2004; Brotto, Heiman, & Tolman, 2009). Even when women do distinguish desire from arousal, there is variation with respect to their temporal sequence (Graham et al, 2004). A significant number of women report that arousal is the trigger for their desire.

All of these studies indicate that female sexual response, in particular desire, may be more complex and less linear than the triphasic model suggested. Two alternative models have been put forth in response to these data. Rosemary Basson's circular model of sexual response allows for the possibility that individuals (women primarily) may seek out (or be responsive to) sexual activity for any number of reasons that may or may not include desire (e.g., emotional intimacy; Basson, 2000; Basson, 2001). Following the onset of sexual activity and/or genital arousal, desire/subjective arousal may occur. Similarly, a group of Dutch researchers proposed an incentive motivational model of sexual response, wherein the sexually aroused state of the body and brain brings about feelings of desire (Both, Everaerd & Laan, 2007; Everaerd & Laan, 1995; Laan & Both, 2008).

The debate about how to best characterize the constructs of desire and arousal (and their associated sexual disorders) intensified in the context of preparations for DSM-5 (Brotto, 2010). Ultimately, the diagnoses of HSDD and FSAD were collapsed into a single diagnosis of Sexual Interest/Arousal Disorder (SIAD) in women. Separate desire and arousal disorders were retained for men, due to the lack of similarly convincing evidence that they should be collapsed. To meet criteria for SIAD, a woman must endorse three of the following symptoms for a minimum of six months: lack of interest in sexual activity, reduced or absent erotic thoughts, lack of initiation and receptivity to sexual activity, reduced pleasure during sex, reduced or absent desire emerging during a sexual encounter, and a reduction in genital or non-genital sensations. These symptomatic criteria include those previously attached to either HSDD or FSAD, with additional criteria that tap into a lack of responsive desire. Specifiers for SIAD pay increased attention to contextual factors by considering partner or relationship factors, individual vulnerabilities (e.g., poor body image), cultural or religious factors, and medical factors.

The decision to do away with the term "sexual desire" in favor of "sexual interest" is a notable one in *DSM-5*. It speaks to the difficulty that remains in capturing the complexity of sexual desire, despite significant efforts to investigate it in recent years. The next section will take a more in-depth look at the history and current status of definitional and classification challenges.

#### **Defining and Characterizing Sexual Desire**

Sexual desire lacks a single, unified definition within the empirical literature. Much of the difficulty stems from the ambiguity of markers of desire. As it became clear that desire was more complicated than a motivational force aimed at sexual action, researchers began to examine the role of physiology, sexual behavior, and sexual cognitions in the desire experience. These efforts have been largely unsuccessful, with no observable or measurable process showing a strong and reliable relationship to desire. Nonetheless, researchers have attempted numerous definitions of sexual desire to guide the empirical literature.

#### **Empirical Definitions of Desire**

Levine (2002) defines desire as "the sum of forces that incline us toward and away from sexual behavior." While Levine conceives of these "forces" as biological, psychological, and cultural, thereby acknowledging that desire is multifaceted, the net result is supposedly observable in the form of sexual behavior. Pfaus (2006) also opts for a behaviorally-oriented definition, with sexual desire defined as "desire for, and fantasy about, sexual activity." This reliance on sexual behavior as a marker for desire is problematic, as the two do not always cooccur. In fact, both men and women report engaging in sexual behavior for many reasons other than desire, including a longing for intimacy, the wish to please a partner, and to escalate a relationship.(Beck, Bozman, & Qualtrough, 1991; Hill & Preston, 1996; Meston & Buss, 2007; Shotland & Hunter, 1995). In addition, the presence of sexual desire does not always drive an individual toward sexual action. Deterrents, including risk of pregnancy or STDs, or concerns about reputation, or even the fear that sex might lead to unwanted emotional involvement, lead both men and women to refrain from sexual activity despite the presence of desire (Beck et al, 1991; Brotto et al, 2009; Graham et al, 2004; Lanti, 2012; Tolman, 1994). The relationship between sexual desire and sexual behavior is far from simple, and the presence of one does not indicate the other as strongly as had been historically assumed.

Everaerd and Both (2001) are among those researchers who turn to physiological arousal as an indicator of desire. They suggest that sexual desire is the awareness of physiological sexual arousal. This conceptualization again places emphasis on an unreliable marker of desire, as physiological arousal is no more associated with desire than sexual behavior is, at least in women. Genital response was found to be poorly correlated with subjective arousal in women (r= .26) and moderately correlated in men (r = .66), according to a meta-analysis of 132 studies that examined the relationship between physiological and subjective arousal (Chivers, Seto, Lalumiere, Laan, & Grimbos, 2010). This low correlation in women appears to result from an indiscriminate pattern of genital response, with genital arousal occurring in response to nonpreferred genders (Chivers, Reiger, Latty, & Bailey, 2004) and sexual activities (Laan & Everaerd, 1995; Suchinsky & Lalumiere, 2011) and often being uncoupled from subjective arousal. These data tell us that for women, in particular, physiological change can occur in the absence of subjective arousal/desire.

Basson and colleagues (2003) suggested that low desire be defined as "absent or diminished feelings of sexual interest or desire, absent sexual thoughts or fantasies and a lack of responsive desire. Motivations (here defined as reasons/incentives) for attempting to have sexual arousal are scarce or absent." A definition of desire here is inferred by discussing what an individual with low desire is lacking. Basson implies that sexual desire is indicated, in part, by sexual thoughts and fantasies. Likewise, the DSM-5 includes absent sexual fantasies as a diagnostic criterion for SIAD (along with diminished sexual behavior and physiological arousal), suggesting that sexual fantasy is a common element of the desire experience. In fact, data are inconsistent. Sexual fantasy is reported only by a minority of respondents as related to their desire (Beck et al, 1991; Carvalheira, Brotto, & Leal, 2010; Reagan & Berscheid, 1996; Goldhammer & McCabe, 2011b). Some data do show a stronger association between desire and sexual fantasy (e.g., Carvahlo & Nobre, 2011; Purifoy, Grodsky, & Giambra, 1992), however, it does not appear not sufficiently strong or consistent to anchor a definition. Regan & Berscheid (1999) opted for a very inclusive definition, with desire conceptualized as "a psychological state subjectively experienced by the individual as an awareness that he or she wants or wishes to attain a (presumably pleasurable) sexual goal that is currently unattainable." This definition does not have the same drawbacks as those noted previously, in that it is not anchored by an unreliable marker of desire. At the same time, it is challenging to apply it to empirical research, given that there is little to quantify. This presents a kind of "Catch-22" dilemma that has made empirical work on desire challenging. The more we rely on operationalizable constructs to represent desire, such that we can assess it quantitatively, the further we move away from the subjectivity that is characteristic of desire. Brotto (2010) speaks to this dilemma when she argues that an overriding problem in understanding (female) sexual desire is the discrepancy between definitions put forth by researchers versus those endorsed by women. As it has become increasingly apparent that our conceptualization of desire was problematic, research has begun to incorporate qualitative methods, inviting women to put their own words to their desire experiences.

Qualitative research, conducted almost exclusively with women, has revealed that the meaning of desire is complex and idiosyncratic. "What is sexual desire?" has not been a question with a simple or readily available answer, in many cases. Goldhammer and McCabe (2011b) found, in their community sample of partnered women (N=40) ages 20-61, that desire could be a physical (e.g., genital sensation, the body feeling "alive," physical arousal), cognitive (e.g., being in a sexual frame of mind) or emotional (e.g., feeling an overwhelming passion) experience. Often, it has been reported as an interplay of several of these factors. A similar theme was found in Brotto, Heiman, and Tolman's (2009) sample of partnered women with and without Female Sexual Arousal Disorder, and in Murray and Milhausen's (2012) group of partnered women in

emerging adulthood. Desire could be a physical (though not strictly genital), cognitive, and/or emotional experience. Desire could be aimed at a particular goal such as sexual activity, though many women identified pleasure associated with the experience of desire, in and of itself. While there do exist common threads to women's descriptions of desire in all of these studies, it is most notable that for many of them, desire was too nuanced an experience to describe accurately in its entirety. This raises the question of whether or not a single, unified definition of desire is a logical or productive pursuit. It may be that there are different ways of characterizing desire that depend on the person and the context.

Through this process of attempting to define desire, focus has shifted away from simply asking "*what* is sexual desire?" Understanding the complexity of desire requires broadening the way we think about desire, asking questions such as how and why we have desire. Next, we will review some of the ways in which we have come to classify desire – as a dyadic experience versus a solitary one, as spontaneous or responsive, as a trait or as a state – and discuss the challenges that these classification decisions introduce.

#### **Dyadic vs Solitary Desire**

Differentiation between desire experienced alone (solitary desire) or toward a partner (dyadic desire) was first proposed by Spector during the process of validating the Sexual Desire Inventory (SDI; Spector, Carey & Steinberg, 1996). In a pilot study of the 20-item SDI (which is now among the most frequently used measures of sexual desire), Spector found a high correlation between the factors "interest in masturbation" and "interest in erotic materials," and found these to be less highly correlated with factors measuring sexual dreams and interpersonal attraction. Spector proposed that perhaps interest in masturbation and use of erotic material represented an interest in individual sexual behavior, separate from interest in partnered sexual behavior. In a second study, items on the original SDI were revised to refer specifically to individual or partnered sexual activity, and results confirmed that these two factors were indeed distinct (Spector et al, 1996).

According to Spector et al (1996), the underlying difference between solitary and dyadic desire is motivational. Solitary desire may reflect a need for tension release and be more physical in nature, whereas dyadic desire may be in part motivated by a need for emotional or physical intimacy with another. This raises an interesting question about the necessity of distinguishing between motives of desire. Some would argue that this is a meaningful distinction, based in part on evidence that other parameters (e.g., testosterone) are differentially (and oppositionally) linked to solitary and dyadic desire in women (van Anders, 2012). Specifically, testosterone has been positively correlated with solitary desire in women, and null or negatively correlated with dyadic desire (van Anders, Hamilton & Watson, 2007; van Anders, Brotto, Farrell, & Yule, 2009; van Anders, 2012). Nonetheless, most studies do not distinguish between types of desire (van Anders, 2012; Dawson & Chivers, 2014). Whether or not this distinction is meaningful for men and women is not clear, nor is whether desire is experienced differently depending on why it occurred. The most apparent difference is the associated sexual behavior, which, as previously discussed, presents additional challenges.

#### **Spontaneous vs Responsive Desire**

The question of what engenders sexual desire also raises the distinction between spontaneous and responsive desire. Masters and Johnson (1966) theorized desire to be spontaneous, with the potential to arise in the supposed absence of sexual stimuli, while Basson (2000) placed emphasis on sexual desire that occurs as a response to sexual stimuli. The spontaneous vs responsive distinction is one that is highly related to gender. Male sexual desire is more often characterized as spontaneous. Men tend to describe their desire as a motivational state as opposed to a cognitive or emotional one (Regan & Berschied, 1999) and report more spontaneous sexual arousal than do women (for review, see Baumeister, Catanese, & Vohs, 2001). While women's desire may sometimes be spontaneous, it shows a higher tendency towards responsivity in comparison to men (for review, see Meana, 2010). Basson's (2000) circular model suggests that women's desire is most often triggered by partner advances, or through sexual activity that begins for intimacy-related, non-sexual reasons. Once engaged in this initially non-desired sexual activity, the woman may get aroused which then engenders the desire for sexual satisfaction, which may or may not include orgasm. The reinforcing value of physical and emotional intimacy acts as a motivator for subsequent sexual activity. Basson does not reject the idea of initial spontaneous desire in women, but suggests that it is far less common than for men, and more importantly, not a pre-requisite for a sexually and emotionally satisfying experience.

Expanding the model of the sexual response to include responsive desire was instrumental in revising our diagnostic system for sexual disorders. The DSM-5 criteria for SIAD now reflect both diminished spontaneous <u>and</u> responsive desire. However, the issue is far from closed. Classification challenges remain in the discussion of spontaneous versus responsive desire. First, there is the question of whether spontaneous and responsive desire are truly dichotomous, as they tend to be discussed in the literature, or whether there exists a continuum of desire from spontaneous to responsive. The spontaneous end of the continuum would capture someone whose desire aligns with Masters and Johnson/Kaplan's model of sexual response, to the extent that there can be no (apparent) sexual stimuli the individual is responding to. On the other end of the continuum would be the individual whose desire is only sparked following exposure to sufficiently arousing stimuli. Surely, there is a wide middle ground between these two representations of desire. Consider, for example, a woman who is responsive to partner initiation only because she already feels some desire, and this desire grows as sexual activity progresses. There are countless scenarios which could reflect the presence of both spontaneous and responsive desire.

Meana (2010) suggests that the spontaneous-responsive continuum is really a continuum of arousability, with higher-desiring individuals located more on the spontaneous end and lower-desiring individuals on the responsive end. Further, she suggests that this continuum might be related to the excitation-inhibition continuum of the dual control model of sexual response, which posits that the sexual response is based on the activation of excitatory and inhibitory systems (Bancroft, Graham, Janssen, & Sanders, 2009). Sexual excitation is triggered by sexual cues in the environment, and inhibition is triggered by performance anxiety or fear of negative consequences to sexual activity. Meana suggests that individuals with higher excitation may be more prone to spontaneous desire, whereas individuals with a more active inhibitory system are situated closer to the responsive end. Some data do support this theory, with Basson's model being more often endorsed by women with sexual difficulties, including low desire (Giles & McCabe, 2009; Sand & Fisher, 2007).

The conceptual issues discussed thus far are resting on the assumption that spontaneous desire is a valid construct. However, it is reasonable to question the notion that desire can emerge from nowhere into the conscious mind. According to the incentive motivational model of sexual response, all desire is responsive to either internal or external cues (Both, Everaerd, & Laan, 2007; Everaerd & Laan, 1995). They argue that sexual stimuli can be processed unconsciously,

and thus what is experienced as spontaneous may actually be responsive to stimuli outside of awareness (Spiering, Everaerd, Karsdorp, Both, & Brauer, 2006).

#### **Desire vs Interest**

A third definitional challenge pertains to the use of the term desire. With DSM-5 came an important change in terminology. According to the DSM, there is no longer a disorder of sexual desire in women. Rather, there is a disorder of sexual *interest*. The term interest is one of many synonyms for desire in ordinary language, along with wish, want, yearn, ache, need, and plea (Levine, 2002). Of these, "interest" may be the least evocative and certainly the least descriptive. The rationale for the decision to replace "desire" with "interest" is not entirely clear, though Brotto (2010), a member of the DSM-5's work group on sexual and gender identity disorders, argued that interest is a better descriptor than desire for women because it "emphasizes a broader construct than the more biological 'drive' connotations of sexual desire, and it reflects the lack of motivation" (p. 234) in women with SIAD. She notes that the term Sexual Interest/Desire Disorder was the preferred term of the International Classification Committee on women's sexual dysfunction (Basson et al, 2003), though recognizes that it may not be favored given some sentiment that it is void of any sexual meaning (Brotto, 2010).

The term "interest" has appeared sporadically over the years in reference to desire, though a convincing distinction is not available. Two standardized measures of sexual desire, the Sexual Interest and Desire Inventory –Female (SIDI-F; Clayton et al, 2006) and the Changes in Sexual Function Questionnaire (CSFQ; Clayton, McGarvey, & Clavet, 1997) define interest and desire separately. Desire is defined as "your interest in having a sexual experience whether alone or with a partner" while interest is defined as "involving thoughts, feelings, and/or a willingness to become involved in some sort of sexual activity." This is hardly a clear distinction. In the empirical literature, "sexual interest" has been used loosely and inconsistently. It is often synonymous with sexual desire, with an implication that the purpose of sexual interest is sexual behavior (e.g., Birnbaum & Reis, 2012). Often it denotes sexual orientation (e.g. Akerman & Beech, 2012; Kalmus & Beech, 2005; Rullo, Strassberg, & Miner, 2014). In the theoretical literature, the term interest makes an appearance in Levine's (2002) continuum of sexual desire intensity. This continuum is presented as "aversion – indifference – interest – need – passion." Here, 'interest' appears in what Levine calls the neutral range, in which people "grant sexual behavior because the other person has expressed desire" (p. 42). It is likened to compliant sex, lacking the agency inherent in the term "desire."

One commonality in usage of the term sexual interest (when it is being used to represent desire as opposed to sexual orientation) is the implication that the interest is in sexual action (Clayton et al, 2006; Levine, 2002). Likewise, the criterion of SIAD that contains the word interest refers to a lack of interest in sexual activity. While "sexual interest" may have been adopted to emphasize a broader construct, its usage thus far seems to have further muddied the waters.

#### **Trait and State Desire**

The question of whether sexual desire is best characterized as a trait or a state is a relatively new one, and it has arisen in part as a byproduct of the spontaneous-responsive desire classification discussion. Trait desire is considered to be an individual's stable, characteristic level of sexual desire, while state desire is context-dependent (Goldey & van Anders, 2012). Responsive desire, then, could be considered a type of state desire. Conversely, an individual's level of spontaneous desire (or sexual excitation/arousability) or frequency of responsivity might reflect their trait level of desire.

Stark and colleagues (2015) have recently proposed a differentiation between trait and state sexual motivation. In accordance with recent conceptual models of sexual behavior (Both, Everaerd, & Laan, 2007; Toates, 2009), they understand sexual motivation to be "the driving force behind sexual engagement accompanied by subjective sexual feelings (i.e., experienced sexual arousal), physiological sexual responses (e.g., genital responses), and sexual behaviors." They argue that trait sexual motivation is stable over time, and consists of a combination of genetic and longstanding sociocultural influences. State sexual motivation, in contrast, is a combination of trait sexual motivation and fluctuating influences such as sexual cues and biological state (Stark et al, 2015). Furthermore, constructs such as sexual desire and sexual interest reflect aspects of trait sexual motivation, but can also describe state sexual motivation. At this point, limited research exists on the validity of either of these two conceptualizations of desire, the extent to which they are distinct or overlapping, and the manner in which they influence each other.

Clearly, debates around how to best classify and define desire are complicated, and research is adding both clarity and complexity to the discussion. If defining a construct is a prerequisite for measuring it, we can safely assume that the state of desire assessment may also be lacking in clarity. The next section will examine existing approaches to the assessment of sexual desire.

#### **Assessment of Sexual Desire**

With no agreed upon definition of desire, there is also no consensus about how to appropriately assess it. As is the case with many other psychological constructs, self-report is the primary means of assessing sexual desire. Self-report data can be garnered through the use of

daily diaries or semi-structured interviews, however, the most common self-report instruments are retrospective questionnaires that assess desire over a period of several weeks.

Self-report data is characterized by several challenges that must be considered. Recall bias and differences in introspective ability among respondents may affect reporting accuracy of any experience. Self-reporting sexual desire involves additional potential confounds. Given that ideas about appropriate levels of desire are highly gendered and that its expression is susceptible to sociocultural pressures (Crawford & Popp, 2003; Dworkin & O'Sullivan, 2007; Kreager & Staff, 2009; Tolman, 1994), the influence of impression management must be seriously considered. Although findings have been mixed, studies suggest that women's responses are particularly susceptible to the effects of impression management (Boyer, Pukall, & Holden, 2012; Fisher, Moore, & Pittenger, 2012; Paulhus, 1991; Huberman, Suschinsky, Lalumiere, & Chivers, 2013). Ultimately, self-assessment of desire is a relative one, dependent on the individual's assessment of how they "stack up" to some reference group. Recent data suggest that same-age, same-gender peers exert the most significant influence on how individuals self-assess their desire (Maykut, 2014), while some data also point to the importance of romantic partners (Bancroft, Graham, & McCord, 2001).

Despite challenges associated with the self-report of sexual desire, its subjective nature renders it the most suitable assessment strategy. Numerous scales have been validated to assess sexual desire, either as components within global sexual function questionnaires, or as desire-specific measures. Among the most widely used validated questionnaires, there is considerable variability in how desire is assessed along a number of dimensions. Several of these questionnaires were aligned with the DSM-IV criteria for HSDD (lack of desire for sexual activity and lack of sexual thoughts/fantasies). As such, they assess desire according to these

markers. The emergence of more nuanced conceptualizations of how desire is experienced (e.g., spontaneous versus responsive) has resulted in assessment instruments that incorporate these nuances. Table 1 provides an overview of validated instruments that assess sexual desire, the extent to which they assess desire as a motivational/behavioral and cognitive experience, and further, the extent to which they consider dyadic vs. solitary, spontaneous vs. responsive, and state vs. trait desire.

#### Desire as a motivational-behavioral construct

Consistent with DSM-IV-TR and Levine's (2002) definition of sexual desire as "the sum of forces that incline us toward and away from sexual behavior," desire is commonly conceptualized in validated questionnaires as a motivational force that drives an individual toward sexual activity. Thus, a person with high desire feels, with a high frequency and/or intensity, a wish to engage in sexual activity. This conceptualization is reflected in the definitions of desire offered on numerous questionnaires: the Female Sexual Function Index (FSFI: Rosen et al, 2000), Brief Sexual Function Inventory for Urology (BSFI: O'Leary et al, 1995), Sexual Desire Inventory (SDI: Spector, Carey, & Steinberg, 1996), Sexual Interest and Desire Inventory - Female (SIDI-F: Clayton et al, 2006), Women's Sexual Interest Diagnostic Interview (WSID: Derogatis et al, 2008); Women's Sexual Interest Diagnostic Interview – Short Form (WSID-SF; Derogatis et al, 2010), and the Trait Sexual Motivation Questionnaire (TSMQ: Stark et al, 2015), which actually defines sexual motivation as opposed to sexual desire (See Table 1). While the definitions of sexual desire offered in these questionnaires vary slightly, they share a focus on the wish, want, or interest in having a sexual experience. This assessment of motivation for behavior is distinct in an important way from a pure assessment of sexual behavior. As discussed earlier, sexual behavior can be a poor indicator of desire. By assessing instead the motivation for sexual

activity, responses should theoretically be less impacted by those factors that lead people to refrain from sex despite desire. Many questionnaires do assess only the desire to engage in sexual activity, and not actual frequency of sexual activity [BSFI (O'Leary et al, 1995); Brief Index of Sexual Function – Women (BISF; Taylor, Rosen, & Leiblum, 1997); Derogatis Interview for Sexual Function (DISF: Derogatis, 1997); FSFI (Rosen et al, 2000); SDI (Spector, Carey, & Steinberg, 1996); Sexual Interest and Desire Inventory – Female (SIDI-F: Clayton et al, 2006); TSMQ (Stark et al, 2015); WSID (Derogatis et al, 2008); WSID-SF (Derogatis et al, 2010)]. While the BISF-W and the SIDI-F do assess sexual activity, those items do not contribute to the desire factor, but to separate sexual activity factors.

Global sexual function questionnaires such as the FSFI and the BSFI simply offer their definition of desire and inquire about the frequency and intensity of desire, per the provided definition. The desire-specific questionnaires, on the other hand, conduct a more extensive assessment, offering several items to assess the desire for sexual activity. The SDI, for example, contains several items inquiring about the strength of desire in response to a variety of stimuli (e.g., seeing an attractive person, spending time with an attractive person, being in a romantic situation), and the importance of fulfilling those desires. With its focus on not only the frequency, but the intensity of drive towards sexual behavior, the SDI can be considered a measure of sexual motivation.

Two questionnaires assess the actual frequency of sexual activity, in addition to desired frequency, thereby assessing both the motivation and the behavior [Sexual Function Questionnire (SFQ; Quirk et al, 2002); Derogatis Sexual Function Inventory (DSFI; Derogatis & Mellisaratos, 1979)]. In these questionnaires, both desired frequency and actual frequency are a part of the sexual desire assessment. On the Female Sexual Desire Questionnaire (FSDQ: Goldhammer &

McCabe, 2011a), sexual activity is only assessed as it co-occurs with sexual desire (e.g., "When you were experiencing sexual desire, how often did you act on this by starting sexual activity with your partner?"). Items that inquire about the frequency of desire for sexual activity, and the frequency with which that desire lead to sexual activity, contribute to the same desire factor.

#### **Desire as a cognitive construct**

In line with the DSM's inference that sexual fantasy is a key indicator of desire, the vast majority of questionnaires that assess desire inquire about sexual thoughts or fantasies, typically through a frequency count (i.e., number of times per week that the respondent had sexual thoughts or fantasies). Among questionnaires that provide a definition of desire (noted above), several include the presence of sexual thoughts or fantasy in that definition (FSFI, BSFI, WSID, WSID-SF). For the remainder of questionnaires, assessment of fantasy is variable. The MFSQ and BISF-W each include a single item assessing the frequency of sexual thoughts and/or fantasies. The FSDQ, as one of the more recent and comprehensive measures of female sexual desire, includes several questions about the frequency of sexual fantasy, the frequency with which they led the respondent to seek out sexual activity. The DSFI includes a sexual cognition/fantasy subscale, which asks respondents to indicate the frequency with which they fantasize about different erotic or sexual experiences.

The TMSQ also includes several items assessing sexual cognitions. Because it is not a measure of desire, but of sexual motivation (of which desire is one component), it considers sexual cognition more broadly and is not limited to fantasy (e.g., "I think about sex more often than others/more than I would like to," "Sex is on my mind every day", "I have vivid sexual fantasies"). The TMSQ uses a response scale from "not at all" to "very much." For some items

this indeed translates to frequency (e.g., "I masturbate regularly"), however with more cognitively-oriented items (e.g., "I have very vivid sexual fantasies), this could be interpreted as assessing intensity of the experience.

#### Assessment of solitary versus dyadic desire

Of the ways in which desire has been further expanded, solitary and dyadic desire is the most frequently assessed in validated desire questionnaires. Most frequently, solitary and dyadic desire are not separated into distinct subscales, but questionnaires clearly conceptualize desire as having both solitary and dyadic components. Definitions of desire on the FSFI (Rosen et al, 2000), BSFI (O'Leary et al, 1995), SIDI-F (Clayton et al, 2006), and WSID (Derogatis et al, 2008) incorporate both individual and partnered sexual activity. Further, individual items on the SIDI-F and WSID, which are desire specific questionnaires, inquire about desire for sexual activity either alone or with a partner, though solitary and dyadic desire contribute to the same desire factor. The TMSQ (Stark et al, 2015) also specifies in its instructions that the terms "sex" or "sexual activity" can refer to either solitary or partnered sexual activity, but only provides a solitary sexuality subscale.

Other measures clearly privilege either solitary or dyadic desire. The Hurlbert Index of Sexual Desire (HISD; Apt & Hurlbert, 1992) is primarily a dyadic desire scale. While not explicitly described as such, it contains no reference to solitary sexual behavior or desire. Thirteen of 25 items refer to a desire to engage in sexual activity with a partner (e.g., "Just thinking about having sex with my partner excites me") while 12 refer neither to individual or partnered activity specifically, and thus could be interpreted as related to either (e.g., "I have a strong sex drive"). Ostovich and Sabini, on the other hand, consider the best measure of sex drive to be independent of partner status, and thus their 4-item Sex Drive Questionnaire (SDQ;

Ostovich & Sabini, 2004) inquires about level of sexual desire generally and frequency of masturbation.

Two questionnaires, the SDI and the FDSQ separate solitary and dyadic desire into subscales. The SDI is comprised of solitary and dyadic desire subscales, with items inquiring about desired frequency of sexual activity alone or with a partner, as well as the strength and importance of fulfilling these desires. As discussed earlier, it was through the validation process for the SDI that desire was first formally subdivided into solitary and dyadic components, each reflecting a different underlying motivation. The FSDQ also assesses both solitary and dyadic desire as two of its six subscales, though dyadic desire is more heavily emphasized. It is more thoroughly assessed (with 16 items as opposed to four), and items that load onto other factors are primarily partner-related. The FSDQ was developed as a comprehensive assessment tool that reflects the multifaceted nature of women's desire, but was developed with specific focus on partnered women. Thus, it is not surprising that the scale emphasizes dyadic desire.

#### Assessment of spontaneous vs responsive desire

Assessing spontaneous and responsive desire as separate constructs is difficult given that their theoretical distinction is not clear. Even if it were, this assessment would hinge on an individual's ability to accurately recall the onset of desire and the context in which it occurred. No desire questionnaire clearly separates items assessing spontaneous and responsive desire, such that the two can be assessed as distinct phenomena. Nonetheless, several attempts to tap into responsive desire have been made, with varying levels of precision.

The Cues for Sexual Desire Scale (CSDS; McCall & Meston, 2006) is the only questionnaire that exclusively assesses responsive desire. Its purpose was to provide an empirical categorization of triggers for desire. As such, it does not assess desire level, but rather the likelihood with which internal and external triggers might lead to sexual desire. It contains 40 items which load onto four factors: emotional bonding cues (e.g., experiencing emotional closeness with a partner); erotic/explicit cues (e.g., watching an erotic movie); visual/proximity cues (e.g., seeing a well-toned body), and implicit/romantic cues (e.g., dancing closely).

Of questionnaires that assess desire level, the FSDQ is the only one with a subscale intended to assess lack of responsive desire (FSDQ: Resistance subscale). The authors conceptualize resistance as a lack of responsive desire (Goldhammer & McCabe, 2011a). Some items on this scale indeed assess the frequency with which partner-initiated sexual activity did not result in desire (e.g., "How often did you turn down your partner's sexual advances because you were not experiencing sexual desire?") while others are less clearly related to responsive desire (e.g., "How often were you worried that your partner would stray from the relationship if you did not take part in sexual activity with him?") Only one item on this scale refers to the presence of responsivity: "How often did you become interested in sexual activity only after your partner had started sexual activity?" A positive response to this question, though, does not necessarily indicate the presence of desire, but simply an interest in having sexual activity, which could be attributed to reasons other than desire.

Conflation of receptivity to partner initiated sexual activity and responsive desire appears in several questionnaires. The WSID and WSID-SF include in their definition of desire "receptivity to partner initiation." The SIDI-F includes a single question assessing receptivity to partner-initiated sexual activity, with response options distinguishing between compliant sex and receptivity accompanied by sexual interest. The HSDD Screener for Postmenopausal Women (Leiblum et al, 2006) also inquires about receptivity to partner initiation. Again, an individual could be receptive to sexual activity for reasons other than desire. Even if receptivity is accompanied by sexual interest as in the SIDI-F item, there is no clarification here that the onset of desire occurred at the time of partner initiation or consequent to it.

If assessment of responsive desire lacks clarity in these measures, spontaneous desire does not fare any better. While not explicitly stated in any of the aforementioned questionnaires, there may be an underlying assumption that items not referring to responsivity or receptivity are assessing spontaneous desire by default. Perhaps because spontaneous-onset desire was the default assumption in the triphasic model, that assumption transferred to our interpretation of sexual function and desire questionnaires that were based on this model. However, without any specific reference to spontaneous desire, we cannot assume to be assessing it.

#### Assessment of trait vs state desire

Much of the debate surrounding whether sexual desire is best characterized as a state or a trait has focused on how desire is assessed in existing questionnaires. Desire questionnaires such as the SDI are commonly referred to as measures of trait desire as they do not tap into the changeable in-the-moment experience of desire that would be considered a state (Dawson & Chivers, 2014; Goldey & van Anders, 2012). A retrospective recall period of 4 weeks (as requested in the vast majority of measures listed in Table 1), or six months (as requested in two) extends beyond what is typically considered a state, and thus questionnaires that use these have been informally given a designation of trait questionnaires. However, a recall period of 4 weeks is much shorter than typical for trait questionnaires. Common trait personality measures (e.g., State-Trait Anxiety Inventory; Spielberger 1983; State-Trait Personality Inventory; Spielberger, 1995) instruct respondents to consider how they feel "generally." A 4-week recall period may not capture a respondent's general tendencies. Further, one could argue that any questionnaire assessing the frequency of desire over a given period is assessing the number of desire states,

with an assumption that a higher number of states equal a stronger trait. The question of what time boundaries isolate a state experience is a difficult one, and there may not be a clear answer.

The Sexual Arousal and Desire Inventory (SADI; Toledano & Pfaus, 2006) was constructed with the intent to measure both state and trait aspects of desire. The SADI does not assess a unitary desire level but rather dimensions of the desire experience when it happens. It contains 54 adjective descriptors of desire/subjective arousal that respondents rate on a 6-point Likert scale of how well the adjective describes their experience of desire. A rating of 0 indicates that the adjective "does not describe it at all" and a rating of 5 "describes it perfectly." The 54 items load onto four factors: evaluative, physiological, motivational, and negative/aversive. The SADI has been used to describe typical desire experience in retrospect (as a measure of trait desire), as well as describing desire that was induced following laboratory exposure to erotic stimuli (as a measure of state desire). The authors thus consider the SADI to be both a trait and state measure.

Stark and colleagues (2015) argue that questionnaires using a retrospective recall period of several weeks might actually be assessing state desire. According to their conceptualization of state desire as an interaction between trait desire and sexual cues and/or biological changes, changes in desire over several months attributable to hormonal or other biological changes should be considered a desire state. Stark and colleagues' recently constructed TMSQ is intended to capture longstanding individual characteristics that indicate trait desire (and other aspects of sexual motivation). As opposed to other validated questionnaires which use a retrospective recall period of four weeks or six months, the TMSQ validation studies asked respondents to answer based upon either the past five years, or "their former life." Stark and colleagues do acknowledge that responses to the TSMQ could still be influenced by state desire. Whether the

two can be isolated and assessed as distinct phenomena is unlikely, given that, like spontaneous/responsive and dyadic/solitary desire, they exist in interaction with one another.

State and trait desire assessment is unlikely to progress until the theoretical foundation of this distinction is more thoroughly addressed. The primary assumption to date (that most desire questionnaires are trait measures because they do not assess transient experiences) may be too simplistic. In the next section, we will review how the theoretical and empirical literature has considered sexual desire as a trait and a state, and how other areas such as trait theory can inform this classification question.

### **Investigating Sexual Desire as a Trait**

There has been an assumption in the desire literature that sexual desire is a trait characteristic, or at least, that it has a strong trait component. As discussed, this designation has been given despite an absence of direct empirical support. This begs the question, why has trait desire been the default characterization?

The historical perspective of sexual desire as "instinctive, spontaneous, insistent" (Leiblum & Rosen, 1988) dominated the desire discussion until recent decades, when broader theories such as the incentive motivational model (Both, Everaerd & Laan, 2007; Everaerd & Laan, 1995; Laan & Both, 2008) were put forth placing desire within a dynamic process. Freud's drive reduction model was an early and extremely influential depiction of desire in the psychological literature. Preferring the term "libido" to sexual desire or drive, Freud conceived of libido as a continually active, independent force, stimulated primarily by internal events and evident at birth. As a sexual counterpart to hunger and thirst (Freud, 1953), libido was essentially biological in nature.

When sexual desire was introduced in the empirical literature by Helen Kaplan (1977), it was also positioned as an innate drive with a biological underpinning. Like Freud, Kaplan drew an analogy between sexual desire and hunger, theorizing that both were governed by neurobiological mechanisms in the central nervous system. She suggested that desire disorders were indicative of a disruption of these mechanisms, though she clarified that biological mechanisms alone were not sufficient to fully account for low desire. Rather, she theorized that individuals with hypoactive sexual desire unconsciously engaged in negative cognitive and perceptual processes that suppressed their existing desire (Kaplan, 1995). Kaplan may have argued, then, that individuals have a predisposition toward a certain level of sex drive, with deviations resulting from environmental influences. As the foundation for the triphasic model of sexual response, Kaplan's theories about desire are undoubtedly among the most influential in contemporary sexology.

Gender differences in strength of sexual drive have been the foundation of the argument for an innate sexual desire, according to evolutionary psychology. Evolutionary psychology suggests that gender differences in sexual desire level are a product of differing strategies for genetic success (Buss, 1995). Specifically, men and women differ in their sexual selection strategies. For women, the most effective strategy for genetic success is ensuring the survival or their offspring by selecting a mate who will provide sufficient resources. Men, on the other hand, are not limited in reproductive capacity, and thus the most effective strategy to ensure their gene survival is to mate with many women (Buss, 1995). This should result in a stronger sex drive in men than women. Indeed, meta-analyses of gender differences in sexuality find consistent support for a higher frequency of indicators of sex drive in men than women (e.g., higher frequency and strength of reported sexual desire, more frequent arousal, sexual fantasy, and

masturbation; Baumeister, Catanese, & Vohs, 2001; Oliver & Hyde, 1993; Petersen & Hyde, 2010).

The notion of a purely biological sex drive is undoubtedly simplistic, and numerous other theories have been offered to explain gender differences in sex drive. In Petersen & Shibley-Hyde's review of gender differences in sexual attitudes and behavior (2010), they found trends in support of social structural and social learning theories of sexuality. Observed gender differences in sexuality-related variables are attributed to disparities in power dynamics between men and women, or in modeling of sexual stereotypes in mass media that are based on gender politics. While these trends do not fully account for gender differences, they appear to have moderating effects (Petersen & Hyde, 2010). This supports a conclusion that gender differences in sex drive stem from both biological and sociocultural factors (Baumeister & Twenge, 2002; Petersen & Shibley-Hyde, 2010).

Given that sexual desire has been conceived of as an innate drive in foundational clinical and empirical literature, it is not difficult to imagine how the concept of traits came to be associated with it. This is not to say that innate characteristics are necessarily traits. As we will review in the next section, traits have in common certain features that are not always consistent with how sexual desire is experienced. However, without deliberate empirical attention to the question of sexual desire as a trait, it seems that the idea of innateness and traits has been somewhat assumed in the sexuality literature.

The question then becomes how does sexual desire stack up as a trait? Trait theory posits that individuals possess a set of characteristics that underlie their individual patterns of thoughts, feelings, and behaviors (McCrae & Costa, 2003). The field of personality psychology has seen shifts in opinions on how traits develop, and the importance they play in individual character.

Early theorists conceived of personality traits as short-lived (Mischel, 1990), with situational variables largely responsible for behavior (Ross & Nisbett, 1991). Later, the opinion shifted heavily in the opposite direction, with traits seen as mostly fixed through adulthood (McCrae & Costa, 1994). A more recent and comprehensive meta-analysis of rank-order consistency of personality traits through the lifespan found that traits are relatively stable across the lifespan, but not to the extent of invariability. Rather, they can be conceptualized as generally stable, but with a dynamic quality (Roberts & Delveccio, 2000). This has led to movement in the empirical literature towards theoretical models that can capture both stability and change in longitudinal data (Anusic & Schimmack, 2016; Ormel, VonKorff, Jeronimus, & Riese, 2016).

Two hallmark features of traits are stability and predictive ability (Eysenck & Eysenck, 1985; McCrae & Costa, 2003). To what extent is the trait stable across time and situations? To what extent does the trait in question predict the individual's behavior? Considering the data on sexual desire that can inform these questions, we are met with insufficient and conflicting evidence.

### Stability

Sexual desire levels do not tend to show the temporal and situational stability that is expected of traits. Data on long-term variability of sexual desire level is not available from studies using longitudinal designs spanning several years. However, we are able to infer general lifespan patterns of desire, and influences on it, from abundant cross-sectional and shorter-term studies on desire level patterns. This body of research suggests numerous influences on desire levels (enhancing and inhibiting) of both biological and psychological origin.

**Biological influences on sexual desire levels.** Numerous biological factors can influence sexual desire levels in men and women, over both short and long-term periods. Most of this

research has focused on the role of sex hormones. While hormones are often assumed to be directly implicated in sexual desire, these relationships are not entirely straightforward. In women, there is some disagreement the relative influence of estrogen, progestin, and testosterone on women's desire (Guay & Spark, 2006), though accumulating evidence points to the central role of testosterone (Wahlen-Jacobsen, 2015). Most of this research has been conducted in naturally and surgically menopausal women. When endogenous sex hormone levels are low, administration of exogenous testosterone has the most significant effect on desire (Buster et al, 2005; Davis et al, 2008; Sarrel, Dobay, & Wiita, 1998). Hormonal changes through pregnancy have also been linked to desire decrease (Regan, Lyle, Otto, & Joshi, 2003, for review). Many women experience changes in desire across the menstrual cycles, though this variability can follow many patterns (Regan, 1996). A review by Stuckey (2008) indicated that increased desire is most often found during the periovulatory phase. As of recent reviews on the subject, no consistent data is available on desire changes associated with hormonal contraceptive use, though most controlled studies have found no adverse effect (Stuckey, 2008). Decreases in sexual desire are well-documented during natural and surgically-induced menopause (Dennerstein, Koochaki, Barton, & Graziottin, 2006; Leiblum, Koochaki, Rodenberg, Barton, & Rosen, 2006). This can result from a direct link between sex hormone levels and sexual drive, though another possibility is that vaginal atrophy secondary to estrogen decrease can make intercourse painful, thereby negatively impacting desire (Kao et al, 2012).

In men, it is clear that testosterone (T) is the primary hormone of interest. Given the longstanding finding that men have a higher sex drive than women (Baumeister, Catanese, & Vohs, 2001; Petersen & Hyde, 2010), a common resultant assumption is that T is strongly implicated in this sex difference. This is true, to an extent, but the relationship between T and male sexual desire is not strictly linear. Evidence in human males that shows a positive correlation between T and desire comes from populations with low levels of T. In other words, administration of T can increase desire in men with below-average levels of T, but this effect is not observed in healthy men (see van Anders, 2012, for a review of the role of T in men and women's desire).

Sexual desire and age tend to be negatively correlated in both men and women, according to numerous studies of sexual function across the lifespan. Large-scale cross-sectional studies of sexual function reveal lower self-reported sexual desire in older age cohorts (Bacon et al, 2003; Clayton & Harsh, 2016; Eplov et al, 2007; Hamilton et al, 2001; Holden et al, 2005; Leiblum, Koochaki, Rodenberg, Barton, & Rosen, 2006). In Beutel, Stobel-Richter, & Brahler's (2008) study of 2,341 German adults between 18-93, they noted that desire decreased with age in both men and women, though observed an earlier decline in women. Araujo, Mohr, and McKinlay (2004) conducted a 9-year follow-up study of 1,085 men in the United States in which they noted that the magnitude of change over their nine year period of study was different among the age cohorts studied. Participants followed from ages 60-70 reported a greater decline in desire than participants followed from 50-60, who in turn had greater desire loss than those followed from 40-50. Thus, the relationship between desire loss and age was not a simple linear one – it accelerated with age.

Changes in sexual desire level also occur as a result of pharmacological interventions that alter neurotransmitter levels, such as serotonin and dopamine. Some of the most frequently cited medications that often reduce sexual desire are selective serotonin reuptake inhibitors (SSRI), which suggests that serotonin may play a role in sexual problems (Phillips & Slaughter, 2000; Rosen, Lane, & Menza, 1999). Drug treatments such as antiadrenergic drugs (e.g. beta blockers) and cancer treatments (e.g. chemotherapy) may result in sexual dysfunction (Meston & Bradford, 2007). General health also is an important contributor to sexual desire changes, as pain, fatigue, and mood disturbance resulting from chronic illness can compromise sexual function (Carvahlo & Nobre, 2011; Leiblum et al., 2006; Meston & Bradford, 2007).

Psychological influences on sexual desire level. Althof and colleagues (2005) offer a four-tiered framework to organize salient psychological and interpersonal issues that contribute to sexual dysfunction, including low sexual desire. Predisposing factors are those that occur from birth or early childhood, and are correlated with sexual difficulties in adulthood. They include constitutional factors (e.g., congenital abnormalities) or early life experiences (e.g., sexual trauma, problematic attachments) that make an individual more likely than others to experience sexual difficulties. *Precipitating factors* trigger sexual difficulties. These are highly variable, and depend on the individual's vulnerability to a particular set of circumstances. For example, a partner's extramarital affair may result in desire loss for one person, while for another it may actually increase desire (Althof et al, 2005). Other precipitating factors might include conflictual separation or divorce, or employment loss, or grief, which can result in either short or longer-term sexual difficulties. Maintaining factors perpetuate sexual difficulties, and may extend from predisposing and/or precipitating factors. Maintaining factors can include interpersonal (e.g., relationship conflict) and intrapsychic issues (e.g. performance anxiety, fear of intimacy, low self-esteem). Maintaining factors also include *contextual factors* that may contribute to sexual difficulties, such as environmental restrictions or anger toward one's partner. There is potential for overlap among predisposing, precipitating and maintaining factors, and one factor (e.g., anxiety) can act as a predisposing and maintaining factor to desire loss.

Much of the research surrounding psychological influences on sexual desire levels has focused on relationship factors. In general, there is a clear correlation between sexual issues and relationship problems (Bancroft et al., 2003; Hayes et al., 2008; King, Holt, & Nazareth, 2007; Oberg & Fugl-Meyer, 2005), though sexual problems can be either the cause or the result of relationship problems in this equation, and may be mediated by other factors. Basson (2002) and Levine (2003) suggest that sexual desire tends to peak at the beginning of relationships when partners are getting to know each other, and decreases over the course of the relationship. This decrease may happen more quickly for women – Klusmann (2002) found that after one year in a dating relationship, women's sexual desire decreased while men's remained stable.

Despite a strong correlation between sexual and relationship problems, desire loss can often occur in the context of a satisfying partnership. Sims and Meana (2010) conducted qualitative interviews with 19 married women who had lost sexual desire over the course of their marriage, but still viewed their relationships as committed and close. In their study, women's attributions for desire loss were: 1) the institutionalization of the relationship, which robbed sex of the transgressive nature that many women found arousing; 2) overfamiliarity with one another, which resulted in routine and familiar sexual encounters, lacking the excitement of early sexual relations; 3) desexualized roles in their daily lives, making it difficult to feel sexy and desirable in their sexual relationship. In short, the lack of excitement and novelty in the sexual relationship served to inhibit desire, despite the presence of relationship satisfaction in general. These results support Perel's (2006) clinically driven hypothesis that closeness and intimacy can dampen many erotic elements of a sexual relationship. Also supporting these results is recent qualitative research on sexual desire trajectories in heterosexual couples, which found that change and autonomy were associated with higher desire (Ferreira, Fraenkel, Narciso, & Novo, 2015).

The role of intrapersonal factors in an individual's level of desire cannot be underestimated. As Sims and Meana's (2010) data suggested, a woman's feeling of desirability surpassed other positive relationship factors in igniting desire. This theme of feeling desirable as a factor that maintains or increases desire has been noted in numerous studies (Graham et al, 2004; McCall & Meston, 2006; Murray, Milhausen, & Sutherland, 2014). Other intrapersonal variables such as comorbid depression and anxiety (Brotto, 2010; Phillips & Slaughter, 2000), poor body image (Seal, Bradford, & Meston, 2009) and experiences of trauma (Loeb et al, 2002 for review) may impact sexual desire level.

Patterns of individual desire variability. Given the numerous influences on sexual desire levels, of both biological and psychological origin, individual patterns of sexual desire over the course of a lifetime are likely highly variable, but with commonalities among the triggers for changes to the desire level. While most data emanates from cross-sectional studies of different age cohorts or groups of men and women with different life experiences (e.g., with and without chronic illness), limited data is available that follows individuals over an extended time. Most of the available data is limited to studies with women. Køster, Eplov, and Garde (2002) conducted personal interviews and survey data collection with a sample of 548 Danish women. Data was collected every 5 years, over the course of 20 years, when participants were between the ages of 40 and 60. Three-hundred and fifty seven women completed the entirety of data collection. The study focused on participants' experience of menopause, but included questions about expectations and experiences of sexual desire. Between the ages of 40-51, 30% of women reported a decreased level of desire, and 70% noticed no change, or an increase in desire. Regression analyses showed a stronger influence of health and partner status, as opposed to menopause, in this desire decrease. From age 51-60, 67% noted a desire level decrease, while

33% noted no change or an increase in desire level. Hällström & Samuelsson (1990) reported interview data from 497 married or cohabitating middle-aged women in Gothenburg, collected on two occasions, six years apart. Sexual desire level showed considerable stability over time, with most changes to desire being decreases. Over the course of six years 27% reported desire decrease while 10% reported desire level increase. Both increases and decreases to desire were correlated with relationship variables, or intrapersonal variables such as mental illness. Fileborn et al (2015) conducted semi-structured retrospective interviews with Australian women ages 50-81 about their experiences of sexuality and desire through their lives. Women in this study noted that their sexual desire was not static or uni-directional (e.g., decreasing over time), but fluid over their lifetime in response to contextual factors. Consistent with existing data, influences on desire often included entry into a new relationship, physiological or health status changes, and partner factors. Phase of life transitions were also associated with increased desire – no longer having the same family or work responsibilities or worries about pregnancy after menopause created opportunities to engage in sex without pressures that had previously had an inhibitory effect on desire.

One study examined desire trajectories over the course of the relationship in 33 heterosexual couples with varying relationship durations (Ferreira et al, 2015). As part of a more extensive qualitative interview on desire and couple differentiation, couples were asked to provide an account of how sexual desire had changed over the course of their relationship. Couples' reported trajectories fell into five general themes: *decrease* over time was the most frequent, and associated with external factors and lack of effort in maintaining desire; *increase* over time was most related to intimacy and depth in the relationship; *ups and downs* were attributable to relationship, individual, or other contextual factors; *stable* and *u-curve* trajectories

were also reported by some couples, though less so than the other trajectories. Couples reported a strong link between differentiation and desire promotion.

Data from cross-sectional and short-term studies has revealed numerous influences on sexual desire level changes. Biological factors such a sex hormones, age, and health status influence sexual desire, as do psychological factors of both interpersonal and intrapersonal origin. Studies of longer-term patterns of desire variability have generally focused on women, and reveal that desire levels can follow numerous trajectories and are continually influenced by those biological and psychological factors.

## **Predictive ability**

The second general assumption of traits is that they predict behavior. Traits occur on a continuum of strength, and individuals with higher degrees of a given trait demonstrate associated behavior more frequently, more intensely, and across a wider range of situations (Conley, 1985; McCrae & Costa, 1995). According to trait theory, if sexual desire were a trait, than individuals with high desire should show more propensity toward sexual behavior, and those with low desire should show less. The literature review up to this point has indicated that sexual behavior (or rather, frequency of partnered sexual activity) is an inconsistent indicator of desire, that is not to say that the relationship between the two isn't meaningful. Psychology and sex research tend to view desire and behavior as "linked but separate constructs" (van Anders, 2012) – linked insofar as desire is often expressed behaviorally, but separate in that their association is not a direct one, but influenced by many contextual factors. Thus, the question "do people with high sexual desire exhibit sexual behavior more frequently and more intensely than those with low desire?" can be answered with a cautionary "yes."

Association between sexual desire level and sexual behavior. Perhaps the clearest demonstration of a relationship between desire level and behavior comes from literature examining the two extremes of the desire-level continuum – very low sexual desire, either in men and women diagnosed with HSDD or who identify as asexual (lacking sexual attraction), and very high desire. Large-scale population studies of sexual dysfunction reveal lower frequency of sexual activity in women and men who meet criteria for HSDD or report lack of interest in sex (Dennerstein, Koochaki, Barton, & Graziottin, 2006; Laumann, Paik, & Rosen, 1999; Laumann et al, 2005; West et al, 2008). Individuals who identify as asexual generally report very low sexual desire and limited, if any, sexual encounters with partners (Brotto, Knudson, Inskip, Rhodes, Erskine, 2010; Bogaert, 2006; Prause & Graham, 2007; Scherrer, 2008). Conversely, men and women with very high sexual desire tend to show higher frequency of sexual activity. Empirical attention to high sexual desire is currently focused on factors that distinguish very high sexual desire from dysregulated or compulsive sexuality. While the limited body of research presents some conflicting information on this distinction, research does suggest heightened sexual activity in those reporting high sexual desire. In Winters, Christoff, and Gorzalka's (2010) sample of 6, 458 men and 7, 938 women from the general population, some of whom had sought treatment for compulsive sexuality/sexual addiction, treatment seekers reported slightly but significantly higher sexual desire than non-treatment seekers, though there was no reported different in the two groups' level of sexual activity. Non-treatment seeking men and women (more representative of the general population) evidenced small but significant correlations between dyadic and solitary desire (per the SDI) and total sexual outlets per week. Carvalho, Stulhofer, Vieira, and Jurin (2015) conducted a survey of 4, 597 men and women from a community sample to investigate the relationship between high sexual desire and

hypersexuality. Results from their cluster analyses revealed a group of men and women (10.7% of the sample) with high self-reported sexual desire and high frequency of sexual activity (desireactivity cluster), but without problems related to sexual compulsivity. The small cluster (2.8%) of those reporting difficulty controlling sexual behavior and negative consequences to sexual behavior actually reported lower desire than the "desire-activity" cluster. While this does suggest a distinction between high sexual desire and dysregulated sexuality, some methodological issues call for a cautionary interpretation of findings. Specifically, this study used three study-specific questions to assess sexual desire as opposed to a standardized questionnaire, with two questions that included consideration of sexual behavior frequency. Thus, sexual activity was primarily assumed to indicate sexual desire when this may often not be the case, especially for women.

Limitations of the desire-behavior relationship. Although data do show a general parallel between sexual desire level and sexual behavior frequency, there are a number of very important caveats to keep in mind. First, it is necessary to consider the source of such data – validated sexual function or desire questionnaires – and the complications that arise from the assumptions in these measures. As reviewed earlier, nearly all sexual function and desire questionnaires adopt a motivational-behavioral conceptualization of desire. Both in definitions of desire and in individual items, desire is conceptualized as a wish for partnered sexual activity or masturbation. There is an assumption here that what is desired is sexual activity, and further, an implication that sexual activity suggests the presence of desire. Sexual desire and sexual activity become conflated when one becomes an intrinsic part of the other's conceptualization. Further, two questionnaires, the SFQ and DSFI, include in their desire factor items that inquire about frequency of sexual activity as opposed to frequency of *desire* for sexual activity. In studies that use these measures, or other study-specific questions that include behavioral assessment in desire

questions (e.g., Carvalho et al., 2015) while separately assessing sexual activity frequency, data can be compromised by the degree of overlap in these constructs. Given the way that desire is defined and conceptualized, it is virtually impossible to consider sexual desire and sexual activity as completely independent of one another. This is an overarching issue that complicates our ability to meaningfully interpret these data.

Second, as previously discussed, there are numerous non-desire based reasons why people have sex, such as conception or relationship enhancement or escalation. However, the way that desire is defined in most questionnaires – a wish/interest in sexual activity – can hide the fact that a wish for sexual activity does not necessarily imply sexual desire, as the motivation can be non-sexual. Perhaps "desire to engage in sexual activity" subsumes sexual desire but actually casts a wider net. There is also, of course, the converse issue of refraining from sex despite desire, for logistical, value-based, or other reasons.

A third important set of issues that create difficulty associating desire with sexual behavior pertain to the respondent's partner status. Studies about sexual desire are often conducted in individuals who have a partner. This makes it difficult to pinpoint the "cause" of reported sexual frequency. While individuals can report independently on their level of desire, reported frequency of partnered sexual activity may indeed reflect the respondent's desire, but it may reflect the partner's desire, or some compromise between the two. A recent study by Dosch, Rochat, Ghisletta, Favez, and Van der Linden (2015) clearly demonstrates this issue. In their study of psychological factors involved in sexual desire and sexual activity, the authors used cluster analyses (CA) to group participants (300 heterosexual couples) based on profiles of sexual desire and sexual activity. CA were computed by gender on dyadic and solitary desire as measured by the SDI, as well as frequency of partnered sexual activity and masturbation. Their

resulting clusters revealed interesting patterns of desire and behavior. "Dyadic men" demonstrated high dyadic desire and partnered sexual activity, and low solitary desire and masturbation. "Solitary men" had low dyadic desire and partner activity scores, and high solitary desire and masturbation scores. "Dyadic and solitary men" showed high scores on all variables. Among men in each cluster, the association between solitary desire and masturbation was stronger than the association between than dyadic desire and partnered activity. Women in this study were also clustered into three groups: "dyadic women" showed moderate dyadic desire and high scores on partnered sexual activity; "dyadic and solitary women" had moderate to high scores on all variables; "neither dyadic nor solitary women" had low scores across all measures of dyadic desire, solitary desire, partnered sexual activity, and masturbation. Patterns across the three groups of women showed the same tendency as the male groups – solitary desire and masturbation were more strongly associated than dyadic desire and partnered sexual activity. The issue at play is two individual levels of desire contributing to the same amount of sexual activity (assuming monogamous partnership). Given that sexual desire discrepancy in couples is generally the rule rather than the exception (Herbenick, Mullinax, & Mark, 2014), reports of sexual activity may be hard to trace back to the desire.

**Expanding what is meant by "sexual behavior."** Traits have a variety of behavioral manifestations. A person who is high on extroversion might have many friends, enjoy talking to people, join social organizations, and frequently seek opportunities for social engagement. What about a potential trait of sexual desire? Is the behavioral manifestation limited to partnered sexual activity and masturbation? Based on the way desire has been defined and assessed in validated questionnaires, it would seem so. However, if we broaden what is meant by sexual behavior to include not only individual or partnered sexual activity, but any expression of

sexuality, this becomes more complex. Blumberg (2003) conducted research with women who described themselves as "highly sexual." Women who described themselves as highly sexual noted not only high desire, but enjoying talking about sex, frequently engaging in flirtation and sexual banter, and feeling more comfortable with sex than other women. Wentland, Herold, Desmarais, and Milhausen (2009) also discovered that highly sexual women are set apart not only in sex drive, but in sexual assertiveness, sexual communication, and sexually provocative dress. So, while the predictive ability of desire with respect to sexual activity may be limited, it would be useful to further investigate the relationship between sexual desire and other behavioral expressions of sexuality.

In response to the question of whether or not sexual desire shows the two hallmark features of traits, data is conflicting. With respect to stability of desire level, some data does suggest long-term stability (with periods of increase and decrease in response to contextual factors), though this data is limited. The issue of predictive ability for associated behavior is complex. As is the case with most personality traits, there is a limit to how well it can predict behavior. While data does indeed show a relationship between sexual desire level and frequency of sexual activity, this relationship is complicated by conceptual, methodological, and logistic factors.

After considering the theoretical basis for considering sexual desire as a trait, a logical question is, "do people actually view their level of sexual desire as a trait?" While this question has not been investigated directly, some recent qualitative research with women points to the centrality of sexual desire to their sense of self and personality, specifically in women with high desire.

### Is sexual desire part of personality?

Blumberg (2003) conducted in-depth semi-structured interviews with 44 women between the ages of 20 and 82 who identified as highly sexual. As the primary inclusion criterion, Blumberg required that women identify with one of the following two statements: "You typically desire sexual stimulation, usually to the point of orgasm, with yourself or a partner, six to seven times per week or more, and act upon that desire whenever possible" or "You think of yourself as a highly sexual woman, sex is often on your mind, and it is an aspect of yourself that strongly and frequently affects your behavior, life choices, and quality of life satisfaction." As such, he allowed for some variation of experience and expression in what it means to be highly sexual. Every woman in Blumberg's study felt that their identity as a highly sexual woman was a significant aspect of who they were. There was variation in how that identity influenced their personality, though. About a third of participants felt that their highly sexual nature was a small but significant part of their sense of self. Another third felt that their sexuality had influenced their life in a more significant way. For these women, characteristics resulting from their highly sexual nature (e.g., confidence, disinhibition, assertiveness) generalized into other areas of their lives in a notable way. For the final third, their sexuality was the essence of their personality.

Cherkasskaya's (2014) qualitative study of women with heightened and inhibited desire showed a similar theme. She examined the mediating role of sexual self-concept in the relationship between internalized representations of parental relationships (e.g. attachment, separation-individuation) and sexual desire. Narratives of women in her "heightened sexual desire" group (N=10) exemplified a sense of ownership and agency over desire, and these women identified their sexual desire as an important part of their personality. While this study was not concerned with whether the specific desire level was viewed as a trait, results suggest that high-desiring women view their desire as a central part of their personality. Women in her inhibited sexual desire group did not identify their desire as an important part of their identity.

These data suggest that, at least in women with high desire, sexual desire may be viewed as a central component of personality. For women (and men, for that matter) with low desire, it is unlikely that desire would be considered a part of personality. However, whether that level of desire is stable to the extent that it would be thought of as a trait is different issue, and will be a focus of the present study.

While the purpose of this project is to investigate trait desire, we must also consider the theoretical and empirical support for state sexual desire as a state. As discussed, desire is likely best characterized as having both state and trait components.

# **Investigating Sexual Desire as a State**

Several theoretical models of sexual desire posit that it is more consistent with a state than a trait. While traits are stable and represent the general level of a characteristic, states represent the thoughts, feelings, and behaviors in a given moment and are context-dependent. In the case of sexual desire, most of these models are based on responsive desire. Incentive Motivation Models propose that encountering sexual stimuli triggers arousal, which in turn triggers sexual desire [Both, Everaerd, & Laan, 2007; Toates, 2009). These models emphasize that sexual stimuli may take the form of either external triggers or inner thoughts, and that desire represents the conscious recognition of arousal to this stimuli. According to this model of sexual response, desire is always triggered, and thus always responsive. As such, it is a contextdependent reaction. Basson's circular model of female sexual response also suggests that women may experience sexual desire only after experiencing stimulation and arousal (Basson, 2002). Research on responsive desire tends to focus on women's sexual response; however, men's sexual desire can also be elicited in response to a variety of contextual triggers (Brotto, 2010).

Context-dependent (state) desire has been studied in laboratory settings by examining changes in self-reported subjective arousal and desire in response to sexual cues. By and large, there is strong support for models of responsive desire. This body of research has often focused on responsive desire level comparisons between clinical and non-clinical samples, for example, noting that women with HSDD had lower desire ratings following exposure to erotic stimuli than women without HSDD (Heiman et al, 2011). Research has also investigated responses to stimuli of differing valence and modality. Petersen and Janssen (2007) found that sexual films depicting coercive sex elicited less desire than films depicting consensual encounters, while Bozman and Beck (1991) observed higher levels of self-reported desire in a sample of men in response to sexual audiotapes with positive versus anxiety or anger-inducing dialogue.

While gender differences in trait desire are well-established and consistent, a different pattern may be emerging when it comes to state desire. Men and women do not appear as different from each other. Both et al. (2004) found that women and men responded with similar intensity of subjective sexual arousal immediately after viewing sexual films, and on sexual desire items in a post-experimental questionnaire. Recently, Goldey and Van Anders (2012) assigned men and women to one of three arousal conditions (the Imagined Social Situation Exercise, erotic story, unstructured fantasy) or a neutral condition. Following sexual stimuli, they had participants self-report their state desire by asking their current desire to masturbate and desire to have sexual activity with a partner. They also had participants complete a measure of "trait" desire, the Sexual Desire Inventory. They observed that state desire was elevated in all three arousal conditions as compared to the neutral conditions, with no significant gender

differences in levels of state desire. Interestingly, women's trait solitary desire (per the SDI) varied by condition, while men's did not. In other words, women's perception of their typical level of desire varied based on current engagement with sexual stimuli. As Goldey and Van Anders observe, though, this doesn't clarify whether desire itself is unstable, or if assessment is unreliable due to arousal or other states. This research highlights important differences between state and trait measurement of desire, particularly with respect to gender differences.

The notion that state desire represents an in-the-moment experience may actually be quite limited. Stark and colleagues (2015) argue that changes to sexual desire secondary to physiological or psychological influences should be considered states, even in cases of relatively long-term changes to desire such as those that occur during pregnancy. They do not draw a sharp distinction between state and trait sexual motivation, though, but rather they argue that state sexual motivation is an interaction of trait motivation and contextual factors. As previously reviewed, sexual desire levels are often described as fluid. Changes to sexual desire are common sequelae to numerous physiological and psychological influences, often of a non-permanent nature. Furthermore, the nature of desire-level changes is highly variable. A certain trigger may enhance one person's desire and inhibit another's, and the duration of desire changes may vary depending on the individual and their context. Stark and colleagues would argue, then, that there is considerable individual variability in the frequency and duration of desire states.

Their assertion that periods of several months should be considered states raises a key question in the debate about trait versus state desire – what are the time boundaries of a state? According to common measures of state experience [e.g., the State-Trait Anxiety Inventory (STAI) Speilberger & Gorsuch, 1983], states are considered to be the respondent's present moment experience. Items such as "I am tense," and "I feel calm" on the STAI require the

respondents to assess their current internal experience, and do not include any degree of retrospective recall. This has generally been the consensus in sexuality research, with validated questionnaires considered to be trait measures because they involve some amount of retrospective recall.

Given that states supposedly represent an in-the-moment experience that is contextdependent, a related question is "what are possible contexts that influence this context-dependent reaction?" Research on state desire to date has considered context to mean the immediate sexual stimuli that trigger the onset (or increase) of sexual desire in the laboratory. However, according to Stark and colleagues' conceptualization, a context-dependent change in desire might also be the context of a new relationship, the context of a depressive episode, the context of menopausal transition, among countless other physiological or psychological states. It must be possible, then, for an individual's assessment of their desire level at any given time to represent multiple cooccurring contexts, or states. As an example, the same person might assess their level of state desire in response to the same sexual stimuli in the laboratory differently depending on any other longer-term "states" that they are currently in.

## CHAPTER III

# SUMMARY AND AIMS OF THE STUDY

The discussion of how to most accurately characterize sexual desire is continually evolving, with the most recent question being whether an individual's level of sexual desire should be considered a trait. While explicit discussion of this issue is new, the concept of trait desire is not. Despite no empirical investigation into this question, sexual desire has been somewhat assumed to be a trait characteristic - a likely offshoot of early conceptualizations of desire that underscores its innateness and its biological underpinnings. As such, validated sexual function and desire questionnaires are generally considered to assess trait desire, despite the short retrospective recall period that most call for. There is an assumption of a certain level of stability in the construct. However, data point to a considerable level of variability in sexual desire level in response to both biological (e.g., hormones, illness, aging) and psychological (e.g., relationship dynamics, intrapsychic issues) factors. While there is no expectation that trait characteristics are perfectly stable over time, does the variability that sexual desire levels tend to show exceed the typical amount of fluctuation seen in established traits? This is of course a difficult question given the fact that sexual desire is multifaceted and not as amenable to objective measurement in the way that many other constructs are. A significant gap in the literature is data that speak to long-term patterns of variability, which may offer a different picture than data gathered through cross-sectional or short-term follow-up studies.

In addition to temporal stability, the second characteristic of traits is the predictive ability for associated behavior. Data does indeed show a relationship between sexual desire and sexual behavior; though numerous issues related to sexual desire assessment cloud this relationship. A key problem is the conflation of desire and behavior that occurs in questionnaires that adopt a motivational-behavioral conceptualization of desire that includes desire for sexual activity. Further, there is the issue of sexual behavior often being a partnered activity, not necessarily driven by the respondent's level of desire.

Some researchers have countered that desire should be measured as a state, given that sexual desire may not necessarily show the temporal stability or predictive ability that is expected of traits. Models of responsive desire such as Incentive-Motivational models highlight the context-dependent nature of desire, and the influence of situational variables on reported desire. To date, state desire has only been considered as responsive desire following presentation of sexual stimuli, requiring an in-the-moment assessment of desire level in the laboratory. However, some interesting questions about the limitations of this conceptualization of a state have recently been raised. Most notably, might time-limited changes in desire that account for the fluidity of desire levels over time actually reflect state experiences?

Although it is probable that sexual desire has both trait and state qualities, there is very limited research that actually investigates this question. The present qualitative investigation aimed to inform the discussion of trait desire by 1) exploring the pattern and context of long-term variability of men and women's desire levels, and 2) investigating the extent to which men and women view their level of sexual desire as a trait characteristic.

### CHAPTER IV

#### **METHODS**

# **Participants**

## Women

Interviews were conducted with 14 women, though data is reported on only 13. One participant appeared severely depressed during the interview and was not able to respond to several questions. One other interview (F7 - Bernice) was only captured in part, due to technical error, and the available segment was included in analysis. The average age of female participants was 49.8 (SD = 5.29), with a range from 40 to 58. Seven were Caucasian, two were African-American, three were Hispanic, and one identified as both Caucasian and Hispanic. Seven were currently married, and the average length of marriage was 18.86 years (SD = 9.32 years). One was cohabiting with her partner for three years. Two were in a relationship and not cohabiting, one was dating, and one was single and not currently dating. One woman reported her relationship status as "divorced," though it should be noted that nine other women had been previously married. On average, participants reported three significant romantic relationships in their lifetime. Women in our sample tended to be highly educated, with 11 of 13 reporting some college or more. Five reported a current religious affiliation. Average age of first sexual intercourse was 17.31 (SD = 1.93), with a range from age 14 to 20. Average number of sexual partners was 11.08 (SD = 7.05), excluding one outlier of 80 partners. All women reported heterosexual orientation. Ten of 13 women reported having at least one child (range 1-5 children). According to responses provided in the interview, ten women reported a trait level of desire (1 low, 1 low-moderate, 1 moderate, 7 high). Eight reported current high desire, one reported moderate, and three reported current low desire. Seven women fell at or below the

suggested clinical cutoff on the desire subscale of the FSFI. Two fell below cutoff for the total FSFI score, indicating risk for sexual dysfunction. 11 of 13 were content with their current desire level. Five reported that desire was central to their identity. Five reported that it was important but not central, and three reported it was neither central nor important. See Table 2 for a summary of sociodemographic characteristics across the sample. Table 3 provides a summary of key demographic and desire-related characteristics for each woman, including their assigned pseudonym which will be used throughout the presentation of results.

## Men

Interviews were conducted with 10 men. The average age of male participants was 42.68 (SD = 1.69), excluding two outliers aged 50 and 63. All 10 were Caucasian. Five were currently married, and the length of marriage ranged from five to 30 years. One was in a relationship and not cohabiting, one was dating multiple partners, and three were single and not currently dating. Though none reported their relationship status as divorced, four did report prior marriages. On average, men reported three significant romantic relationships in their lifetime. Men in our sample tended to be highly educated, with eight of 10 reporting some college or more. Three reported a current religious affiliation. Average age of first intercourse was 15.40 (SD = 1.84). Number of sexual partners ranged from three to 300. All men reported heterosexual orientation. Four men reported having at least one child (range 1-2 children). According to responses provided in the interview, nine men reported a trait level of desire (3 moderate, 6 high). Five reported current high desire, three reported moderate, and two reported current low desire. Two men fell in the "mild-moderate dysfunction" range on the desire subscale of the IIEF. Five fell in the "mild dysfunction" range and three fell in the "no dysfunction" range. Seven of 10 were content with their current desire level. Three reported that desire was central to their identity.

Two reported that it was important but not central, and five reported it was neither central nor important. See Table 2 for a summary of sociodemographic characteristics across the sample. Table 4 provides a summary of key demographic and desire-related characteristics for each man, including assigned pseudonyms.

#### Procedure

Participants were recruited through UNLV subject pool, UNLV RAVE and UNLV Today, and snowball sampling. Interested men and women were invited to contact the researcher to learn more about the study and determine eligibility through a brief telephone screening (See Appendix A). Twenty-two participants completed the study at the PRACTICE community mental health clinic on the UNLV campus or at a private office on UNLV campus, and one requested to complete the interview in a private office at her workplace. Interviews were audio recorded using a digital recording device. At the appointment, the researcher first reviewed informed consent, including the procedure for audio-recording and transcribing interviews, and answered any questions about the procedure or participant confidentiality. Participants were reminded that they were under no obligation to discuss topics that are uncomfortable for them. Careful attention was paid to ensure participants' comfort given the sensitive nature of the subject matter. Interviews ranged in length, but lasted approximately two hours for women and one hour for men. Following the interview, participants completed a sociodemographic questionnaire, a gender-specific sexual function questionnaire (FSFI or IIEF), and the Sexual Desire Inventory. Participants received \$20 cash compensation at the time of study termination. All interviews were transcribed by the primary researcher.

#### **Research Approach**

Data collection and analysis followed grounded theory methodology, broadly conceived, which aims to systematically gather and analyze qualitative data in a methodologically rigorous fashion. Grounded theory methodology is so named because its ultimate aim is to produce a theory that is *grounded* in data collected from a careful analysis of the participants' experience, rather than testing preexisting theories or hypotheses. Thus, it is often employed during the exploratory stages of research when the goal is to understand the perspective of a particular group's experience, which is under-theorized.

In a grounded theory approach, data are collected via qualitative methods such as openended interviews, open-ended focus group discussions, examination of documents, and direct observation (Krahn & Eisert, 2000). The proposed study utilized individual interviews, given the aim of gathering detailed individual history.

In a grounded theory approach, data are coded in an increasingly abstracted process, aimed at the generation of a core theme that can be used to understand the group being studied. A detailed three-tiered coding system, proposed by Strauss and Corbin (1990), is a widely accepted coding process among qualitative researchers. The first stage of the coding process is referred to as *open coding*, which refers to the breaking down of each transcribed interview into discrete parts, typically line-by-line, in order to closely examine each section for themes. The second stage is *axial coding*, in which data are "put back together in new ways after open coding, by making connections between categories" (Strauss and Corbin, 1990). Finally, *selective coding* seeks to uncover the core category, through integration of the existing categories and themes. Notably, though the process of coding is presented here sequentially, the three phases occur concurrently in a process known as the *constant comparative method*, a hallmark of the grounded

theory approach. During the process of coding, the researcher is guided by the following questions (as conceptualized by Glaser, 1978): What is going on here? What is this person saying? What are people doing? What do these actions assume? As themes begin to emerge from the data, the researcher is guided by such questions as "What process is at issue here? Under what conditions did this process develop? How does the interviewee feel, think and act while involved in this process? When, why and how does this process change? What are the consequences?"(Charmaz, 1995). The process of data collection continues until the point of *saturation*, at which it is determined that no new themes are emerging (Glaser & Strauss, 1967).

### **Reliability and Validity in Qualitative Research**

A common criticism of qualitative research is a perceived lack of rigor in data collection and analysis. Indeed, ensuring that qualitative data is held to standards of "good science" requires adherence to certain criteria, which have been developed in response to this concern.

Lincoln and Gruba (1985) propose four criteria that comprise the core concept of "trustworthiness" of qualitative data and are largely analogous to the concepts of reliability and validity in quantitative research. *Credibility* replaces the idea of internal validity, and is concerned with a researcher's confidence in the findings. Credibility is built by gathering evidence from different perspectives or by asking participants to confirm whether the gathered information is consistent with their experiences. *Transferability* replaces the concept of external validity, with the aim of giving the readers a detailed portrait of the research setting, by which they can determine the applicability of research findings to different people and groups. *Dependability* replaces the idea of inter-rater reliability, and is the extent to which a different researcher could arrive at the same system of coding and categorization. Finally, *confirmability* is the extent to which the procedures can be replicated by an independent researcher.

Henwood and Pidgeon (1992) propose a system for ensuring methodological rigor. They emphasize the importance of:

*Keeping close to the data*, which requires that all emergent categories be grounded in the data.
 *Integrating theory at diverse levels of abstraction*, which posits that the developing theory must be evident at all levels of coding.

3) *Reflexivity*, which requires that the role of the researcher and his or her own biases be acknowledged and accounted for in the documentation of research. This is generally accomplished through careful documentation of the researcher's personal hypotheses, intuitions, and attitudes, known as *bracketing*, and continual verification of these personal hypotheses against the data in order to avoid bias. See Appendix B for an account of the primary investigator's personal biases.

4) *Documentation* requires that the research track their thoughts, decisions and observations about the research through the study.

5) *Theoretical sampling and negative case analysis* requires the researcher to continually develop and modify any emerging theory, exploring cases that do not fit as well as those which might generate new knowledge.

6) *Sensitivity to negotiated realities* requires validation of research findings with the participants, and development of a shared interpretation of findings. The resulting theory should reflect a negotiated reality between the perceptions of the participant and the observations by the researcher.

7) *Transferability of findings* relates to the generalizability of the findings to other contexts.

Because the proposed study is conceptualized as a preliminary investigation of the extent to which men and women experience their desire as a trait, the methodology as outlined by Henwood and Pidgeon (1992) are perceived to best facilitate a systematic data collection and theory development.

#### Measures

### <u>Semi-Structured Interview (Appendix C)</u>

Each participant completed a semi-structured interview with the primary investigator. The interview consisted of open-ended questions regarding participants' history of sexual desire variability and their perception of trait-level desire. See Appendix C for the interview guide. See Appendix D for the desire-level graph, which participants completed as the first question of the semi-structured interview.

# Sociodemographic and Relationship History Questionnaire (Appendix E)

Participants completed a brief questionnaire, composed by the researcher, to collect basic demographic information, and sexual and relationship history.

# Female Sexual Function Index (FSFI: Rosen et al, 2000: Appendix F)

The FSFI was administered to all female participants as an indicator of global sexual function. The FSFI is comprised of 19 items divided into six subscales: desire, subjective arousal, lubrication, orgasm, satisfaction, and pain, with each question pertaining to one subscale. The FSFI has been found to have high test-retest reliability (r = .70-.86) high internal consistency (Cronbach's alpha values of 0.82 and higher) and acceptable discriminate validity as demonstrated by significant differences between scores of women with female sexual arousal disorder, female orgasmic disorder, hypoactive sexual desire disorder and control groups (Meston, 2003; Rosen et al, 2000). Because the Female Sexual Function Index (FSFI) assesses sexual function during sexual activity in the past four weeks, only women who endorsed having

engaged in partnered sexual activity over the past four weeks (N = 11) were included in analysis of total score. In this sample, Cronbach's alpha was .98.

#### International Index of Erectile Function (IIEF: Rosen et al, 1997; Appendix G)

The IIEF was administered to all male participants as an indicator of global sexual function. The questionnaire is comprised of 15 items divided into five subscales: erectile function, orgasmic function, sexual desire, intercourse satisfaction, and overall satisfaction. Internal consistency has been found to be high for the erectile and orgasmic function scales (alpha = .90) and satisfactory in the other three domains (alpha = .70 and greater). In our sample, Cronbach's alpha was .94 for erectile function, .98 for orgasmic function, .76 for sexual desire, .90 for intercourse satisfaction, and .96 for overall satisfaction. The IIEF has high test-retest reliability for total scores (r=.82) and moderate to high test-retest reliability on individual subscales (r= .64-.84), and acceptable discriminant validity, as demonstrated by its ability to differentiate between men with and without reported sexual dysfunction (Rosen et al, 1997). Sexual Desire Inventory (SDI: Spector, Carey, & Steinberg, 1997; Appendix H)

The SDI was administered to all participants as a measure of sexual desire level. The SDI is comprised of 14 items which assess the frequency, strength, and importance of fulfilling solitary and dyadic sexual desire over the past month. Responses on the SDI provide a total score, as well as solitary and dyadic desire subscale scores. Internal consistency has been reported as high for both dyadic (alpha = .86) and solitary (alpha = .96) subscales (Spector et al, 1996). Test-retest reliability over a one-month period has been calculated at r = .76 (Carey, 1995). In our sample, the Cronbach's alpha for the dyadic scale was .89 for women and .86 for men, and Cronbach's alpha for the solitary scale was .87 for women and .90 for men.

#### **Personal Reflexivity – The Self as Researcher**

As an instrument of research in this study, my social background and value system accompany me through the research process and shape methodological and analytical decisions therein. Thus, my personal, methodological, and theoretical positions that relate to the research process are here elaborated, such that I may be positioned within the various contexts at play in the present inquiry.

I identify as a heterosexual Caucasian woman, and I am in my early 30s. I was raised in a conservative Christian home environment and attended Christian school, though I lived in a very liberal-leaning city in Canada. Though the context of my home and school life was religious, I did not personally adopt a Christian belief system, and have identified as humanist through my adult life.

My interest in sexuality developed early in life. Given the relatively conservative context of my early environments, sexuality was not discussed aside from its status as a sanctioned activity in the context of heterosexual marriage. Perhaps because it was a taboo and thus held a degree of mystery and excitement, I developed a keen interest in learning about sexuality from a young age. What I most enjoyed was learning about the experiences of individual people, not simply the scientific facts of the "birds and the bees." As I transitioned into exploring sexuality in the academic arena, I was most captured by qualitative research that presented sexual phenomena in the context of the individual's life and world. In choosing my research methodology, I am cognizant of my strong desire to hear from and interact with real-life persons. I am particularly interested in the construct of desire, as I conceive of many aspects of an individual's sexual desire as pathways to understanding broader aspects of the self. In addition to conducting research, I am in the early stages of clinical practice. I have completed my formal training in psychology in Montreal, Las Vegas, and rural Alaska. I work from psychodynamic and systems orientations. In the limited (~5 years) time that I have practicing, I have worked primarily with women, often with histories of sexual trauma, and often from socioeconomically disadvantaged backgrounds. I am aware of certain counter-transference dynamics that arise for me when working with older male clients. As such, I anticipated and noticed a different emotional experience of interviewing my older male participants, stemming from awareness of our age and gender disparity.

#### CHAPTER V

#### RESULTS

## **Reliability Analysis**

Transcribed interviews were independently coded by the primary investigator, and the research supervisor. Agreement between raters on themes present in the interviews at the open coding stage was .87, indicating good interrater reliability. When differences arose or when only one researcher noted a theme, each coder presented her data-based reasons for including or not including the theme, and a joint decision was made about whether the data adequately supported the theme. Themes were only included in the final analysis when both researchers agreed that they were supported by data. Therefore, all themes here presented had unanimous agreement by both researchers, either by way of initial coding agreement or after discussion and reference to the data. The development of the model was a collaborative effort between the two raters who analyzed themes for the potential existence of an over-arching pattern over time.

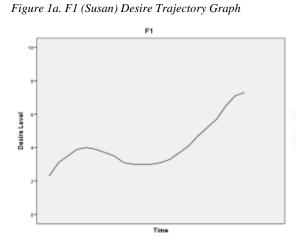
# **Presentation of Results**

We will first present women's graphic representations of their desire trajectories. Next, we will propose a model of women's desire development, along with the core themes and subthemes that comprise it. Lastly, results addressing the question of trait and state desire will be discussed. This will be repeated for the men.

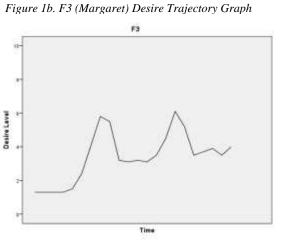
# **Graphic Representations of Women's Sexual Desire Trajectories**

As the first question in the semi-structured interviews, participants were asked to handdraw a line graph of their desire-level trajectory, beginning when they first began having desire, and continuing to the present day. Each participant's graph was divided into 21 data points along the time dimension, and the *Desire Level* axis was given a scale of 0-10, representing nonexistent to very high desire. Graphs were reproduced in SPSS and are presented below in Figures

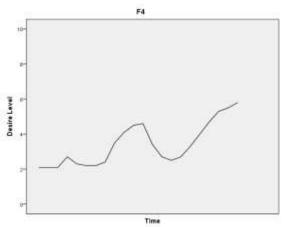
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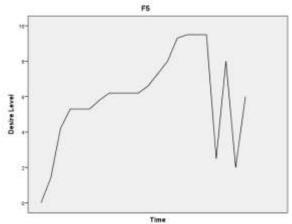


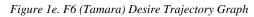


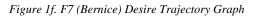


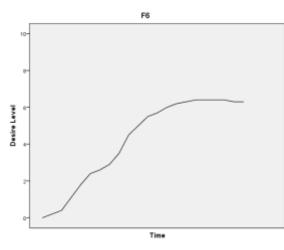












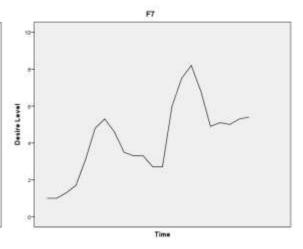
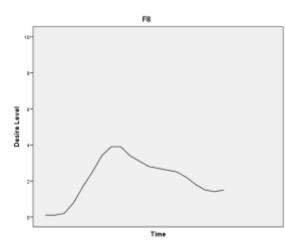


Figure 1g. F8 (Renata) Desire Trajectory Graph



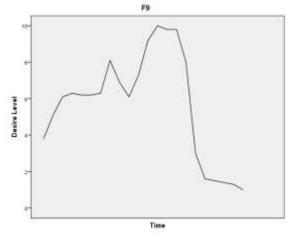
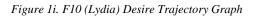
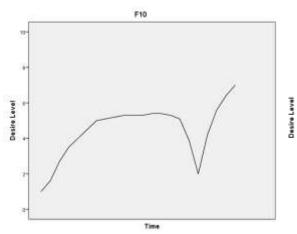
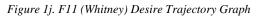
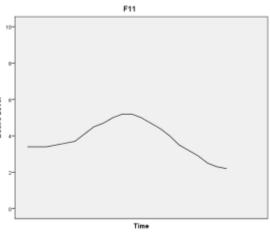


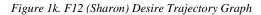
Figure 1h. F9 (Janice) Desire Trajectory Graph

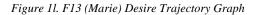












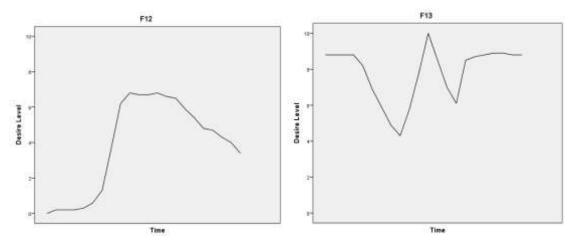
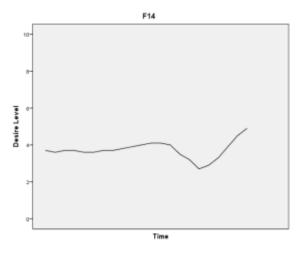
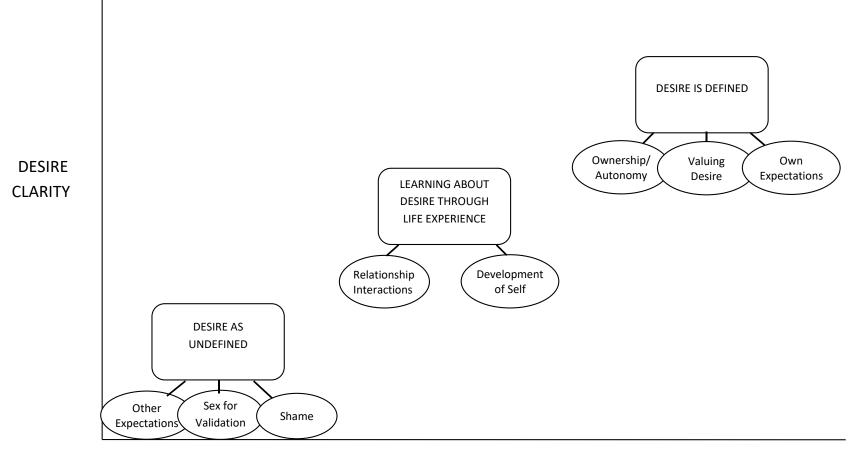


Figure 1m. F14 (Nadine) Desire Trajectory Graph



### Women's Desire Trajectories: Emergent Model and Themes

In the second portion of the semi-structured interview, we asked women to "walk us through" their desire trajectory graph and explain the variability therein. What emerged from women's narratives of their desire history was a model of desire development composed of three relatively distinct stages beginning in adolescence and evolving through early and middle adulthood. In their adolescent years, desire was generally not experienced as its own entity with a direct connection to their own wants. Instead, what appeared most salient during this early period was sexual activity driven by a yearning for validation or by pressure to fulfill societal or partner expectations, often followed by feelings of shame for having been sexual. Graphically, this stage of the desire trajectory was often represented as low or even absent desire. Then, as women progressed through their adult lives, they accumulated personal and relational experiences that clarified exactly what and how they desire. Stressors and physical factors were also identified as impacting sexual desire but these were identified as short-term fluctuations that did not fundamentally change lifetime desire trajectories. In essence, it appeared that through life experiences women started to identify what desire was, what interfered with it, and what facilitated it. Desire progressively took shape. This stage was represented with a fair amount of variability in desire levels as desire inhibitors and facilitators came and went. Finally, at the time of the interviews they appeared to have defined what desire is to them, to have developed their own expectations for sex and relationships, and to place high value on enacting their desire in line with these expectations. Graphically, this stage was variable with respect to desire level. For a schematic representation of this model, please see Figure 2 below.



TIME

Figure 2. Model of the Trajectory of Women's Desire

The construction of a model of the trajectory of women's desire and the discovery of emergent themes involved collapsing first-order themes, which originated from the line-by-line transcript analysis, into second-order themes. These second-order themes were further collapsed into broad categories. Tables 5 and 6 outline this process from right to left. Table 5 presents themes and categories that were presented by women as causal factors for their desire level. Table 6 presents themes that characterize the experience and enactment of desire.

What follows is a detailed elaboration of each of these categories and sub-themes as described by women in our study. Select quotations are offered to demonstrate the connection of themes to the data. Each quotation is identified by the pseudonym and age.

# Stage 1: Desire as Undefined: Developmental Factors in Early Experiences of Desire

Women most often identified their adolescent years as the "starting point" of their desire history. When asked why they began their graphs at that point, most offered reasons such as "*That's just honestly when I became sexually active*" (Whitney, 47) or "*I'm thinking it just kind of happened… maybe with the boyfriend*" (Renata, 55). Desire was equated with having sex, but women did not recall much of a desire experience at all. The three salient themes that emerged from their adolescent experience were a sense that they had to fulfill others' expectations, the need for validation, and shame about being sexual.

### Sex to fulfill others' expectations interferes with desire.

The vast majority of women in this study agreed that being able to truly experience their desire in a satisfying way required a clear sense of who they are and what they want, and the ability to bring that authenticity into their sexual experiences. For many women, though, their early experiences around sexuality and desire were largely influenced by expectations that were set by others. Sexual activity during adolescence was rarely spoken of as an opportunity to

explore what they desired, learn about their bodies, or focus on their own pleasure. While no one in this study reported having sex that was unwanted or coercive during their early relationships, it was often viewed as simply "*something you do*" – fulfilling an expectation or perceived obligation as a girlfriend.

Well, teenagers, I think the level of desire was just because I was just a teenager and everybody was doing it. (Renata, 55)

I enjoyed it to a certain extent. But in hindsight, it didn't flip a switch where I was like "Yeah, let's do that again!" It was more like "Okay. That's what we do. We're boyfriend and girlfriend." (Gloria, 45)

I start exploring sexual relationships and have several partners, and get myself into some sticky situations. But I wasn't connected at all to any kind of real desire... It was more like "oh, I know I should act this way." (Susan, 45)

I don't think desire had a name at that time. It was just something you do. Something I did as a girlfriend-- as a good girlfriend. As good as I could be. (Lydia, 45)

There was little mention of pleasure accompanying these early experiences. For example,

Lydia characterized it as "mundane ... you know, that young kind of sex." It wasn't unpleasant by

any account, but nondescript assessments such as "it was fine," "it was nice," and "it was

good," were far more common. While some women did point out the lack of sexual skill on the

part of both partners as contributing to this, others commented that the expectation for pleasure

was unbalanced.

The sexual acts were mostly for him...it wasn't really reciprocal, um, in terms of I was never orgasmic. He was, but I was never that way. It was just more, kind of, along for the ride. (Gloria, 45)

For Lydia, desire and pleasure "*got lost*" in the obligatory and habitual nature of sex, so much so that the most memorable part of sex *was* the routine:

With my boyfriend from high school, it kind of became an obligation as well and kind of just something to do, get out of class and go have sex and then go eat Carl's Jr. Sausage sandwiches... I remember how we used to go to his house after school. He lived off of his

friend's place, and I was always chewing gum. When we were about to have sex I put my gum up on the bed post. And then when we were done having sex, I'd take my gum back. (Lydia, 45)

A few women also commented on the conflicting societal expectations they saw imposed

on women's sexuality - specifically, the pressure to be sexual coupled with the pressure to be

chaste. They felt that the norms dictating how they were "supposed" to be with respect to

sexuality put a "big constraint" on their ability to have their own experience. While this

influence was not limited to adolescence, it began to take effect at that time.

And I think that sometimes the society norms put a big constraint on that... there was still a lot of judgments and prejudice. And even though everybody was thinking that they were being free-spirited, that was fine for the 15 minutes it was happening, but afterwards...(Sharon, 52)

At least in my opinion, the way that the general population is socialized, especially women, are socialized to identify their desire, it's as though their sluts or they're this or they're that. It's that dichotomy of Betty Crocker in the kitchen and a porn star in the bedroom. And so, keeping desire kind of compartmentalized to these very finite positions and not allowing a person to just ebb and flow throughout their day, and be able to experience what they're experiencing when they're experiencing it I think chokes out levels of desire in people. (Susan, 45)

## Desire for validation rather than desire for sex

Another factor that hindered women's ability to connect to their desire was the confusion introduced by the often-reinforcing effect of validation. For some women, sexual attention brought short-lived feelings of acceptance or reassurance of worth. A primary motivator for sexual behavior (ranging from flirting to intercourse) became receiving this type of validation.

Susan reported that the impact of male attention on her self-esteem was evident long before she began having sex. She reported that she had always been deemed "the pretty one" in her family, and suggested that her craving for attention from boys was an attempt to *"fill that* 

*role, at some level.* " She further alluded to other family dynamics at play in her yearning for validation:

I think because my parents were young and they went through this set of circumstances, there was kind of this – I was very flirtatious. I really liked attention from boys. I really, really liked attention from boys... And beyond that, I didn't really take any of them seriously. It was like, they were so easily swayed by the slightest flirtation that I couldn't ever take any of them seriously. Like, "okay you made me feel good, I can move on now." (Susan, 45)

Other women reported that the validation they got from sex compensated for a shaky sense of self. When this relationship was established in adolescence, validation became conflated with sexual desire. In other words, it became difficult to distinguish the desire for sex from a desire for the validation that came from sex. This was often not identifiable at the time, but reflecting now on what early desire felt like, women recognized feelings such as a wish for acceptance or for self-esteem.

I think looking at maybe adolescence, early 20s — looking back at that now, I used sex for acceptance. So I, you know, probably also confused that with desire...that wanting to be needed. (Whitney, 47)

Early on, it's best described like it fueled my self-esteem...The reason I was high (in desire) in my young years was more of a feeling of feeling wanted, feeling desired. The fact that a person was attracted to me. Not the intimacy, but just, "oh this person really, really likes me. This person is really, really interested in me. (Marie, 40)

Anna, 53, reported that this validation was so powerful that her value as a "sexual object"

became a core part of her sense of self.

Needing validation, needing to feel sexy, needing to be sought after as a sexual object. It was almost like being a sexual object, being objectified, was part of my identity... It took many years to extricate my identity from that. It kind of defined me for a long time.

# Shame about being sexual

Paradoxically, the fulfilling of others' expectations in regard to sex was accompanied with the belief that it was somehow wrong for a young woman to be sexual – a message instilled

in many women during childhood and adolescence. Several offered the hypothesis that growing up in an environment where sex felt shameful impacted their ability to freely explore their sexuality. As Tamara, 56, described,

Well, childhood, I grew up in a very sexually-suppressed home. My mother, it's like, 'You don't date until you're 16. You have an 11:00 PM curfew.' And it was a lot of 'don't, don't, don't.'

Susan recalled her early years of feeling "*double downed*" on by a mentality of sexual shame, with a conservative family and church affiliation. Interestingly, she spoke of some awareness as a young girl that she had nothing to be ashamed of, calling her father "*crazy*" for his allegations that she was a "*slut*."

My dad was very contentious about this...if you don't behave exactly to his expectations there's a huge problem. So he started calling me names, and saying all of these horrible things to me when it came to the way I interacted with boys. "You're such a slut, they only want one thing." And I hadn't done anything, I thought he was crazy, and I just kind of isolated myself from him. And then I got involved in church which kind of double downed on that mentality when it came to sexuality.

Nonetheless, she spoke to the strength with which these messages were internalized, even into

her adult years.

Even when I met my ex-husband, there was this very hush-hush, you don't have sex before you're married kind of thing. Which we did, we had sex before we were married... But then emotionally, it connected sex with this very negative emotion. For the first probably two years of my marriage, it was very hard for me to not continue to associate this feeling of wrong – because I had been told sex was wrong, sex before marriage is wrong. Just because you sign the marriage certificate, it doesn't change the emotional relationship you have with the act.

The notion that sexuality was somehow shameful was instilled to varying degrees. While

Susan felt this impact deeply, for others it was present in subtler ways. For example, Margaret joked about hearing her mother's voice in her head calling her a "*naughty girl*," while Renata chastised her younger self for being sexually active: "*so silly, little girl*." She didn't recall any explicit messages about sex being shameful. Still, she developed the belief that being sexual was

incompatible with the "goodness" that she strived for. As a consequence of this belief, some women reported that they felt a need to hide their desire, or "*put it aside*" in order to maintain the image of goodness.

It definitely made me more inhibited. I had an older brother and I was the only girl, so it was definitely a different tone with me. "You're a little girl." They would joke around with my brother about things, but not with me...I felt that I would have gotten in trouble, so I think that contributed some. (Gloria, 45)

I think I was so afraid. And again, it's due to my mother. You know, when you're just like saying, "No, no, no." Just feeling like I can't even think about it...Just very strict, nothing of that kind. (Tamara, 56)

But there was the stigma that good girls don't have sex. That's probably why I didn't. There was a lot of pressure within my group of friends to not have sex...and maybe if that weren't the case I would have explored more. (Nadine, 53)

### **Stage II: Learning About Desire Through Life Experience**

Not surprisingly, attempting to act in accordance with others' expectations and feeling ashamed for wanting to be sexual made it difficult for women to learn about their sexuality and desire. With early desire as undefined and often confused with validation, how did women arrive at a place where desire is understood and valued? The second stage of the trajectory represents the years during which life experiences provided the opportunity to learn about their desire. These experiences fall broadly under two categories: 1) *Relational factors*, including *positive and negative relationship characteristics, novelty,* and *stagnation* in sexual relationships; 2) *Development of Self,* including *self-awareness, self-esteem, and well-being.* 

# **Relational Factors**

*Positive Relationship Characteristics.* Most women reported that a solid relationship with their partner facilitated their desire. Factors such as good communication, trust, intimacy, and compatibility were reported as relationship characteristics that made women desire their partners and desire sex.

When you're just feeling really good about your husband, and he's being—you have really—things are clicking, then of course the desire's better than when we're like totally getting on our nerves or something—but I think that's pretty natural. (Janice, 51)

For me, intimacy – emotional intimacy – has a lot to do with it. My sex drive goes up quite a bit when I'm feeling emotionally intimate, as opposed to just dating and having sex with somebody. (Gloria, 45)

This is the person who meets all of my morals, all of my values. We are the yin to each other's yang, so to speak, for a cheesy analogy. We really do complete each other. Where I'm lacking, he has it. Where he's lacking, I fill it. We're not opposites, but we're opposites where we need to be. The important stuff. So I just feel good with the person that I've chosen. (Marie, 40)

Well, we have common interests. We laugh a lot together. We can cry together. He's my best friend. (Tamara, 56)

Women who talked about these qualities in their current relationships often contrasted them to

their prior marriages, in which desire was lacking. In the following two quotations, women

discussed how their prior experiences highlighted the value of trust and intimacy to their current

desire.

I've realized that there was a direct correlation for me with desire and sexuality with trust. So those two things go hand-in-hand for me. If I'm in a situation where I can trust and I feel safe, and I'm secure, then I feel myself and that I can express myself freely and experience whatever it is I'm experiencing. Versus the prior 15 years when I was with a partner who I didn't trust, and that there were tremendous issues, I didn't have much desire. (Susan, 45)

And so to go from somebody like that, to this. And I have people tell—all my good friends are like, "You deserve this. I saw what you went through." And in my mind, it's like, you have to go from point A to get to point B. (Nadine, 53)

Women for whom intimacy was a facilitator of desire sometimes drew a distinction between

more "carnal" sex versus intimacy-based sex. The former served to simply satisfy a sexual need,

and became less appealing when they began experiencing the increased pleasure that intimacy-

based sex provided.

Intimacy and desire and sex with a partner are all interlinked for me. But just a passionate burst of chemistry and sexual needs, that's separate. (Susan, 45)

The way I respond to my husband intimately is totally different than having sex with someone because you want that desire to be met. You have sex and you're done, you're gone. (Renata, 55)

Many women who were in relationships and content with their sex lives reported that both they and their partners made the sexual aspect of their relationship a priority, even if that meant putting sex *"on the schedule,"* or, as Sharon described, *"faking it to get into the groove."* The two women in this study who did not have children even suggested that this decision had allowed them to prioritize their relationship and their sex lives, which they both valued greatly. In the following quotation, Tamara, who reported consistent strong desire throughout her 26-year relationship, describes one way that she and her husband nurture their intimate relationship:

For example, my husband and I are both into cooking and foods, we're foodies. So I think that's part of that sensual pleasure... I will come up with these menus, and go shopping, and cook together, and eat together, and then talk about what a great meal we had, and then have great sex. And so it's like the two are combined sometimes.

Most reported that having their own pleasure prioritized was as important as prioritizing sex. In contrast to sex in their adolescent years which was overwhelmingly focused on their partners' pleasure, sex in adulthood became "*a two-way street*." For one woman, experiencing an orgasm after years of having sex that was "*all about him*" was a relief: "*It just finally felt like* "*Oh, so this is fun! I get it now. I understand.*" (Gloria, 45). Margaret, 58, clearly recalled a period of increasing desire and highlighted the important role that learning to value her own pleasure had played in that increase:

I had, in particular, one boyfriend who was open to experimenting with sex... and he was like, "I'm not going to be satisfied unless you're satisfied." So he made a point of making sure that I was having a good time. And that helped. It really drove home the point that what I want makes me feel better. Getting what I want makes me feel good. And having someone who shared that was like "Oh, man."

As women began to learn what brought them pleasure and had partners who valued their pleasure, sex became more enjoyable. Many women spoke to a simple effect of positive reinforcement – the more enjoyable sex became, the more they desired it.

Another factor that featured prominently in women's narratives was the facilitative effect of being desired. To be seen as sexy, and to be wanted by another was not only one of the most frequently reported relational factors impacting desire, but often one of the strongest. Anna described of a period of steadily increasing desire as follows:

The more I was sought, the more it charged my desire. So the more I was desired, the more I felt desirable, and the more desire I had.

Anna's use of the word "*charged*" – much more evocative than the commonly used "increased," or "improved" – underscores the powerful effect that feeling desired had for her. Similarly, Janice discussed the impact of feeling wanted by a young, attractive man during a time in which she felt neglected by her husband. Feeling desired to such an extent even overshadowed the unsatisfying sex that came from this affair:

I would never in a million years think he would be interested in me at all. And then one day something happened ... Everything was in my mind. The sex was horrible. He was a virgin. It was not good but I made like it - in my mind, it was better. It did everything for me... it gave me this "Umph."

In fact, feeling desired – by partners, potential partners, or strangers – was reinforcing enough that some women talked about knowing "*what to do*" to stimulate that desire in others. For example, Bernice said with confidence, "*When I do want to feel desired, well, I know what to do. I mean, come on. We're women.*" This often involved dressing and carrying themselves in such a way that made them feel sexy.

If I want to feel desired, I'm going to put a nice dress on and I'm going to go out there and I'm going to look nice. If I desire to have something, I'm going to work towards it. (Bernice, 48)

I know that a lot of first attractions are based on, "Oh, there's a nice-looking guy, I wouldn't mind going to bed with him." If I want someone to see me as a potential partner, I want them to see me as sexual and attractive, and I think about my own desire later. (Margaret, 58)

I would say in my thirties, I felt like I kind of had that sexual prime and then it was very important...And I kind of liked to dress a little sexier... I loved to wear heels and that kind of thing... And I kind of liked...knowing men were looking at me if I was shopping or something like that. (Janice, 51)

In these examples, women suggested that feeling desirable in their *own* eyes was an important

factor in feeling desirable to others. Interestingly, Lydia noted how desirable she felt knowing

that her partner wanted her when she did not feel at her best: "And he desires me, and it's like,

really? Here with my feet that need to be filed and-- you know?"

Relatedly, women also spoke to the intense desire created by good "chemistry" with

partners.

And meeting my second husband at that time, it was—oh, it's hard to describe but I just felt like—it was almost animalistic. I was drawn to him like a—everything in me said, "You need to be with this person." It was an instinctual thing. It made no sense. There's no reason why I should've been wanting to be with somebody else at that time. I wasn't planning to leave my husband. It just was this chemical, instinctual-- (Janice, 51)

You know how you hear about that sexual attraction and like [explosion gesture]. I had that experience there with a young man. And it was not an emotional experience, but if we were in the same room, there could be 300 people, we would know it, we would get up and would leave together. (Sharon, 52)

In the Sharon's case, she reported that this experience of intense physical

chemistry "kept heightening my awareness" of her sexuality, so much so that it initiated a long

"stride" of high desire.

Often, the context of a trusting relationship contributed to women's ability to let go of

inhibitions and explore their desire without fear of being judged. They reported a greater

openness and security with their own vulnerability when they could trust that they would be met

with respect. For many, the outcome was a greater connection to their desire, and in turn, an

increase in desire. For example, Whitney reported a sense of "relief" when she married her

husband. With the security that came in this relationship, she felt that their sex now "had space

to be about desire." Others echoed:

I trust his responses. I can trust that I'm not going to be judged. I can trust that he's going to be kind. I can trust that is going to meet me where I am. Whether I'm sad or irritated, or feeling sexual, I know he's going to meet me where I am. (Susan, 45)

When I can really be myself in a relationship, and not feel like I have to hide what is natural to me, that's when I really feel connected to my desire. And I feel more of it when I'm connected to it. (Margaret, 58)

Gloria described the concurrent impact of a trusting relationship and her own age-related

disinhibition as creating a "perfect storm" of factors that helped her lose the inhibition that she

felt had "held her back" for years:

As you age, I think you tend to be... at least I have felt less self-conscious. You get more comfortable with yourself. At least I have. Especially if you have a good partner that makes you feel more comfortable with yourself and appreciates you. My husband now has certainly been very positive in that respect, so of course that frees you up... that has freed me up. (Gloria, 45)

The above quotations highlight the intersection of self and relationship factors that allowed women to explore their desire. Though positive relationship factors were important for many women, they rarely acted independently of intrapersonal growth, which will be discussed later.

*Negative relationship interactions.* Perhaps because most of the women in this study generally reported an upward trajectory of desire and satisfaction with desire, major inhibitors were not as frequently emphasized in their narratives as were facilitators. About 60% of women interviewed discussed at least one type of negative relational experience that had inhibited desire. For a few women– Susan, Bernice, and Renata – negative experiences had played a significant role in shaping their trajectories. Each of the following themes was reported by two or three women. Therefore, the themes discussed are not suggested to be common to all women in the sample, but rather a demonstration of the range of negative relationship experiences and their impact on desire.

One set of themes centered on the negative impact of feeling violated or sexually objectified in a negative way. Not surprisingly, the impact on desire in these cases was dramatic. For example, Renata experienced a total loss of desire following a sexual assault: *"That's when it goes. That's when the incident took place, and it just went down for me...And it was right away."* Her ability to heal from this was complicated by several factors, and her desire loss was compounded by a series of physical health issues and significant guilt about the impact of low desire on her marriage. In Renata's case, her negative experiences around sex and desire overshadowed the positive ones, and her trajectory showed a downward trend in desire level from the time of her assault to the present.

Susan and Bernice had previously been in abusive marriages and described the "slow erosion" of desire as their relationships deteriorated:

Like the abuse, the desire was just the sort of slow erosion. As the emotional was being betrayed, there is a sort of walling off of these other things. And the scales just kind of... just this quiet erosion. (Susan, 45)

It just was like—it's almost like everyday a little bit is chipped away from you, of anything, and you just slowly become, I would say, a shell of a person...I started to really, really have no desire at all. (Bernice, 48)

For Susan, the relationship involved significant sexual objectification by her husband, so much so that she felt her sexuality no longer belonged to her. She described a series of interactions in her marriage that *"made me realize I didn't matter,"* aside from her value as a sexual object, including this simple but poignant example:

I ruined his vacation because I got so severely sunburned – mind you, I'm the mom. I'm putting sunblock on everybody. Nobody put sunblock on me... And I ruined his vacation because he couldn't have sex with me.

In contrast to the desire-facilitative effect of reciprocity in relationships, this example illustrates the negative impact of feeling taken for granted. Lydia also spoke to dampening effect of this dynamic in a relationship, in which she began to feel like *"the means"* for her partner's sexual gratification:

I remember, too, like with my daughter's dad, I was very pregnant and we would have sex then, too, and I didn't really want it. I remember being really pregnant and-- you can have sex when you're pregnant and we didn't hurt or anything, like a certain position, but it's like, "Really? Am I not doing enough already?"

Other women reported that their partners did not approach sex in a way that stimulated their desire. For example, Renata described a purely responsive desire that needed to be *"caressed and pulled out and loved."* Her husband's attempts to initiate, though, could be rather abrupt: *"And he says to me, 'I'm feeling frisky.' That's what he says. That's his call from the wild."* Anna reported that her desire was stimulated in the context of novelty and excitement, and she felt as though her husband had *"stopped trying"* and was *"going through the motions when it came to sex."* 

Two women in our study who had been in desire-discrepant relationships (as the lower-

desiring partner) reported that the discrepancy only grew wider as they were criticized for their

low desire and blamed for the impact it had on the relationship.

He thought the whole thing was my fault, my issue. Like I had a problem because we never consummated our marriage, hardly. It was a bad marriage... He made me go to a doctor to see about, maybe I needed testosterone. Like maybe my whatever levels that you need for that, either estrogen or testosterone, I don't—but it was never his fault. (Nadine, 53)

There was a period in the marriage, where, the first time things started to go bad – where I literally never said no to him. So it was every day, every other day, for months on end... But then it wasn't enough sex, and then it wasn't creative enough. (Susan, 45)

A couple of women reported that they actually made intentional efforts to suppress their desire. Susan described her desire as being on *"lockdown"* in her abusive relationship. She felt

as though "*anything I had belonged to him*," including her desire. With no ownership over her desire, it was not safe to express and it "*had to be kept away*." Anna described her efforts to try and control desire that she feels for men other than her husband:

Now that I'm married, having desire actually makes me a little nervous. Because I'm married, and I know that the desire's not for my husband... But I'm very good at controlling it and reining it in — which is not even that healthy. You know, I've never been one to suppress my desire. I don't like suppressing my desire.

Often, it was this lack of desire in relationships that helped women clarify what desire was for

them, and how much they value it. As previously discussed, sometimes this became apparent

once women entered healthy relationships and experienced a significant change in desire. For

Lydia, though, desire "got a name" when it was absent:

It [desire] got a name when it was absent. And I wasn't comfortable with it. It got a name when I recognized that I didn't feel it for somebody...He loved me. I loved him too, but after time, I did not desire him sexually. I did not...Then at that point, I had feelings that I'd never had before in my life, because I had always been so attracted to the men I was with before. That wasn't what was missing, in those other relationships... I found that that's very important, that I have to have a full package... Then, it got a name.

However, for a couple of women, being in relationships actually highlighted the fact that

relationships played a negligible role in their desire, or even had a dampening effect.

And relationship doesn't play that big of a role for me. At this point in my life, I do not want to be in a relationship. But I don't want to give up sex. (Margaret, 58)

But I really think, as I get older – and I'm not trying to generalize about sex and love and desire — but for me, sex is one thing and love and relationships is a different thing. And as I go further into my life, I'm almost 54 now, I really don't see the two meshing in the future for me. (Anna, 53)

Novelty and Stagnation in Sexual Relationships. Almost all women addressed the impact

of novelty and stagnation on their sexual desire. Spikes within the overall trajectory were often

associated with the "extra spark" that came with a new partnership. Women spoke to the

excitement that came from arranging encounters, fantasizing about what sex might be like, and

feeling like they could not get enough of their new partner. Bernice joked about the early stage of

relationships: "Oh, yeah. You could go to work with two hours (of sleep). Now I'd probably die if

I only got two hours!"

Sharon realized that her desire was really sparked by the "chase" more so than the actual sex:

So another part of me is that I am an adrenaline junkie. I like scary fun...part of the fun is the hunt or the pre-relationship where you're looking for someone. Oh, you found someone. Oh, I've got to get them interested in—so that whole part is exciting. I think for me when there's a high period, there's something that is—there is that excitement and that challenge because I'm super competitive.

While novelty was most often talked about in terms of new partnerships, a couple of married

women did discuss they ways in which they tried to create novelty in their sexual relationships to

combat the "complacency" or "routine" that they fell into.

Just try to take advantage of those unexpected opportunities, like seize those moments, initiate, initiate sexual intercourse with my husband to just catch him off guard a little bit. (Whitney, 47)

We love to travel. So, whenever we go away, and you're away from home, we're relaxing. There is no stress. That always is a boost...Being away from home. Out of the routine. Anything out of the routine helps, I think. But, it's so hard to get out of that routine. (Janice, 51)

Indeed, the familiarity that develops as relationships mature was frequently reported as a contributor to desire decline. For the most part, women accepted this as an inevitability and did not experience this decline as particularly distressing. It is important to note, though, that women in this study were generally content with their desire level. Thus, the "new partner spark" could be enjoyed as just that, before a return to a satisfying baseline. Anna, though, did realize after committing to a long-term relationship that her desire was entirely contingent on novelty and excitement. She spoke emphatically about the frustration that she felt at her loss of desire.

It's like, it's so f—ing boring. And it's like, okay, it's just boring! And so... it's boring. It's boring. And I think the nature of -I don't want to speak to every woman's desire, but my desire - the nature of my desire, of what I found erotic was ... exciting! It was exciting. It was forbidden. It was transgressive. It was secret. It was at night. It was with people you're not supposed to do it with. That was my desire, you know? And so I just...this is f—ing boring!

### **Development of Self**

#### Self-Awareness

Developing a greater sense of self-awareness with age was discussed by nearly all women as a key factor that allowed them to connect with their desire. Though part of this process was exploring their sexual selves, women also discussed the impact of working through a range of life experiences that helped shape their identity. For some women, it was toxic relationships, while for others it was mental health issues, major life stressors, or simply feeling lost as to who they were. Regardless, the outcome of working through these experiences was a strengthened sense of self that came from figuring out who they were and what they wanted.

Then I started to reflect on my sense of self, and that's where it came into like, "I don't need to be feeling all, like dressing sexy or attracting other people's attention. I love my husband. I don't need attention from other people, from other men." Where, when he wasn't giving me the attention, I craved attention from other people. So as time-- as I moved away from recovery-- as I moved into my recovery, I developed more confidence and just being myself...This is who I am, take it or leave it. And so that's when I started to see the benefits of the change and the growth kind of laid out. (Janice, 51)

Nobody had any expectations on me academically because my sister was the smart one. I was the social one. You know how kids get labelled in families? ... and so there's always that self-doubt...And so that was a conflict with me, too, was how much of myself do I pursue? And that was in my twenties and thirties, I had to figure out that balance in myself of what I wanted...And so I think my 20s, my late teens to early 30s was just developing who I wanted to be and what life I wanted to live without the expectations that had been put on me. I kind of came more into myself as a woman and as a person in my thirties than in my twenties, and so the peaks up would be in my early thirties. I was more comfortable with, just, who I was. (Sharon, 52)

And as their sense of self strengthened, they found themselves able to shed the barriers that had

prevented them from connecting to their desire. Many spoke of the "freedom" that they now felt

to be themselves, without the "self-consciousness" and "hang-ups" that had previously clouded

their sexual experiences.

When I started having relationships after my divorce, I was looking for relationships that just fulfilled what I wanted. And I think that's when I started realizing there's really good sex out there. And I can kind of take advantage of that. And free myself up to enjoy it. And not have stigma that being raised in a Catholic family and all that stuff... So just matured enough to put those things behind me. (Margaret, 58)

I think the more you grow up—because I think that you don't stop growing up when you become an adult. You're constantly growing up and learning and reading about yourself, things that enhance yourself. So you're always growing as a human being. So I think that definitely helps. (Nadine, 53)

I'm more aware of it (desire) in the last 3 to 5 years than the prior 15 to 20 years...as I've aged and gotten older and become more aware of myself and what my own personal needs are. (Susan, 45)

For Anna, who realized that her desire thrived on novelty, it was about accepting that her desire

could not be reignited in her marriage. Interestingly, she did not need to act on her desire in order

to see an improvement in desire. As she stated, once she accepted her situation, her desire slowly

began to return:

I was sort of blaming myself, like "Oh, there's something wrong with me. I'm premenopausal. I'm getting old." And really, there's nothing wrong with me. I don't need hormones, I don't need the female Viagra. I don't need any of that. I'm just bored, and I need to change the situation in my relationship, and I need new partners, and I need to have fun. And once I realized that, you know, my desire slowly started to come back.

Several women highlighted the importance of getting in touch with their own bodies and learning

what produced pleasure.

Between 30 and 40 was a really good time for the sexuality...I just experimented a lot. I experimented with my own body, you know I read about multiple orgasms, I read about female ejaculation, like "Oh, I want to try and do that." ... it was an adventure in, a journey into your own sexual self. Getting to know your body. It was really fabulous. (Anna, 53)

Before when it was like penetration was sex, and that was it. And I hadn't actually experienced the real arousal you get. And so when someone asked me to do that

(masturbate), I didn't know how, and it was like, "Hold that thought! I'm going to go home, get some books, take some time, and figure out how to do that. (Margaret, 58)

Self-esteem. A relationship between desire level and self-esteem existed across the trajectory. However, the way in which these constructs were related evolved with age. Early on, self-esteem was boosted by validation from others in the form of sexual attention. As previously discussed, several women spoke to the important role that being desired by others played in this validation. As sense of self strengthened, their definition of self-esteem shifted from one that emphasized *other-validation* to one based in *self-validation*. The ability, as Sharon said, to say *"This is who I am and I'm okay with it. And I'm okay with it. And if you're not, oh well."* The self-esteem that developed as a result of self-knowledge and acceptance translated to a greater ability to enact desire in a fulfilling way. In reflecting on when her desire was highest, Susan stated: *"When I feel strong. When I feel strong in who I am and how I'm operating within my own life."* One participant who reported that her early desire was driven by a need for validation talked about the role of self-esteem in her current desire. Whereas validation from sex used to fuel her self-esteem, now, her self-esteem fuels desire:

My personality is fueled really by the fact that I'm okay with who I am...Love me or hate me... I think it has to be intertwined. Because I couldn't be at this high desire level if I was shy about or uncomfortable with anything else in my life. (Marie, 40)

The shift from other to self-validation was mirrored in the increasing importance of self*desirability* with age. Rather than thinking primarily about whether they were desirable to others, women began to pay attention to whether they were desirable in their own eyes.

So when I feel pretty and when I feel confident and when I feel I'm at my best and when I feel like I'm kind, that allows me to desire myself...Which then allows me to be open and desire another person, and allows them to desire me, and all those things kind of link together. (Susan, 45)

Bernice put it quite simply: "If I don't desire me, how can I expect anyone else to?"

As previously discussed, several women reported that they felt most desirable to others when they felt sexy and attractive. For Margaret and Anna, feeling desirable actually had a direct impact on their own level of desire as well.

I think at this point in my life that there is a definite connection...I think even unconsciously, if I'm dressing up on a Friday night and I want to go out, thinking I'm sexy, there is a direct correspondence with my desire to have sex. (Margaret, 58)

And I think my desire really started to take off once my weight stabilized, and once I started to see myself as an attractive woman. So my desire was kind of tied with feeling attractive. Feeling desirable. And the more desirable I felt, the more I enjoyed sex and the more I wanted it, and so the more I worked on my weight and feeling attractive and looking attractive. (Anna, 53)

In the above example, self-desirability was facilitated by body esteem. Two other women also

identified the role that weight played in their feelings of desirability, and consequently, their

level of desire.

*Well-being.* The various factors outlined thus far – developing satisfying relationships, knowledge of and comfort with themselves – often contributed to a greater overall feeling of well-being. Several women simply noted that that they were happier with themselves and their lives as they got older, and related their increase in desire to the healthier "*mindsets*" they now had.

I didn't think it was going to be that late in life that I peaked like this. But then, again, I wasn't in the healthy mindset. And I think your mindset has totally a lot to do with it. (Bernice, 48)

I don't know if that's just the hormones are finally right, or mentally things are good, so that's allowed to come to the surface, I'm not sure...maybe this would have been there all along if things had felt, you know, good in the way that they do now. (Gloria, 45)

It's a different thing now, as I'm older and have like, some wreckages in my past and I'm consciously building my life in a positive way, that the desire-- it's increasing. (Lydia, 45)

## **Stage III - Desire is Defined**

Using life experiences to learn about desire, develop self-awareness and build self-esteem – these factors led women to being able to take control of their lives and their sexuality. The final stage of the trajectory as here conceptualized with this sample of women represents the present-day experience of women who are now content with their desire. The major sub-themes that characterized this stage were women's ability to take *ownership* of their desire, their recognition of the *value* that desire has in their lives, and their ability to set *expectations* about how desire is enacted and fulfilled.

**Ownership/Autonomy.** Many women experienced a meaningful change in their desire when they decided to consciously take control of how it was expressed and enacted in their lives. Aging (and consequently, life experience) helped women recognize that they felt most satisfied with their sexuality and desire when they took ownership over their sexual needs fulfillment. Being able to ask questions like "What do *I* want?" and giving themselves permission to desire – and ask for – fulfilling sex became a fundamental part of many women's experience.

I actually think that I've become more attuned to that, refined it, as I have matured and just accepted that you know, it's a two-way street. I'm going to be in charge of what I feel, how I feel, how I want it, and so I've kind of taken charge of that aspect. (Margaret, 58)

I don't know, for me personally, I feel like I've come over a big hill and I'm on the other side of a really rough thing. And I'm a healthier person now and—I think it's expressing one's desire, it comes with being okay with who you are, it comes with saying "This is my life. I love who I am. No one is going to treat me bad. I'm going to claim my sexuality. I am going to express it how I wish to and with whom I wish to." It's a very – desire is a very potent thing. It really is. (Lydia, 45)

For Susan, learning how to have sex for *her* pleasure was especially empowering after years of feeling like her sexuality was controlled by her husband. Bringing herself authentically to her sexual relationship – for herself, not as an object for another – was key being able to finally express the desire that she had suppressed for years.

Even learning how to masturbate and how to be in touch with myself and take responsibility for my own orgasms. And be with a partner who is not intimidated if I need my vibrator. All those things are important for me to have a relationship with something that I'm free to, you know, express myself. And have feelings that aren't necessarily tied to his ego but are about me.

Gloria had described her desire fluctuations as relationship-centered. Her typical pattern was a

rise in desire with a new relationship, which fell back down to a lower baseline when the

relationship ended. However, as she began to value her desire differently with age, she reported

feeling as though her desire belonged to her now, and was not purely the product of the

relationship:

I feel like now, having experienced it like I've experienced it, if something were to happen to my husband now, I would still be positively changed because of it, you know what I mean? I think that wouldn't go away. Of course there's lots of little factors that factor in – in terms of a relationship with an individual person. But I think that, you know, I've sort of seen the light now, where it would still be improved.

Because their desire was now within their control, some even felt as though they had control

over what their desire would look like in the future.

I think that maybe now as I'm kind of more—feel more in control, I would have more power and control of this trajectory. It seems like I was kind of like just on the flow. Less at the wheel. (Lydia, 45)

My own desire? Oh, yeah. I can turn it on and turn it off on when I want...I almost feel like I'm independent when it comes to desire. I could do whatever I want when it comes to desire. (Bernice, 48)

Valuing desire. All of the women who reported being fairly desirous at this time in their

lives spoke to the joy and fulfillment that desire brought to their lives and relationships. Having

desire made them feel good about themselves, and was viewed as part of a life well-lived.

Perhaps because their current desire was often viewed as the outcome of a process of self-

discovery, women felt "lucky" and "grateful" to be able to experience it.

You know, I had this friend who was always really high (in desire). And I was always a little jealous of her, you know? Like "Oh, I think that would be fun to feel that way." And

now I feel like, I know what she feels like... And I like that. It is fun! ...Now I know it can be such an important aspect of everything. And I'm pretty proud of it, in a sense. (Gloria, 45)

I think it's sort of life-affirming... Life can be sort of a drudgery sometimes, and you need fun things that you like to do. It's kind of like good food, going for a swim, traveling – just, the good stuff of life is good sex. (Anna, 53)

I'm 58, and a lot of my friends who are older than me, and some who are younger, just think "oh, it's not that important to me." And I just find that sad…The thought of not having desire, not being sexual. It's such an enjoyable part of my life. It's so much fun. It makes me feel good. And throwing the towel in because we're 'getting old' – it just seems like they're giving up, and missing out on something. (Margaret, 58)

I think it's part of me being vibrant and moving toward life force. And I think that's really important as you get older. I think a lot of people focus on decline and death, and I want to sustain life. (Tamara, 56)

You know how there are people who live kind of dangerously and sexily and are magnetic and dynamic and fabulous and just have a life well-lived? I think desire is a part of that. It's a part of having a good life. I mean, it's the thing that makes us be, as human beings. (Lydia, 45)

Desire was often reported to be a central or highly important element of women's identities,

which had not always been the case when they were younger. For some, desire contributed to

their sense of "wholeness" as women.

When I'm in that kind of sexual desirous mode, I like to experiment. I'm open, I feel free, I feel like a sexual woman. I feel beautiful, I feel natural. I'm a very natural woman to begin with and that's part of womanhood. And it just helps me feel—it's part of my wholeness as a woman. (Lydia, 45)

Before it was the validation. Now, it's more of feeling complete, feeling whole. Without my current husband, without experiencing that level of intimacy that we have reached in our marriage, I don't feel like a whole person. (Marie, 40)

For Marie, having desire was so a part of her sense of wholeness that she felt its absence

strongly. Speaking to times in her life when she had lost her desire, she said the following:

I would describe it as really, sadness, and lonely, and – it sounds funny, but tiring. Feeling tired... it's a really intense feeling and when it (desire) stopped, it becomes a sickening feeling. I don't know if people would describe it as depressing or being depressed, but it's a very—when you don't get it, it's a pit of your stomach, "I feel ill" feeling.

Two participants who still felt strong desire after menopause reported that they made a concerted effort ensure that their desire remained strong – as Margaret described it, her *"refusal to throw in the towel"* and let age stifle her desire. They reported doing so by attending to their physical health and monitoring sexual responsivity (for example, masturbating regularly to ensure arousal and orgasm).

For those women who had experienced a decline in desire following menopause, desire was not viewed as a central part of their lives, as it was for the more desirous women quoted thus far. However, they still considered their desire to be a valuable part of their life experience – something that made them feel good, and that they would miss were it to disappear.

It's something that everybody needs to some degree, to know that desire is there. To want someone for them, to be wanted for me. To have that experience is really different. (Whitney, 47)

For me there is a level of, where you want to be desired and you want that in your life. And there is that component of me, and I think if that was completely cut off I wouldn't like it. (Sharon, 52)

**Own Expectations.** With ownership of desire and recognition of its intrinsic value, it became important for women to set their own expectations around desire and to have these met. In contrast to their earlier years, during which expectations around sexuality were set for them, women now took charge of setting their own. The opinion of others became less and less important as time went on.

I get to define how things look in my own life when it comes to my sexuality, my desire, my relationships...I no longer feel like I have to meet somebody else's standard or expectation of the way that things look for my life. (Susan, 45)

I think as a girl, growing up you have that underlying message to please. And I think that you don't really get to that point—or I didn't get to that point until somewhere in that age

range where I was like, "Well, I don't have to please everyone all the time." And that opens up more experiences for you, too. (Sharon, 52)

For some women, their expectations focused on prioritizing sex, seeking the types of

relationships that fulfilled their desire, and ensuring that sex was pleasurable. Women were less

willing to be unsatisfied, and believed that they were deserving of pleasure.

*I've had relationships that I've had to get out of because sex was bad. And I refuse to spend the rest of my life... Even though you're a good man and you provide, and you do all the other things, and we have fun together, it's too important to not have. (Margaret, 58)* 

If I want good sex it's going to have to be that fun, exciting sex. And if someone wants a relationship, I can do that. But it's not going to be with the same person... I'm just more accepting of the situation, and looking ahead to eventually change my situation. (Anna, 53)

I think if you don't have self-confidence, there's going to be a part of you that feels that you don't deserve to have that pleasure and that you're going to be hung up about what your body looks like or what your reaction is. Whereas, if you can just be happy in being who you are, you bring that to the experience. Your breasts may not be perfect, your legs may not be perfect, but that's okay. I mean, I know that physically, I'm far from perfect. But that's okay. (Tamara, 56)

Other women were satisfied with their lower desire and did not feel inclined to prioritize desire or their sexual relationships. For them, being in charge of setting expectations for their desire meant that they could be secure in their desire, whether it was low or high, and not feel pressured to act in a way that did not feel authentic. For example, Janice reported that she often second-guessed herself when she read magazine articles saying that *"people are having sex into their eighties, and it's good for your health, and it's good for this, that, and the other."* However, when she evaluated what felt natural for her and her relationship, she said *"Actually, I feel pretty content and fine with myself."* Sharon, who reported generally moderate desire, said that she felt satisfied knowing that desire would emerge were she to meet someone she was attracted to: *"I* 

have not slept with a million guys to find myself, to make sure I'm still desirable...I don't need to verify its existence every day!"

## Summary of the model of women's desire development

The trajectory of women's desire development reflected a three-stage process, beginning in adolescence and continuing into adulthood. Desire began as an undefined entity, enacted according others' expectations and often overshadowed by the validation that came from sex. Through the accumulation of life experiences that helped women learn about themselves and about their desire, they were able to define what desire was to them, take ownership of it, and develop their own expectations. Two participants articulated this essence of this development as follows:

It wasn't so much a thing, like an entity, or a being of its own. It really didn't have—I really didn't so much have that, not like I do now. Two different lifetimes, it feels like. Like the 20 years between those times is starkly different. Now I can kind of stand outside of myself, in a way, and kind of just be so much more conscious of what things mean to me in my life, and why they are that way. Then, I was just kind of going with the flow, not really knowing me. I'm getting there now. At that time, I didn't know me at all. (Lydia, 45)

I feel like it's taken me this many years to be who I am. So it's like—I'll go back to the cake analogy. I was baking all the layers all those other years. So I wasn't ready to have that frosting yet...I had to go through everything else that I had to in my life to truly know who I was... So it wasn't until I learned all those life lessons and got to this age and this crossroads, so to speak, in my life that it was like, "Okay, I'm going to reprioritize my priorities." And things shifted. And so it (desire) became one of my higher priorities, one of my higher importance that made me—which makes me who I am today. (Marie, 40)

### **Stage-Level Analyses of Desire Trajectory Graphs**

Our model of the developmental trajectory of desire clarity emerged from an exploration

of desire level over time. To examine the relationship of desire level to the stages of clarity,

women's graphs were divided into three segments, in keeping with the three stages of the model

described above. In their narratives, women generally reported that the themes outlined in Stage

1 of the model represented their desire experience through adolescence, until age 18 or 19. Stage 2 encompasses ages 20-40. The age at which women appeared to be entering Stage 3 of the model was often late 30s, with a couple in their early 40s. Thus, 40 and older was determined to be the age range that best captured Stage 3. For each segment, a regression line was fit across the data points. The overall direction and magnitude of desire level change was assessed by the slope, and the amount of variability in desire level was assessed by the standard error of the mean. The slope and variability of the full trajectory was also assessed. See Table 7 for these values.

ID	Slope	Std.	Slope	Std.	Slope	Std.	Slope	Std.
	Stage	Error	Stage	Error	Stage	Error	Total	Error
	1	Stage	2	Stage	3	Stage 3		Total
		1		2				
F1(Susan)	.42*	.22	.00	.42	.56*	.16	.16*	.92
F3 (Margaret)	.04	.07	11	1.29	08	1.18	.13*	1.23
F4 (Gloria)	.03	.23	03	.83	.35*	.13	.18*	.82
F5 (Anna)	.19*	.19	.00	2.48	20	2.82	.19*	2.42
F6 (Tamara)	.35	.19	.48*	.28	.00	.06	.34*	.78
F7 (Bernice)	.15	.12	.20	1.54	23	.89	.22*	1.47
F8 (Renata)	.00		.49*	.61	20*	.16	.05	1.17
F9 (Janice)	.44*	.62	.49	1.12	-1.26*	1.87	18	2.80
F10 (Lydia)	.60		.12*	.39	.71*	.89	.16*	1.23
F11 (Whitney)	.17*	.21	23*	.28	26*	.10	05	.89
F12 (Sharon)	.17*	.25	.16	.95	37*	.14	.26*	2.10
F13 (Marie)	.04	.03	.18	1.54	.02	.03	.05	1.52
F14 (Nadine)	.00	.08	.03	.19	.41*	.38	.05*	.67

Table 7. Slope and Standard Error Calculations for Women's Desire Trajectories

**Stage 1 Characteristics.** Graphically, Stage 1 was shown in one of two ways: desire increase or stability, with low variability. Five women indicated an early trajectory of a significant positive slope, indicating a significant increase in desire through this stage. Six women indicated a stable (often low) desire, as shown by slope near zero with low standard error.

**Stage 2 Characteristics.** Stage 2 showed a notable increase in variability compared to Stage 1, which is not surprising given the major theme of this stage — learning about desire. The most common presentation of Stage 2 was low slope and high variability. In other words, there was not a consistent upward or downward trend within this stage due to the amount of variability in desire. Three women did indicate a significant upward trend in this stage. For one (Whitney), this stage involved a significant desire loss, which she attributed to a medication side-effect. Three women indicated that their desire level peaked during this stage.

**Stage 3 Characteristics.** Stage 3 was variable in presentation. For two women (Susan and Gloria), this stage showed a significant positive increase with low variability. For two others (Lydia and Nadine), desire significantly increased as well, but with more variability. In both cases, desire was decreasing in their early forties before turning around continuing upward until the present. Two women (Tamara and Marie) reported steady high desire through this stage. For three women (Janice, Whitney, Sharon), Stage 3 showed a significant decline, and all three cited the decline in recent years due to menopause. It should be noted, though, that all three women still described a desire experience consistent with the themes outlined in Stage 3, with ownership, autonomy, and self-determined expectations for desire. In three cases (Margaret, Anna, Bernice), Stage 3 remained variable. Seven women indicated that their desire peaked during Stage 3. For three others, their peak level of desire was located in both Stage 2 and Stage 3.

**Overall Trajectory Characteristics.** Nine women's graphs showed a significant positive slope overall. Two showed a non-significant positive slope, and two a non-significant negative slope.

### Shorter-term Fluctuations in Desire Level Within the Larger Trajectory

Many of the causal factors for desire level changes contributed to the gradual shaping and clarity of desire over time, as summarized in the desire trajectory model. However, women also reported a subset of causal factors for desire level changes that stood outside of the developmental model. These factors contributed to fluctuations in desire level on a shorter-term basis, and included life stressors, demands of work and family, and physical and mental health issues. These contextual factors, for the vast majority of women, did not factor in to their graphic representation of their desire level trajectory.

Stress. Not surprisingly, life stressors were frequently named as a causal factor for desire

declines.

I do actively make note of certain emotional behaviors that I noticed go up or down that are linked to desire. So if something is especially stressful and I've noticed a decrease in joy or contentment or gratitude in my life, that's going to directly affect the amount of desire that I have. (Susan, 45)

For women, the nature of this stress often involved managing the demands of work and family

life that resulted in sex being at the bottom of the priority list.

Well when things are going good, it's always on a high level. The only thing that brings it down a couple of notches, but never really diminishes it, is just personal life struggles. I mean, everybody has personal life issues going on — finances, kids, parents, what have you, but those are the only areas that would ever probably make it come down. (Marie, 40)

Definitely our schedule. We own our business. We've been a business 20 years. It's like you're a slave to it when you own a business and that part of it. ...but that is an issue — work and then that schedule of all time — go, go, go burnout feeling. It doesn't help. (Janice, 51)

You're not going to the gym, you're going into soccer. You refocus your narcissistic tendencies... it becomes an ordeal, to use that term, because you have to wait till they go to bed, then you have hope that you are still awake, and then you have to hope that you're both still interested... there was nothing in our relationship that was unnatural. It wasn't like I was avoiding him or he was avoiding me. It was just like, "I am exhausted and we can just snuggle?" (Sharon, 52)

Physical Factors. Physical factors were also named as contributors to fluctuations in

desire, and included general wellness, chronic health conditions, and hormonal changes.

Healthy Living. Several women commented that their short-term desire changes were

correlated with their overall feeling of physical wellness.

I'm very much into health and fitness, and to me, that's just part of that ball of wax, for lack of a better word... We eat well. Neither one of us takes prescription drugs. We do a lot of supplements, we exercise, and I really think that that's added to it. (Tamara, 56)

I know from myself that the more—like I'm pretty physically active and the more physically active I am, that plays a part in it. And so obviously this is the point that I was most physically active...The more physically active I am, the higher the desire. The more I'm like, "whatever," — the lethargic attitude comes into that. (Sharon, 52)

Chronic Illness. For others, the effects of chronic illness and treatment put dampers in

their desire.

I think because we were going through some difficulties with my health... and it just didn't work, I mean emotionally and physically... I would get sick and kind of nauseous. And the medicine I was taking in my eyes... I was working and just went kaput one day. And so just physical difficulties. (Renata, 55)

During this time right here, I had a broken nose and so I went to the doctor, got pain pills and started to like the pain pills. So a pain pill, it gives you—it doesn't give you the desire to even have sex. (Bernice, 48)

For Whitney, the effect of anti-depressant medication was so dramatic that she

hypothesized that it permanently "rewired" her desire, even after she stopped taking it:

I did take medication for a while that eliminated my desire to the point that I would have to remind myself I'm married, I have a husband who is interested in intercourse...I haven't taken medication in probably at least 12 years, and I've never regained a high level of desire after that though. It's almost like it rewired something in me. (Whitney, 47)

Hormones. The most common physical factor affecting women's desire were hormonal

changes. Lydia reported a strong relationship between desire and hormonal changes, noticing

fluctuations on a monthly basis according to her menstrual cycle, as well as during pregnancy

and postpartum. Seven of the ten women who had children also mentioned brief declines in

desire postpartum, though they all noted that these declines were not significant enough to factor

into the trajectory they drew.

Hormonal changes during menopause did factor into the larger narrative for some

women. Three of seven women who reported going through menopause noted a decline in desire.

For Janice, it was a fairly rapid decline from high to minimal desire.

I would describe myself as being probably, maybe a little above average on desire through my forties, to like 45. And then in the last five years, I've gone through menopause, which has been super easy, no problems at all, but my desire has gone way down to just very minimal. (Janice, 51)

For the others, desire decline was gradual:

I started perimenopause somewhere around 45 and that takes a toll on it. Not as big as people say, for me, and that's probably why the decrease, just natural progression of lifespan, age. (Sharon, 52)

Notably, both of the participants quoted above reported going through the development outlined

in the three stages of the model prior to their desire loss. And interestingly, both described

feeling secure and content with their desire, despite the change in level.

It's definitely, mentally, fine. I'm happy. I feel more content with myself than I have in years...But as far as sexually from that, lubrication is completely gone. Even in my head when I am ready to have sex, and I feel like I'm ready, physically, I'm not. Nothing happens... It's like, no, it doesn't bother me, but it's just kind of startling when it first starts happening. (Janice, 51)

Gloria reported that she was placed on hormone replacement therapy (HRT) following

surgical menopause, and noticed an increase in desire level as well as in a shift from purely

responsive desire to spontaneous desire. While her desire was "much improved," she hesitated to

attribute the full effect to the HRT:

Honestly, I don't know... I came into it more recently. I suspect that I had lower hormones before. Because take aside the physical aspect of having pain – I mean, it wasn't painful for years, that was more mid-life – it was just lower. I would not call it truly low, but low to moderate. Where now it's moderate to high. But that to me, has to do more with life as it is now. (Gloria, 45)

### Women's Trait and State Desire

The extent to which desire was experienced as having trait and/or state characteristics was assessed as part of the semi-structured interview. These data will now be reviewed, supported by select quotations.

# **Trait Desire**

Due to loss of audio for the first half of Bernice's interview, information relative to the question of trait-level desire was not available. Of the remaining 12 women, 10 described themselves as having a trait level of desire. Women who reported trait low or moderate desire cited their general level of interest in sex as support for this assessment. For women who self-assessed trait high desire, their reasoning included interest in sex, but also their willingness to satisfy their own sexual needs, enjoyment of sex, the presence of spontaneous desire, and having active fantasy worlds. Many women felt "wired" towards a certain level of desire, and viewed contextual fluctuations as merely short deviations from their natural state.

I really think it's just the way that we're wired, personally. Because I do, I wonder sometimes when maybe I do talk to a friend who does have that perceived higher level of desire. And I wonder, why do they have that, versus mine? Where, I have somebody that I'm still, after all these years, very attracted to, but just not this driven need for the sexual gratification, or that desire. I think it's just the way we are and everybody's just a little bit different on that. (Whitney, 47)

I'd like to say that I'm a pretty high-desiring person. Just lately been experiencing, I guess, more on the moderate. I guess just because my mind is just preoccupied with other stuff... Like sex drive is probably what a lot of people would classify as a male, like a male sex drive. (Marie, 40)

Yeah, when I was married and having kids. And that relationship, it was pretty high, and then as you get kids and your focuses change, it dips down sometimes. And time, effort, all of that plays a factor into it. But it was always pretty medium. Like I wouldn't say there was never a time where it was like, "ugh.", or a time like, "Ah!" (Sharon, 52)

Some women, particularly those with high desire, even suggested that their desire level was

inherited, referencing parents and siblings who were similarly desirous.

I think it—can it be genetic? We're all pretty desirous. My dad, my mom on the down low, my brothers, myself.... I think I'm made this way. I think I'm just made this way. (Lydia, 45)

You know I was thinking about that, and talking to my sister... And she says she has very high desire, too. And... she says our father is very sexual too. And so I'm starting to think maybe I've inherited it. It could be, I don't know? (Anna, 53)

Interestingly, three women with fairly stable desire trajectories made a point of commenting that

their desire level "*fit*" with their personality more generally.

And I think for me, with most parts of my personality, is that it's very even-keeled and so that would just—where it would just fit in...Like I'm not highly emotional, I'm not volatile, I don't like confrontation. You'll never really see me really out of my mind, crazy happy. I'm happy a lot but it's not like—or you'll never see me really—I'm just even-keeled. (Sharon, 52)

I guess that would play into my whole personality of—I'm not one of those people who is extremely passionate about one thing...Because I very easily become complacent with a lot of things in my life... To me, it is all intertwined on—Sexual desire is just part of that, of not having this ongoing burning inside for things. (Whitney, 47)

I haven't changed as a person, you know what I mean? And I think that's part of your personality, you know what I mean? I think that it goes along—it's a package deal, so to speak. (Nadine, 53)

# **State Desire**

With the exception of Tamara, who viewed her desire as unwaveringly high, all women

reported fluctuations in their desire. These fluctuations were ultimately categorized into two

types of state desire: *circumstantial*, and *purposely suppressed*.

State – circumstantial. This represents the most common description of desire states –

changes in desire resulting from a broad range of contextual factors that contributed to short-term

increase or decrease. The following quote illustrates this type of state fluctuation:

Well usually like, currently, not usually, but currently I'm super busy with work, so I've got my focus somewhere else. When I was younger if there was a lull, it's because I was super busy with my kids or super busy going to school or super busy—yeah. And it seems like a natural—like something fills in, something moves to the side, something fills in, something moves to the side...it kind of flows in and out. (Sharon, 52)

While the context of desire changes was often identifiable, some women also noted bursts of

spontaneous desire. In cases like Lydia's, the "desirous times" seemingly came and went "out of

the blue."

But I tell you, it will be just a bolt out of the blue to my brain – "Now's time." Okay, good. I pull it out, I have an orgasm. I know exactly where in my body I can go to have an orgasm. It's wonderful. It's so quick. I have an orgasm, and then I'm ready to wash dishes. (Lydia, 45)

State – purposefully suppressed. The second subtype of state desire was intentional

suppression of desire when it felt either unsafe to express, or unwanted because it could not be acted on. As discussed, some women reported suppressing their desire when they were young because it felt wrong or bad. Susan reported a need to *"keep it away"* when with a partner whom she did not trust.

A subset of women also reported a tendency to try and suppress very high desire due to the costs associated with having it and acting on it. They enjoyed their high desire and preferred to keep it at level which felt within their control. Lydia described the potential for her desire to be a *"runaway horse"* and described the *"responsibility"* that she felt to contain and express it only in ways that felt safe.

But it's also something that can have a lot of power, and can kind of overtake you. You have to have reins on it because it could be a runaway horse and in some, it is. When I was young, it was more so. I'm just thankful that I didn't get into some crazy situations, you know what I mean, with strangers and things. But it's a responsibility too. It could be careless... So you have to kind of channel it. That's what I'm learning now. Big time. (Lydia, 45)

For Lydia, the potential cost of acting on desire was having risky sex. Others emphasized the productivity and energy loss that came from having high desire periods that were almost all-

You know like when someone's manic, and they have like euphoria, and they think they can conquer the world, and they have these great ideas – "I'm going to do this, and I'm going to stay up all night." That's pretty much the same as for me when I have high desire and I have an outlet for it... "When am I gonna see them next? What should I wear? Oh, I'm gonna buy these new panties. Where should we do it," like frantic. And it's exhausting, you know? And you can't concentrate, like if you have something to write, or a job, or this or that. (Anna, 53)

I would say whenever I was at high levels of sexual desire it was - kind of gets in the way of life sometimes. It interferes with your day to day life, because you invest this time and energy into that – thoughts, and before and after. And there's all that activity in your brain. There's a lot invested in it time-wise. (Janice, 51)

Marie discussed how she learned to manage her desire level when sex was not available, by

keeping herself preoccupied:

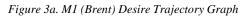
consuming:

I don't know if I've taken myself down a couple levels in order to, kind of, not be so on the extreme side... Before, it was, even though it just happened yesterday, like, "I'm hungry, so I need to be fed," so to speak. Where, "Okay, he's not here and I'm by myself, so I have to learn to be satisfied a little longer than I was before." ... Keep myself preoccupied with other things that will fill my time. Because an idle mind is a dangerous mind sometimes...it's probably one of the biggest reasons why I decided to get another degree, because it was "okay I needed to keep myself preoccupied."

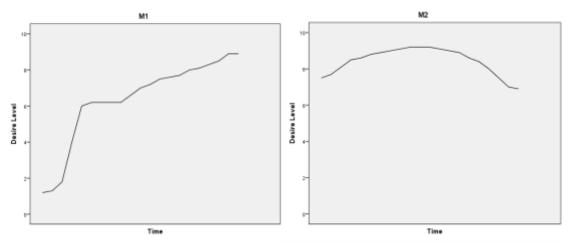
# **Graphic Representations of Men's Sexual Desire Trajectories**

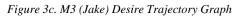
The desire level trajectories drawn by male participants at the beginning of the semi-

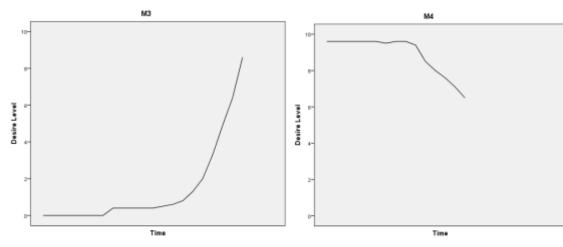
structured interview were reproduced in SPSS and are presented below in Figures 3a - 3j.

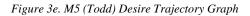












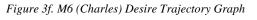
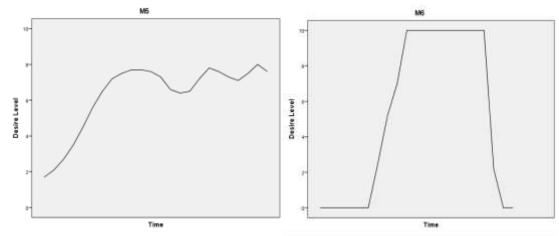
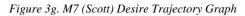
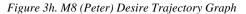
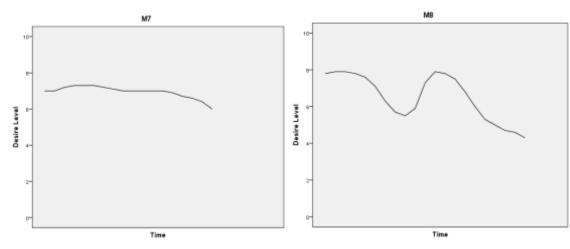


Figure 3d. M4 (Timothy) Desire Trajectory Graph

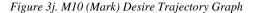


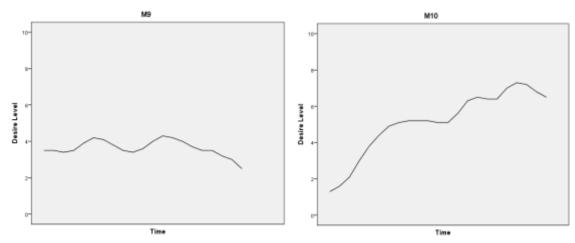














In contrast to the narratives provided by women in this study, men's narratives of desire did not reflect a common trajectory or model of desire development. Most commonly, men endorsed a fairly consistent level of desire throughout their lives, that was apparent by early adulthood, if not earlier. Men tended to begin their graphs (indicating onset of desire) at puberty, though a few reported an earlier onset. A smaller set of contextual factors for desire changes emerged in the narratives of this sample of men, falling broadly into the categories of: 1) *Individual*, including self-esteem, well-being, stress, physical health, and aging; 2) *Relational*, including positive relationship characteristics, and novelty and stagnation in sexual relationships. While the set of themes brought forth were fairly common among participants, the relative influence of these factors on desire differed. In other words, what may have been the single most influential factor in one man's desire trajectory may have been a cause for small, short-term changes in another. Often, men had two or three key contextual factors that influenced their desire trajectory. We will first review the causal factors present in men's narratives, differentiating between their influence on overall trajectories versus shorter-term changes where applicable. Table 8 presents these themes and categories. We will then present some limited data on the experience and enactment of desire, found in Table 9. It should be noted that the experiential element of desire was offered primarily by a subset of very high-desiring men. Select quotations, identified by participant pseudonym and age, will be offered demonstrate the connection of the themes to the data.

# **Individual Factors Influencing Desire Level**

**Self-Esteem.** Self-esteem was a primary influence on desire for a few men in our sample. Two men, Jake and Charles, reported that their "entry" into a consistent high level of desire was triggered by a marked increase in self-esteem. Prior to this point, desire was nonexistent or very low. For Jake, this shift occurred in his early twenties and was so dramatic that he likened it to having a brain tumor. He reported a *"snowball effect"* increasing both self-esteem and desire as he was reinforced by the satisfaction his change in sexuality brought him. This effect has maintained until the present day, reflected in a steadily increasing level of desire:

I know for a fact that when I was in high school, and even college, I was... I wouldn't say timid... Not as confident. I wasn't athletically gifted when I was younger. For some reason, that changed when I got to Europe. I don't know what happened. It was almost like one day I woke up and I was a different person. All of a sudden I was an MVP on a

football team there, I played well, and that somehow translated...I became more confident, I became a different person. And my confidence just soared. And I was talking to somebody the other day who was the same age as me, and I said we're sort of in this power time of our lives. We make good money, we do whatever the f--- we want, we don't have kids, we don't have wives. We do what we want when we want it. We have sex with whom we want, and it's very fulfilling sex usually, it's not this high school backseat car sex... But I would say, short answer, yes. As my confidence grew, my sexual desire has grown exponentially with it. (Jake, 42)

For Charles, desire also went "zero to one hundred" at around 20 years old when his lifestyle

changed dramatically. He reported being active in the rock and roll scene, and experienced career

and social success that fueled his self-esteem:

I had a good roof over my head, good payday, plenty of time off work when I needed it, and a badass guitar... I had a physique that was just noticeable everywhere I went .... And having a woman on this shoulder and a woman on this shoulder, and having two and three women in the bed at night, sometimes even including my wife. Yeah, we had a great time. (Charles, 63)

For him, desire remained steady through his 50s before a similarly abrupt and significant drop.

While the instigating factor was a heart attack, he highlighted the impact that his health status

(and consequent financial strain) had on self-esteem:

I think I was in my mid-fifties before I came back down. So somewhere between here and here was a heart attack and a triple bypass, and a broke-ass S.O.B with no money in his wallet. (Charles, 63)

In fact, he suggested that one change that might increase his currently low desire is "If I could

feel more successful like that again."

For two other men, the impact of self-esteem on desire was neither abrupt nor dramatic.

In their cases, self-esteem slowly built through early adulthood. As they matured, they became

secure in their sexuality and desire, and more comfortable enacting it in a way that felt natural.

For Brent, this involved learning to let go of self-judgment for wanting to be sexual. The result

was a steady increase in desire.

I feel like I had a lot of judgment on sexuality...I think it was self-judgment... I felt like if you hit on a girl, you're a pervert...So because I had that and never really dealt with, it felt like I was probably awkward... It wasn't until I moved into New York City. That's when I feel like I belonged somewhere. And that's when I felt like I was more okay with my sexuality...and I think in the last four years my maturity has pretty much gotten to the point of getting rid of that judgment on sexuality... And in my relationship now, I feel like I am allowed to be a man, more than I ever have in my life with somebody. It's almost like the like, like whatever comes out is fine, because it's genuine. (Brent, 42)

In Todd's case, his desire actually decreased once he arrived at a place of comfort and security with his desire. In his adolescent and early adulthood years, he described being caught up in the novelty of new sexual experiences. However, he began to feel pressure associated with maintaining high desire. As he described, he reached a point at which the novelty of sexual exploration wore off, and he recognized that maintaining that level of desirousness did not feel natural.

I think now I'm more comfortable not doing it. Just being able to just exist without having that stress hanging over...it can be stressful to have to feel like you have to perform more, or be better, or you know, find somebody better...To try and maintain that. I just, I don't need to feel any stress about it. So now, things have just settled into more comfortable. (Todd, 41)

Well-being. An increase in happiness and life satisfaction was reported in a few cases to

relate to desire level. For example, one man who reported variable desire through his life

reported that high desire often came with periods of good "morale," while low desire was

associated with low morale. For others, feelings of well-being did not influence the broad

trajectory, but were identified therein as acting on desire.

I didn't work for a couple of years because I had the money and so now I'm surfing and just having a good time, going to pool parties. So yeah, the desire got back up to the point that, yeah, this is fun. (Scott, 43)

And I have my lows. But the general trend - there's definitely times that I get depressed, and I'm just not desiring anything. But those are very short periods of time. And I always know myself well enough to know that it's going to pass. I'm not going to feel this way forever. But it happens. (Jake, 42) Well I think my desire increases as a result of doing things, keeping my anxiety away. So if I'm exercising or working or doing things that keep me from being anxious, then my desire definitely rises. When I feel better, then I can feel that I have more desire. (Todd, 41)

Stress. Stressful life circumstances were also named as contributors to short-term

changes in desire. For Mark, age 50, the "daily stresses of life" interfered with the ability to

prioritize desire:

We can sit and talk about the daily stresses of life. When you're younger you have beyond whatever, with no responsibility. And then life happens and children happen and responsibilities happen. And what time you used to spend acting on desires is now spent otherwise... it's not that you stop that desire, I think life takes over the desire. Your attention's taken somewhere else. (Mark, 50)

Interestingly, for Scott (43), a high-desiring man who reported that his drive for sex and drive for

success were the two core parts of his identity, a heightened level of stress and pressure actually

increased his desire for a time. One it surpassed this optimal level, though, it had the opposite

effect:

I can think of my lower valleys. I lived in New York and I worked like 7:00 in the morning till 11:00 at night. Because I was in the IT industry at that time. And I was a CTO at Weight Watchers. I was just crazy busy all the time. And it was-- when I first started it, I feel like the first year, I think it made my drive go higher. And I don't know if it was just the constant work mentality or whatever it was. Constant drive. But then after that first year, I was there for another nine months, and that was probably one of the lower valleys of my sexual desire. It's just like, I think I was burned out. (Scott, 43)

**Health Problems.** Three men in this sample – Charles, Mark, and Peter – reported decreases in desire consequent to health conditions, which they did indicate in their overall trajectory. As previously reported, Charles suffered a heart attack which was an instigating factor in an abrupt desire decline: *"like falling off a cliff."* He reported that his desire loss was in part sustained by low blood pressure, which led to erectile dysfunction. The other two men reported that chronic pain and pain medication negatively impacted their desire. In both cases, the

trajectory shows a steady downward trend from the time of injury, though both men reported other contributing factors to the decline.

Age. Though seven trajectories showed a decline in desire in recent years, four specifically named age-related changes as a causal factor, to varying degrees. The changes were not described as declines in desire level, per se, but rather changes to sexual performance or to

the importance of fulfilling desire.

In one way I would draw sort of a steady line, and in another way - this is so stereotypical - but around my 20s, I would say from 20 to about 35, there was more of an urgency. Whereas now, if one engages in sexual activity today or waits until tomorrow or waits until next week, it's going to be okay. But the desire's still there. (Sam, 44)

Yeah, as you can see from the chart, over the last couple of years I've started dropping....there will be times when I'm trying to have a conversation with girls or whatever. And I just want to have a conversation. There's no desire whatsoever. And that used to never happen. (Scott, 43)

As you get older and your responsibilities, a wife, everything-- my desire hasn't changed. I mean if my wife were to say "sure, daily," then yes, my sexual desire daily would be yes. But it's a partner thing and sometimes we're just too damn tired. Fifty years old, what I did at 20 is not what I do at 50. (Mark, 50)

For Timothy, this decline was particularly distressing, as he felt highly self-conscious about

aging, and reported a significant loss of self-esteem with his changing physical appearance.

And it stinks, because I want to be like that-- the 19 year old that can go all night and keep going and when you get old you can't. And it's sad, because it just makes me feel old and it's just makes me feel my age more...The desire's there, but the ability's not and every year that passes that ability will decrease even more. (Timothy, 45)

### **Relational Factors Influencing Desire Level**

Positive relationship characteristics. One married man in this study, Mark, reported

that his desire level was primarily influenced by the level of intimacy he felt with his wife.

Following an initial puberty-related increase, his trajectory showed a rise in desire after the birth

of each of his two children, plateaued in between. He commented while walking through the

graph that "*I didn't realize that I was subconsciously drawing our lifeline*." He reported that their intimacy grew by working through challenges together, and that desire grew steadily along with it: "*The more we worked together, the more - the more adversity is thrown at you, if you* 

fight it as a team, the closer you become."

While Mark's was the sole trajectory that was dictated by the quality of the relationship,

several other men identified positive relational interactions that facilitated their desire. The most

frequently reported among men in this sample was being desired. In many cases, having their

desirability affirmed also had the strongest impact on desire.

Most of all, what makes a woman desirous is if I can feel they find me desirous, that's the main thing...feeling desired. (Timothy, 45)

I was so, almost reconditioned to a point where it was just like, I forgot what it was like to have somebody desire you the same time you desire them. So in the last four or five years it was just like a new experience again, like a rebirth. (Brent, 42)

Feeling wanted is reciprocated, it has to be. You can make your partner feel wanted as much as you want. But if it's not reciprocated, you can say "I love you, I love you, I love you," but if you don't hear it back, or feel it back, then what good is it? (Mark, 50)

Sometimes it's enough to know that they want me. And like I was telling you earlier, with having very strict standards, it's always very satisfying - like, if gay men hit on me - I'm completely straight, but not homophobic. I love it. I think it's f---ing great. That I'm desired by these men, even when I'm not attracted to them. (Jake, 43)

Another relational factor that influenced desire was the reinforcing value of satisfying sex. This

theme was most commonly reported by men who were very high-desiring and non-monogamous.

As was previously reported, Jake experienced a strong increase in desire alongside an increase in

self-esteem, which was reinforced by his decision to pursue the type of sex he found most

fulfilling:

It came from this baseline, let's just have this nice sex and have it consistently - to this different style of sex that's going to be much more intense, but shorter lived... The whole pattern changed. (Jake, 42)

The other two men in this sub-group reported a very early awareness – during their teenage years – that their desire thrived in the context of non-monogamy. This was quickly reinforced by the satisfaction they felt in acting on their desire in the way they wanted. Their trajectories both show a slight increase in desire – from high to even higher – during their late adolescence, attributed to this decision to be non-monogamous.

And so I guess, at least in my formative years, late teens early 20s, sexuality became something that made me feel better about myself. And so if you combine that with ditching the traditional societal views of sexuality, then, at least for me, I was on a pretty good loop - this makes me feel good about myself, and it doesn't really matter what the culture thinks. (Sam, 44)

Novelty and stagnation in sexual relationships. Almost all men reported that novelty,

either in partner or in sexual experience, had a positive impact on desire level.

Certainly, the beginning is high-level desire, right? But it always is. (Greg, 40)

I guess in the beginning of it it's total lust and attraction, and it turns into love, and then you start to become comfortable with the person and then it becomes less frequent but it's deeper connection...And then probably if a relationship ended, it would kinda go back to that point - It would be a high drive again. (Brent, 42)

There's a little bit of a pattern with change and spontaneity and doing thing differently, and when things are different and exciting it seems to arouse my, raise my desire level with somebody, just something totally off pause. (Timothy, 45)

For some men, the novelty-driven increase with a new partner lasted anywhere from a few

months to a few years before the feeling of familiarity set in and desire decreased. For those

reporting very high desire and a preference for non-monogamy, though, the influence of novelty

was much shorter-lived: Every week it was somebody new. And it'd last for a week, then

somebody new. (Scott, 43). Jake described his pattern of novelty and habituation as "clockwork":

It's about, usually about sexual encounter number three. If it's three in one night, no - but the third singular occasion of having sex... It's usually after that, where for some reason, more often than not, it's sort of bottoms off. I get this incredible sense of boredom, and I'm just like "uhhh." And there has to be something to drive me further. And there usually is not. In almost every case, there's not that push. (Jake, 42) In the trajectories of these men whose desire was contingent on novelty and non-monogamy,

their decision to act on this desire allowed it to be sustained. Thus, novelty did not register in the

trajectory in the form of spikes in desire, but it was what allowed it to remain consistently high.

# Experiential characteristics of men's desire

The value of desire. These themes were primarily emphasized by men with very high

desire. For this group, being able to act on their desire was a key source of self-esteem. At times,

it was the validation from having a new partner show interest in them that boosted self-esteem:

I've always had a lot of self-esteem issues for my entire life. I just never have felt good about myself. So, at least for me, there's always been this reduction of that. You know, if I can meet somebody and they want to have sex with me, then at least somebody likes me, at least for an hour. And so you feel better about yourself, at least for a short period of time. It's certainly not a long-term fix. It's not like I sit here now going "I must be great, you know, a girl 20 years ago wanted me." (Sam, 44)

At other times, the validation didn't come from partners, but from their own sense of satisfaction

with having a high drive. Jake reported that there were days when his "unstoppable" sex drive

made him feel like "a f---ing god." For Scott, his sex drive served as a sort of barometer for how

successful he would be in other areas of life:

Those times where it's dipped the lowest, those are the times where it's like-- it's a little too low, because it feels like it's messing with every part of-- I felt it's affecting who I am and my ability to succeed in other parts... Because, like I said, my drive-- to me, my drive is - everything I do, my drive is high. So when that drops...then I feel like "well, does that mean everything else is dropping?" (Scott, 43)

These men also made a point of prioritizing sex in their lives in such a way that their desire

needs were met. This meant seeking out the types of sex that they found most stimulating,

without judgment, as well as seeking open relationships/marriages.

And then, at least most of my life, I've just been very comfortable with sexual activities - going to swingers clubs, hanging out on a nude beach. You know, it's fine, why not, let's try it. And so yes, I feel that I had higher levels of desire than most people had. Although

again, it could be that everyone has high levels of desire and I'm just more relaxed about doing what we want to do. (Sam, 44)

**Cost of high desire.** While this group of men were very highly satisfied overall with their desire and their sex lives, they did report cost associated with acting on high desire. The costs fell broadly into the categories of financial, relational, and energy/productivity. From a financial standpoint, men noted that *"Particularly as a male, pursuing sexuality costs you money... I would definitely have a lot more money in my life if that were not the case"* (Sam, 44). Examples of financial cost included calling out sick to work, or purchasing plane tickets and hotel rooms if the opportunity for sex with a desired partner could potentially arise.

The relational cost of high desire was felt mostly strongly by Jake, who expressed frustration and sadness that his desire needs precluded a long-term relationship. As opposed to the other participants who continued to enjoy sex with their wives in the context of an open marriage, for this man, the *"fuel reserve"* of his desire for each individual partner was small, and desire could not be re-sparked.

I've tried the open thing -- but it doesn't resurrect anything with them just because I can also f--k other people... It does upset me knowing that I would love-- I almost feel like some Greek tale of this guy who's constantly tortured knowing that he's going to have this really great sex but eventually it's just going to fall off. Like I've been cursed by some Prometheus or just like constantly getting my liver ripped out every day, but then it regrows so it's good. It's this weird anticipation of like I know it's going to happen, but I'm hoping it doesn't happen this time. But I know that it does. (Jake, 42)

Finally, these men noted that pursuing desire took energy away from other areas of life, and affected their productivity. One simply called his desire a *"huge time drain,"* while another shared his friend's observation of him, that *"If you invested as much time as you do having sex with girls in your career, you would be wildly successful."* (Jake, 42) Nonetheless, men viewed the costs as a simple tradeoff for the satisfaction that their desire brought them.

It's like a tragedy that I'll never be in a long-term, fulfilling, sexual relationship.... But am I going to trade what happened in my life with that? No. ...It is a trade-off, and I wouldn't trade it, though. That's the thing, I wouldn't trade it. (Jake, 42)

I've had a lot of great times. I've had a lot of experiences that I wouldn't trade for anything. I realize that makes me very much an outlier in a lot of ways, when it comes to sexuality...I've been to brothels before, I've been wherever there's sex occurring, and it's been a lot of fun. (Sam, 44)

From goal-oriented to intimacy-focused desire. Other men describe a shift in their

experience of desire as they aged, from young desire that felt "goal-oriented" - with the goal as

intercourse - to their current desire that felt more complex and based in intimacy with their

partner. This shift in the experience of desire was viewed as a byproduct of the maturity gained

from life experience.

But as I got older, I never thought I was going to get married, but I still had the desire to be with somebody longer than just sexual encounters, so that's... They definitely converged later on ... I can't really think of a way to separate the two. (Todd, 41)

I think in the last couple years it changed a little bit. Before that was like, just being intimate. My goal was I had to have sex. Lately in the last few years, it's more like something that could happen, or could not happen. But it's not because of the sexual desire. It's just more of a maturity sort of level. That's not the end-all, you know? It's great to have it, it's not like I have to have it. (Brent, 42)

Yeah, but that desire has changed. You could draw a line of single, on-the-hunt desire versus happy-and-together desire. It could be two lines...Yeah, because if dimension one were by itself, then about nineteen that would drop almost to the bottom. And at nineteen, if it were a different color for happiness and desire toward one person, then it would stay exactly like it was. But you only asked for one line. (Mark, 50)

# **Analyses of Men's Desire Trajectory Graphs**

The analysis of men's graphs was restricted to the overall trajectory, as there was no data-

driven reason to divide them into segments, as was the case with the three-stage model in

women. The slope and variability of the overall trajectory was calculated for men's graphs, and

values are presented below.

ID	Slope	Std. Error
	Total	Total
M1 (Brent)	.34*	1.05
M2 (Sam)	03	.73
M3 (Jake)	.54*	1.48
M4 (Timothy)	20*	.60
M5 (Todd)	.23*	1.29
M6 (Charles)	06	4.40
M7 (Scott)	05*	.22
M8 (Peter)	15*	.88
M9 (Greg)	02	.45
M10 (Mark)	.25*	.64

Table 10. Slope and Standard Error Calculations for Men's Desire Trajectories

Three slope patterns emerged from men's graphs: 1) Significant positive slope, 2) Significant negative slope, 3) Nonsignificant negative slope. Graphs with a high amount of variability often showed infrequent but substantial changes in level (e.g., Brent, Jake, Charles). **Significant Positive Slope.** Four men indicated a significant positive slope in their trajectory. In two cases (Brent, Jake), this was due to a single, abrupt increase in desire. In the other case (Todd), this was due to an initial increase followed by a more consistent pattern of fluctuation. The final case (Mark) showed a steady increase over time.

**Significant Negative Slope.** Three men indicated a significant negative slope. In two cases (Timothy, Scott), the slope was less variable, and reflected an age-related decline. In the third case (Peter), there was an age-related decline coupled with variability through the trajectory.

**Nonsignificant Negative Slope.** Three men indicated a non-significant negative slope over time. In two cases (Sam, Greg), the trajectories were fairly stable with some age-related decline. In the third case (Charles), the variability was high due to an abrupt and substantial increase early in the trajectory, and a similarly abrupt and substantial decrease near the end.

# Men's Trait and State Desire

Nine out of 10 men viewed themselves as having a trait level of desire. The majority of men based this assessment on their level of interest in sexual activity, while three (with high desire) also included the extent to which they prioritized the pursuit of sex. Two reported a broader feeling of having a "sexual energy" or "sensual personality." Men generally reported that their desire felt fairly stable over time, despite changes in sexual activity. A couple of men joked that their trajectories would look like an "echocardiogram" (Mark, 50) or a "seismograph for a major earthquake" (Charles, 63) were it to track their sexual activity versus desire. Others commented after reflecting on desire during the interview that desire had showed more stability than they initially thought:

Looking at now it's like, because I was thinking about, like when I was married and then in that point where we pretty much didn't have sex for years. I looked at that as a decline. But my drive wasn't declined. (Brent, 42)

I don't know, maybe I'd smooth out some of those curves. It is always, it's just always present. (Greg, 40)

Some viewed their desire level as a product of their biology, hypothesizing a role of genetics,

chemistry, and brain wiring in determining their level of desire. Others pointed to both biological

predisposition and environmental influences.

Maybe the people who have low desire have lower levels of receptors. I'm not sure. Or a negative experience. I've never experienced anything negative. It's always tapped the pleasure centers, I guess you'd say... So yes, there is a possibility of different chemistry and different ways we are wired. (Mark, 50)

Probably because my mother was very sensual and sexual in her relationship... just from what I seen with my step-dad, and from what I hear from my sisters, my mother was very, very sexual...So, it's kind of, in a way, I think I picked up a lot of those things from my mother. (Timothy, 45)

Further, some men did view their desire level as reflective of their broader personality:

I'm a physical person...I feel like I have the creative energy, which I think is probably linked to sexual energy. It's just energy...I'm very like hyper, you know, physical. But it's like, it's just a lot of just energy and it's like sexual energy, but it's like life force energy. I think it's all kind of the same thing is what I would say. (Brent, 42)

I don't quite separate the two. The sexual part of life from the rest of life. I think I'm pretty even across the board that way. I don't have this secret level of desire for sex compared to food or work or something like that. (Todd, 41)

I think it just fits well with me, because it keeps me moving. It keeps me the going, because I just can't stand to sit around. I'm sure one is directly related to the other... So I think the desire on both sides, the sexual desire, is an impetus to the other desires - that "get out in the world and experience. (Scott, 43)

### **State Desire**

Despite a fair amount of stability across, the majority of men identified fluctuations

within their trajectory, which were categorized as *circumstantial* and *purposefully suppressed* 

desire.

State: Circumstantial. As reviewed in the section on causal factors, there were a number

of personal and relational factors that contributed to short-term changes in desire. As these

factors came and went, desire fluctuated alongside. Additionally, men reported instances of

spontaneous - or, perhaps highly responsive- desire that was frequently triggered throughout

their days, occurring on an even smaller scale than the causal factors discussed previously. As

Sam noted:

They really do come on sporadically. It could be that you're just walking along and notice someone cute and the mind starts wandering. You know, and they don't even know it, you'll never see them again. Yeah, those cycles, it could be almost anything that sets that off. (Sam, 44)

**State: suppression.** Some men reported that they tried to purposefully suppress their desire when it occurred at times they deemed inappropriate. For example, Sam reported that desire was easily triggered by seeing attractive women, and he felt he needed to *"reduce"* his desire when he was around women who he was not able to pursue sex with. As he stated, *"desire"* 

*is something that I want to reduce, unless I want to act on it.* "For another man who was distressed at the lack of intimacy in his marriage, he reported trying to *"program myself to just throw it out of my eyesight... When my mind starts thinking about sex, I try not to think about it.* (Timothy, 45)

### CHAPTER VI

# DISCUSSION

## **Summary of Results**

# Women

The narratives of women's desire trajectories suggested a three-stage developmental model of women's sexual desire. In adolescence, desire was not well understood, as engagement in sexual activity often reflected a wish to fulfill others' expectations or to gain validation, and often co-occurred with shame about being sexual (Stage 1). Then, a variety of life experiences helped women shape their sense of self and learn about the nature of their desire (Stage 2), leading to the present time during which desire is defined, valued, and enacted with autonomy and according to their own wants (Stage 3). Though desire level was more often variable than linear over the lifespan, many women interviewed indicated an overarching pattern of desire level increase over these developmental stages. A majority also felt that their desire level was an inherent, trait-like characteristic despite variability.

# Men

This sample of men had less to say about their desire trajectories, and it was not possible to infer a model from their data. Men's trajectories showed less variability, with a stronger sense of what and how they desire apparent from an earlier age. In most cases, there were two to three primary contextual factors influencing men's trajectories, falling into the categories of individual (self-esteem, well-being, stress, physicality) and relational (positive relationship characteristics, novelty, and stagnation) factors. Nine of 10 men viewed their level of desire as a trait-like characteristic.

#### **Interpretation of Results**

### Women's sexual desire as a developing entity

The fact that women's desire level was variable across the lifespan is not surprising. However, our data suggested that this variability occurs within a larger developmental process through which desire takes shape. This study represents the first attempt to articulate a developmental trajectory of desire over the lifespan. Within our model are several features that are consistent with existing literature, as well as some novel findings that further our understanding of women's desire.

Adolescence and amorphous desire. The literature on adolescent girls' experience of sexual desire is quite slim, possibly indicating a societal apprehension and anxiety associated with acknowledging adolescent girls as sexual beings (Tolman, 2002). Nonetheless, the topic emerged in the literature in late 1980s and early 1990s, and has gained traction in recent years. Considering the fact that sexuality is embedded within an evolving socio-cultural context, research has demonstrated some shifts in young women's sexual expression over the past 30 years. While we will later consider our findings in relation to some of these recent developments, it is useful to refer back the early literature on female adolescent sexuality.

In her seminal essay following a year-long ethnographic study of an urban public school, Fine (1988) observed a "missing discourse of [female adolescent] desire" within schools and sexual education curriculum, reflective of a similar lack of attention to adolescent girls' desire in the sexuality literature. She observed that the dominant discourse emphasized danger and immorality, often silencing the "whispers" of desire by girls themselves. Research at that time considered girls' sexuality almost exclusively in terms of risk and negative outcomes, leaving little room for desire or pleasure (e.g., Fine, 1998; Thompson, 1990). Fine's articled urged researchers to not interpret this "missing discourse" as evidence of an absence, but instead as reflective of a social silence around young women and desire (Fine, 1988, p. 29) Within this context, it is not entirely surprising that the defining characteristic of our "Stage 1" desire was its lack of definition. Desire got lost amid the often-contradictory messages girls received about their sexuality. Tolman (2002) has suggested that the absence of desire – or even the absence of an expectation for desire – increases the susceptibility for girls' sexual experiences to be dictated by the needs or expectations of others. Indeed, women in our study identified the struggle of having sexual feelings, "hiding" or suppressing them out of shame, and yet feeling as though sexual activity was "what you do" – what Tolman (2002) termed the "dilemmas of desire."

Our "Stage 1" themes are arguably the most influenced by social norms and attitudes towards women's sexuality. Given that North American sexual attitudes have become increasingly permissive with less guilt associated with sexual activity (Hamilton & Armstrong, 2009; Petersen & Hyde, 2010; Wells & Twenge, 2005), it is interesting to consider the extent to which our model will apply to today's young women. One particularly relevant development has to do with girls' sexual agency. In our model, agency was a key factor that distinguished our "Stage 3" desire. For women in our sample, agency was not part of their early desire experience, but developed later in life as they let go of the pressure to conform to others' expectations. More recent literature, however, suggests that agency in sexual expression is becoming more important for young adults, and even adolescents. For example, when determining their "approval" over others' sexual choices, adolescents are more likely to consider the individual's agency and personal responsibility over their choices, as opposed to their adherence to gendered or moralistic ideals (Abbott & Dalla, 2008, Armstrong, Hamilton, Armstrong, & Seeley, 2014; Jackson & Cram, 2003). Bay-Cheng (2015) argues that a shift in girls' construction of their sexual identity has come about with the influence of neoliberalist ideals. She argues that whereas young women have traditionally been judged according to a one-dimensional framework – which she names the "virgin/slut continuum" – these cultural shifts have introduced sexual agency as another dimension on which women are now evaluated. She proposes a matrix in which the traditional continuum of sexually abstinent to sexually active intersects with an "agency line." In this model, both abstinence or sexual activity can be enacted in a non-agentic or an agentic manner, with different ramifications within each quadrant. While her model has received both support and critique (e.g., Lamb, 2015; Lerum & Dworkin, 2015; Tolman, Anderson, & Belmont, 2015), there is some agreement that sexual agency has moved closer to the forefront of young women's sexual identities. This raises the question of how increased sexual agency from an earlier age might influence our developmental trajectory of desire. While Bay-Cheng does not suggest that agency in adolescence could eliminate sexual shame or pressure to adhere to others' expectations, it might provide a counter-balance that was not felt by the women in our study.

We can also consider an alternative hypothesis to account for the themes of our "Stage 1" desire. It is possible that what we have termed "undefined desire" is not purely a product of external forces dictating women's sexuality, but actually reflective of normative adolescent development. Even without stifling sociocultural factors, the process of identity formation remains a developmental process of adolescence and young adulthood (Erikson, 1968; Marcia, 1967). Some researchers have incorporated sexual identity development into Erikson and Marcia's developmental stages. While this work initially focused solely on sexual orientation (Worthington, Savoy, Dillon, & Vernaglia, 2002), others (e.g., Maas, 2006) conceptualize this more broadly as the task of figuring out who we are as sexual beings, including the nature of

how we desire. In our model, this process is an important part of our "Stage 2" development that results (for most women in our sample) in a clear sense of their desire self-concept.

The task of defining desire. According to the model we have put forth, women's initial "undefined" desire becomes clarified through a highly individualized process which we have broadly characterized as "life experience teaches about desire." This model captures one way in which desire can develop across the lifespan. A logical question, then, is "for whom does it develop this way?" Are there certain experiences within this second stage that determine whether or not desire takes on the characteristics of our third stage?

*The role of relationships.* As reviewed earlier, the reconceptualization of women's sexual response as circular rather than linear and female sexual desire as responsive rather than spontaneous led to a positioning of relational factors as the key stimuli for desire (Basson, 2001). Within this framework, intimacy and the emotional health of the relationship became governing factors of women's desire, and were required (along with appropriate sexual stimuli) for women to be either spontaneously or responsively desirous (Basson, 2007). This reframing of women's desire as a relational phenomenon had support in the clinical literature. Based on his work with couples, Levine (2006) theorized that women consider intimacy as a gateway to sex, whereas men consider sex a gateway to intimacy. Similarly, McCarthy (2003) argued that women's desire was dependent on their satisfaction with their relationship, and that women generally valued relational intimacy more than sex. An abundant empirical literature also underscores the importance of relationship factors in women's desire, such as intimacy (e.g., Regan & Berscheid, 1996), good communication (e.g., Byers, 2001), and compatibility (e.g., Impett, Strachman, Finkel, & Gable, 2008).

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The importance of relational factors was indeed identified by a number of women in our study, some of whom even suggested that their desire would not be as high or as fulfilling were it not for the relational context in which it occurred (e.g., Susan, Gloria, Tamara). However, women also emphasized themes that challenge the assumptions that have grown out of relational models of desire. Even among those whose desire was relational, it did not follow that intimacy was valued above and beyond good sex. Such blanket assumptions (e.g., McCarthy, 2003; Regan & Berscheid, 1995) are far too simplistic and do not reflect the importance of good sex to intimacy for some women in our study (or, the complete decoupling of intimacy and sex for others). Women emphasized the reinforcing value of pleasurable sex, and the importance of having partners who care about and prioritize their pleasure. This reciprocity in sexual relationships was particularly impactful for women whose early relationships felt unbalanced in this regard.

Further challenging the relational models of desire were those women who reported that relationships were unnecessary or even inhibitory to satisfying and high desire. This is consistent with a growing body of literature suggesting that relational models, despite being a positive and long overdue alternative to drive-based models, still fail to capture a subset of women. Meana (2010) challenged the assumed primacy of relationality in women's sexuality, pointing to a growing body of research suggesting that women's feelings about themselves are as important to desire as their feelings about their partner.

From the standpoint of facilitating a transition toward defined, valued, and agentic desire, how might we "evaluate" the role of relational experiences? For one, the process of learning about what facilitates and inhibits desire requires that women accumulate sufficient experiences to figure this out. For those who do not end up with a clear sense of their desire, it is possible that their sexual and relational experiences are not sufficiently varied. In our sample of women, all had multiple sexual partners and significant relationships. They tended to speak of their prior (sexual) relationships in ways that highlighted what they learnt about their desire within these relationships – not only in terms of what enhanced or inhibited it, but what led to the recognition of its intrinsic value. Thus, it would seem that desire was progressively shaped through relational interactions. For women in our study, the two outcomes of this process appeared to be either a recognition of the value of intimacy to desire, or alternately, the recognition that relationships are unimportant to, or even hinder, desire.

In women for whom relationships are important to desire, another possibility is that the balance of positive versus negative relational experiences influences whether or not desire becomes valued. Positive and negative sexual anticipation has been identified as an important factor influencing desire and arousal in the short term (e.g., Graham et al, 2004; McCarthy & McCarthy, 2013). In other words, if one anticipates that a sexual experience will be pleasurable, one is more likely to desire it. Perhaps the overall balance of these experiences over time contributes to a broader form of positive or negative sexual "anticipation" that influences the value and centrality of desire to life. Women in our study indeed emphasized positive relationship characteristics that facilitated desire more so than negative ones inhibiting desire. Although there are undoubtedly certain relational factors that are more impactful than others, there may also be individual traits that influence a woman's propensity to emphasize positive versus negative interactions. For example, perhaps a predisposition to high desire (as endorsed by much of our sample) leads women to subconsciously give more weight to desire-facilitative experiences.

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*Development of self: the key to women's desire?* While relational factors were variably influential in strengthening women's desire, we found near-unanimous agreement in the importance of a strengthened sense of self in the movement towards our "Stage 3" desire. The importance of intrapersonal factors to women's desire has been under-emphasized in the movement toward conceptualizing desire as a relational phenomenon. Many of the factors that were reported by women in our study as enhancers or inhibitors of desire in the short term are consistent with a growing literature on the importance of intrapersonal and individual factors, such as mood (e.g., Brotto, 2010; Graham et al, 2004; Phillips & Slaughter, 2000), body image (Seal, Bradford, & Meston, 2009), hormonal fluctuations (Regan et al, 2003; Stuckey, 2008), and stressors (Basson, 2006; Laumann, Paik, & Rosen, 1999). However, while these factors certainly contributed to variability in our sample, they did not play into the overall development of desire within our model. The intrapersonal factors that were key in terms of "setting the stage" for their present-day (Stage 3) desire were those involved in a longer-term process of "coming into one's self" – the progressive shaping of women's identities as they navigated life and relationships.

The importance of a reasonably differentiated self in shaping desire has been emphasized in the clinical literature (e.g. Schnarch, 1991, 2013; Perel, 2006). For example, Schnarch theorizes that sexual desire and selfhood are "thoroughly entangled." He posits that problems in desire may reflect a lack of emotional autonomy and a dependency on others for a reflected sense of self. Thus, the work of connecting to desire involves a process of developing emotional autonomy (Schnarch, 2013). For women in our study, developing the ability to move from othervalidation to self-validation was indeed part of what allowed them to experience their desire in a fulfilling way.

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The role of sexual self-awareness described by women in our study (i.e., learning about their body and what produces pleasure) is consistent with research on contributors to positive sexual self-concept and agentic sexuality (Johnson-Vickberg & Deaux, 2005). From a broader standpoint, though, the decrease in shame and self-consciousness in middle age (consistent with Orth, Robins, and Soto, 2010) increased women's ability to explore desire without judgment. How might this act on desire level? One option is that women who experienced increased desire at this stage are in fact pre-disposed to higher desire, which is now uninhibited by those factors that had previously dampened it.

### **Defined desire: agentic and valued**

The characteristics of desire in the third stage of our model add an important dimension to the way that women's desire might be approached, empirically and clinically. First, agentic sexuality has typically been explored as it pertains to sexual behavior – specifically, that agency is apparent by women's willingness to initiate sex and communicate desires to their partner (Fetterolf & Sanchez, 2015). In our sample, agency was described as far more fundamental than the mere initiation of sexual activity. It reflected a broader feeling of ownership over desire and an ability to decide how it would be enacted in their lives. In some cases, that meant not feeling pressured into undesired sexual activity. Interestingly, while ownership and agency have previously been identified as characteristics of high desirers (Cherkasskaya, 2014), our results suggest that the development of agency over desire can actually be an important causal influence for high and satisfying desire.

The centrality of desire to women's sense of self (and vice versa), and the joy and fulfillment desire brought to the lives of the women in our study stands in contrast to ageist stereotypes that suggest that desire and sexuality become less important for women as they age (Weeks, 2002). Perhaps this assumption is inferred from evolutionary theory, insofar as sex loses value when it no longer serves a reproductive function. Or perhaps the extent to which one values sex is assumed to be inferable by one's level of sexual activity, which has been shown to decline with age (Herbenick et al, 2010). National, population-based surveys of sexuality and sexual function that impose upper age limits such as 44 (Mercer et al, 2003) or 59 (Boyle, Cook, Purdie, Najman, & Dunne, 2003; Laumann, Paik, & Rosen, 1999; Richters, Grulich, de Visser, Smith, Rissel, 2003) only serve to reinforce the notion that sex loses relevance with age.

Research on variables such as sexual satisfaction in middle-aged and older women is growing, in an effort to combat the over-simplification of the relationship between age and the value of sexuality (e.g., Avis et al, 2005; Trompeter, Bettencourt, & Barret-Connor, 2012) Though these studies demonstrate that sex is indeed important to older women, they tend to have a limited scope insofar as the importance of sex is considered within a relational context. For example, questions such as "to what extent would you say that sexual expression is an important part of your relationships" (Thomas, Hess, & Thurston, 2015) would capture only part of the reason why desire was valued by women in our sample. What women emphasized was the value of desire for its own sake. One of the most common reasons why women in our study valued their desire was because it made them feel good about themselves.

Our data also suggest that the relationship between desire level and age is more complex than the literature tends to suggest. The apparent norm of linear, age-related decline, documented as early as a woman's late twenties to late thirties (Hayes & Dennerstein, 2005, for review) was reported by four of 13 women in our study. For the remainder, desire was stable, variable, or increasing during Stage 3. Some researchers have argued that increases in desire in middle-aged women reflect a signal by the "biological clock" to capitalize on remaining fertility (Easton,

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Confer, Goetz, & Buss, 2010). Though our sample size is very small, the menopausal status of our desire-level "trend" groups does not align with this hypothesis. One woman with declining desire had not yet begun menopause, and three women with steadily high or increasing desire in Stage 3 were in or past the menopausal transition.

Our data are somewhat more consistent with studies that evaluated the same women at multiple timepoints (years apart), a method that provides more nuanced information on variability that can get lost in cohort studies (e.g., Koster, Eplov, & Garde, 2002; Hällström & Samuelsson, 1990). In multiple point studies, a substantial number of women reported steady or increasing desire. Cohort studies tend to report the percentage of women in each age group reporting low desire within a given time frame (Hayes & Dennerstein, 2005, for review). Thus, reports of desire stability or increase are simply left out, and an overly-simplistic conclusion of age-related decline can understandably be drawn. It is also interesting to consider the limited scope of many cohort studies to documenting the prevalence of sexual dysfunction. As such, sexual desire is often assessed with a single, unvalidated question, such as whether low desire is present or absent (e.g., Boyle et al, 2003; Laumann, Paik, Rosen, 1999). Finally, the time frames in which retrospective recall is requested can range from one to several months. In their review of population-based studies on aging and sexual function, Hayes and Dennerstein (2005) highlight the significant impact of selected time frame on the reported prevalence of low desire. They present the results of three large-scale, community-based studies which ask almost identical questions about sexual difficulties, but with time frames of "several months or more" versus "one month or more." In the former studies, prevalence rates of low desire in women up to age 59 were 32% and 34%. In the latter, it was 55%. Clearly, there is a tremendous potential

for nuance when assessing desire level, and assumptions that have been drawn from the extant literature may be quite tenuous.

Interestingly, if women in our study were assessed based solely on their endorsement of low desire during the past month (as in Question 2 on the FSFI), two women who reported current high desire and one who reported moderate desire would actually be considered part of a "low desire" group in a population-based survey. Further, these women are considered at or below the clinical cutoff for HSDD, according to norms established for the FSFI (Gerstenberger et al, 2010). This suggests that the type of assessments that are generally called upon in prevalence studies may be missing the mark by assessing desire "states" and thereby overestimating the prevalence of low desire.

# Men's desire trajectories: variable, but not developmental?

We can consider two possibilities for the absence of a similar developmental model in men. The first is a combination of drawbacks pertaining to our sample and methods, which will be addressed in study limitations. A second possibility is that while men's desire is also variable and can evolve from an experiential standpoint, their sense of what desire is may be clarified earlier in life.

One very notable gender difference was the absence of themes in the "developmental" category that comprised women's Stage 1 desire. Whether or not this finding would generalize is difficult to know, as the desire experience of adolescent males and young men is severely understudied, with an almost exclusive focus on sexual activity rather than desire (see Smith, Guthrie, & Oakley, 2005, for review). Although 30% of men in our study did report early messages of sexual shame within their families, these messages did not appear to have the impact it had in women. Guilt and shame about sex is consistently higher in women (Else-Quest, Allison,

Higgins & Morton, 2012, for review), which is generally attributed to a sexual double standard which holds men and women to different standards when it comes to acceptable sexual conduct (see Crawford & Popp, 2003, for review). Perhaps the fact that society at large does not shame young (heterosexual) men, such familial messages can be off-set. Tolman (2002) argues that in addition to a sexual double standard that holds more permissive views of male sexual behavior, young men and women are socialized to prioritize men's sexual needs and pleasure. In this way, society might allow men a "head start" in exploring and clarifying their desire as it emerges in adolescence.

We cannot, however, assume that such pervasive and long-held (albeit changing) societal beliefs have no impact on young men's desire development. Our data gave a glimpse into such impact through the narrative of one man, who spoke to the stress he felt to "perform" by pursuing sexual activity and new partners. Indeed, societal views in line with the traditional sexual double standard don't always leave space for men who lack interest in sex. Recent work by Murray (2017) on masculinity stereotypes and their impact on desire revealed some interesting data to consider. In her qualitative study of adult men aged 30-65, the majority reported consistent high desire and interest in sex. However, many reported that this desire was sometimes feigned in order to appear masculine or to not upset their partner. Murray's interview guide directly tapped this construct by asking men if it was "okay to not feel desire," and whether they ever felt as though they "should" have desire when they did not. It is difficult to speculate whether or not more men in our sample may have addressed this issue if prompted. In any case, the impact of gendered stereotypes on men's desire development remains an area worthy of further attention.

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Another notable gender difference is the relatively small number of themes endorsed by men as causal factors for desire changes. While this may again be a function of sample or methods, it might also simply reflect the more stable nature of men's desire – particularly given our emphasis on broader patterns of change.

Self and relationality in men's desire trajectories. The role of individual factors was primary to both increases and decreases in desire for most men in our study. Biological factors reported (as desire inhibitors) are consistent with common themes in the literature, including age (Bacon et al, 2003; Laumann et al, 2009) and physical health/illness (e.g. Murray et al, 2016). Carvahlo and Nobre (2011) argue that biological determinants of men's desire have been historically over-valued, to the detriment of psychological, interpersonal, or cultural factors. Interestingly, men's narratives highlighted an important interaction of biological and psychological factors. The age or illness-related declines in desire were more pronounced in men who reported concurrent issues with self-esteem or relationship dissatisfaction (e.g., Timothy, Charles, Peter), than in those who conceived of their declines as purely biological in nature. This is consistent with Bancroft (2009) and Samelson and Hannon's (1999) research showing that medical problems are more likely to impact desire when they interact with other vulnerability factors.

Further highlighting the importance of non-biological factors were those men who conceived of desire-level *increases* in the larger trajectory as influenced by psychological or relational factors, such as self-esteem and intimacy. Contributors to men's increases in desire, aside from those impacting situational desire/arousal (e.g., Janssen et al, 2008; Murray et al, 2016) are largely unknown (except, perhaps, as they relate to the resolution of HSDD). Research on causal factors impacting desire in the long-term are limited to inhibitors. Perhaps this is a

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function of the traditional conceptualization of men's desire as biologically driven. Higher desire during adolescence and early adulthood may be assumed to be a function of biological predisposition. Our results highlight the importance of attention to men's desire from a biopsychosocial framework as it relates to variability in general, not just decline.

In terms of short-term contextual factors for desire changes, our data support existing research highlighting the impact of stress (Bodenmann, Ledermann, Blattner, & Galluzzo, 2006) and novelty (Morton & Gorzalka, 2015). Additionally, being desired was reported by 70% of men in our sample as a facilitator of desire, often as one of the strongest or most important to them. Despite the fact that being desired is frequently reported by men as desire/arousal-enhancing (Janssen et al., 2008; Murray, et al., 2016), it tends to be under-emphasized relative to women, perhaps because it goes against gendered sexual scripts that position men as the desirers, not the desired (Byers, 1996; Simon & Gagnon, 2003). Further, it has often been identified as a facilitator of desire within the context of sexual activity [i.e., feeling desired because of their partner's initiation of sex (Masters, Casey, Wells, & Morrison, 2013)]. For some men in our study, feeling desired was rewarding, in and of itself – an observation made by Meana (2010) about women's desire.

### The trait debate: perspectives of men and women

A second overarching goal of this study was to inform the recent debate of trait and state sexual desire by offering the perspective of men and women as to their own characterizations of their desire. Opponents of the trait view argue that trait theory would conceptualize desire as a force residing within the individual that can show inter-individual variation, but temporal and situational stability intra-individually (Chivers & Brotto, 2017). As such, it aligns more with models of spontaneous desire than responsive desire, and carries with it the same limitations to capturing the nuances of women's desire. They argue that a state conceptualization is more appropriate, at least for women, in that it considers desire as context-dependent and temporally and situationally variable (Chivers & Brotto, 2017).

By shifting research away from a trait model and towards a state one, research has challenged some long-held assumptions about desire, most notably the gender difference in strength of sex drive (Baumeister, 2001). For example, Both et al (2004) found that men and women's reports of subjective sexual arousal in response to erotic films were similarly intense. Likewise, Goldey and van Anders (2012) found no gender difference in reports of state desire across three different arousal conditions induced within the laboratory. Thus, while trait desire may be marked by a gender difference, strength of state desire may not be.

Indeed, there are no grounds to contest the fact that women's desire is sensitive to context, or to suggest that a purely trait conceptualization would capture the nuance of women's desire. A purely state conceptualization of women's desire, though, does not align with how women in our study viewed their own desire. To our knowledge, this is the first study to simply ask women (and men): "why do you think you have the level of desire that you do?" One of the most common responses from men and women alike was a biological predisposition – their own unique wiring towards moderate or high desire, perhaps even genetically determined. In the small number of men (N=1) and women (N=2) who did not self-assess a desire trait, the primary difference was the perception of inherency. These individuals instead viewed their desire purely as a function of contextual influences. Bearing in mind that our sample was rather desirous, this finding may simply add to a small body of research demonstrating that women with higher desire endorse linear models, while women with lower desire endorse responsive models (Giles & McCabe, 2009; Sand & Fisher, 2007). However, our "trait" women certainly did not present their

desire as invariable or insensitive to context. In some cases, variability was quite significant. What they perceived was an overarching stability despite this variability. Thus, the argument that women's desire is too variable to be considered a trait has come from researchers' interpretation of what "too variable" means. Here, the value of self-assessment to an experience as subjective as desire is further underscored.

The way in which men and women determined their trait level revealed an interesting gender difference. Given the relative stability of men's desire over time, their trait assessments were not surprising. However, many women with variable desire self-assessed their trait level as high. Thus, it would seem that periods of high desire were considered to reflect their trait level, while periods of lower desire were considered as (sometimes lengthy) situational "states" that deviated from said trait. This approach to self-assessment held true for our moderate-desiring women as well, who reported declining desire during menopause, as well as other lengthy periods of low desire. They still assessed their highest desire as their trait level, and framed their lower desire as contextually influenced states. One possibility for this approach to selfassessment relates to the fact that desire level and life satisfaction appeared to be positively correlated. As such, higher desire was simply associated with life going well. Perhaps women are more likely to assess their most satisfying desire as their inherent desire. It is also possible that when women feel their best (in the case of women in this study, evidenced by greater well-being, a solid sense of self, and positive relationships), their inherent desire level is unstifled and can be freely expressed and wholly experienced. Lastly, in our sample, the fact that many were currently high-desiring introduces the possibility of a recency bias in their global selfassessment.

# Bridging the inherent and the context-dependent

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Clearly, no single model of sexual response or desire can accurately reflect the experience of all men and women. Alternatives to motivational models that conceive of desire as a context-dependent state provide a viable theoretical framework in which to understand a broader range of desire experiences. However, the assumption that each person's desire can be captured under one model may be an oversimplification. Studies that ask whether a motivational or relational model best reflects an individual's desire (e.g., Sand & Fisher, 2007) at the very least assume that one does it better than the other. Perhaps a more appropriate question is, to what extent do each of these models account for certain elements of an individual's desire experience? Our data suggest that the polarity of motivational versus relational should be broadened to motivational versus context-dependent, as variability was not purely a consequence of relational factors. Men and women may be naturally situated along a continuum of inherency (trait) to context-dependence (state). Perhaps men are situated closer to the trait end, while women may be situated closer to the state end, reflecting a greater propensity towards variability. Or, perhaps we are situated within a matrix comprised of two continuums - an inherency continuum, which reflects the strength of inherent desire, as well as a context-dependence continuum, reflecting a low to high propensity towards variability. In our sample, Margaret (F3) and Anna (F5) provide examples of high inherency, yet still mid to high context-dependence. Tamara (F6) demonstrates high inherency and low context-dependence. Participants such as Gloria (F4), Janice (F9), and Peter (M8), who did not assess a trait desire level, would be low inherency, high context-dependence.

### **Clinical Implications**

The adoption of state desire models has clear implications for clinical work, as Chivers and Brotto (2017) outline. For example, women who experience low desire can re-frame their desire as context-dependent and explore their respective desire triggers and their desire's interaction with emotional states, rather than feel that their desire level is hard-wired and beyond their control. A counter-argument may be that some women (and men) are predisposed to experience desire within a certain defined range, and thus interventions from a psychoeducational or acceptance-based framework are also appropriate. Exploring men and women's perceptions of the origins of their desire, and the extent to which clients fit both a trait and state framework, may be a useful foundation for assessing desire problems.

Our developmental model of women's desire can provide insights into helping clients move toward more satisfying desire. First, the clinician may evaluate the extent to which the client's present experience is still characterized by the themes in Stage 1. Issues such as sexual shame or lack of autonomy over desire expression may be important treatment targets. Further assessment must consider the extent to which the woman's desire is relational or not. For a woman with low desire in a satisfying relationship, interventions might target issues such as couple differentiation. Even in cases of relationally-oriented desire, working towards development of a solid self is a clear treatment focus derived from our model. Lastly, clinicians should bear in mind that desire can be intrinsically valuable, not just for its contribution to satisfying relationships, but to women's sense of self. This value held strong for some women into their late fifties, when some clinicians might assume that the importance of sexuality to well-being declines.

In men, though biological influences on desire were strong, psychosocial factors such as self-esteem and relational intimacy were key influences on desire for some. Clinicians should not under-emphasize the role of such factors in treatment.

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#### Limitations

There are a number of limitations to the current study that must be considered in the interpretation of findings. We will consider limitations with respect to study design, methods, and sample characteristics.

**Limitations of design.** A qualitative approach to data collection limits the extent to which findings can be generalized. One, men and women's perceptions of causal factors for desire changes were all that we could access with this methodology. Further, we assigned our participants the enormous task of reflecting on up to 40 years of desire fluctuations. As such, their perceptions of causal factors and trait desire may have been influenced by a variety of biases. For example, factors that gained importance to desire over time and are part of their present experience may have been over-emphasized relative to other factors that were perhaps more important in earlier years. As suggested earlier, a recency bias may have affected trait assessments, given that trait assessments often aligned with current desire levels. Another possibility is that narrative bias may have influenced appraisals of trait desire. The impression that desire, at some level, has "been this way all along" may have provided an organizational framework in which to interpret a large amount of information. Only a highly complex longitudinal study could track the relative impact of all of these factors as facilitators and inhibitors of desire, in the long-term. Though the benefits of our approach in addressing our research questions were determined to outweigh the drawbacks, particularly given our focus on men and women's perceptions, these limitations are potentially significant.

Second, despite adherence to guidelines outlined by Henwood & Pidgeon (1997), subjectivity remains a risk in our interpretation. It is possible that two other researchers evaluating the same data would have developed a different developmental model of women's desire, or may have in fact gleaned a developmental model from men's narratives. However, given that our interpretation was closely grounded in the data, we are confident that it represents, at the very least, a reasonable interpretation of the narratives.

Third, our study did not directly assess variability and predictive validity, the two hallmark features of traits. Our participants' recollections of the timing, duration, and magnitude of variability may not align with patterns that might have emerged through direct longitudinal assessment of desire level.

Fourth, we must consider the potential limitations of our interview guide. Though we did begin the protocol by having participants draw their desire trajectory, our first area of detailed exploration were questions about trait desire. It is possible that had we begun the interview with an in-depth exploration of contextual influences on variability, some men and women may have been less likely to self-assess a desire-level trait. This decision was intentional so as to not prime the participant toward variability before making their self-assessment. It would be interesting to assess whether or not such sequencing actually has an impact on trait assessments, and if so, for whom. A second consideration of our interview guide is the extent to which our questions may have more easily tapped women's experiences. The fact that women's interviews were significantly longer than men's suggests that our questions may have had less relevance to men. The overall gender difference in variability within the trajectory, and the interview's emphasis on contextual factors in variability clearly had a role in the limited information offered by men.

**Limitations of method.** A potentially significant limitation of our method is that both men and women were interviewed by a female researcher. The more substantive interviews offered by women may have reflected an increased comfort in sharing sensitive information. In a review of interviewer effects in public health research (Davis et al, 2010), interviewer effects, including gender, were shown to have substantial impact on face-to-face survey data collection, particularly in gender-related and sensitive topics. Some of these studies suggest that men may in fact be more comfortable disclosing sensitive information such as sexual abuse history to female interviewers. Other studies indicate that both men and women provide higher reports of certain sexual behaviors to same-gender interviewers. Whether these reports are actually more accurate, or are perhaps influenced by other biases is unclear. Though more research is needed to clarify if and when interviewers and respondents should be matched by gender, we acknowledge the possibility that the gender mismatch in our study may have influenced the data.

Limitations of sample. We chose to limit our study to a heterosexual sample. The purpose of this decision was to set aside the potentially significant impact that growing up as a member of a sexual minority group in a heterosexist society might have on desire development (Sue, 2010). Cultural stigma, and the resulting internalized stigma that many sexual minority adults experience (Herek, Gillis, & Cogan, 2009) could arguably add layers of complexity to the process of clarifying desire, as well as create additional barriers to the experience and expression of desire. A model of desire development that can include the role of sexual orientation identity is an important future direction in this line of research.

Second, participants were self-selected. Although volunteer bias can occur in any area of psychology, it seems to be particularly salient in sexuality research. Studies of volunteer bias in sexuality studies with college-aged men and women have found that self-referred participants tend to be less inhibited, have less sexual guilt, be more sexually open, and have more positive attitudes towards sexuality (Strassberg & Lowe, 1995; Wiederman, 1999). Although we did not objectively assess any such characteristics in our sample, women in our study appeared to discuss their desire history without reservation. It is also notable that our female sample was

largely comprised of desirous, content women, many of whom considered their desire to be central and highly valued in their lives. Among those with low or moderate desire, all but one were non-distressed. The one low-desiring participant who was distressed about her desire was the one participant whose narrative did not fit the model put forth. Thus, our model reflects the trajectory of women who are satisfied with their desire, and for whom desire is important. Its generalizability is clearly limited.

Third, our sample's demographic characteristics reflect a limited segment of the population. Women were primarily Caucasian and highly educated. Men were all Caucasian, and also very educated. It is difficult to theorize as to what bias this may have introduced into our data. However, further research on a culturally and socio-economically diverse sample may shed light on this issue. With respect to age, our male participants were younger on average, with most in their early 40s. Notably, the final stage of our model in women was theorized to begin in their forties. It is possible that women were able to more fully articulate a developmental process of desire with the advantage of age.

#### **Future Directions**

There are many directions for further research emanating from our results. First, this study provides only one developmental model of women's desire, developed from a small, homogeneous sample. As addressed in our study limitations, an exploration of developmental trajectories of desire with men and women who are more diverse in terms of demographic characteristics, desire level, and sexual orientation may reveal different key characteristics. It would be interesting to explore in-depth any features that are found to be common between models.

Further, while our attempt to elucidate a developmental model of men's desire was unsuccessful, this may have been a result of sample or methods. Future attempts at capturing men's early desire experiences may benefit from more direct efforts to inquire about experiences of desire in the context of masculinity stereotypes or other gendered sexual scripts. Murray (2017) has found such direct questioning to be fruitful.

Though the literature on long-term patterns of desire-level variability is limited, especially in men, our results are consistent with a growing body of literature suggesting that women's sexuality is intrinsically more plastic or fluid than men's (Baumeister, 2000; Diamond, 2008; Peplau, 2001). Much of this literature stems from research on sexual orientation, which argues that men and women's sexual orientations show different underlying determinants and developmental courses (Hyde, 2005; Mustanski, Chivers, & Bailey, 2002). In her work on sexual fluidity in women's sexual orientation, Diamond (2008) has shown that some women experience variability in the target of their sexual attraction, with adopted sexual orientation labels varying over time. She has brought forth Dynamical Systems Modeling as a possibility for understanding women's sexual fluidity, which can account for the capacity for dramatic change over time. Interestingly, in a recent study applying this model to the same-sex attraction and behavior of 33 sexual minority women (lesbian, bisexual, and "fluid"), her results supported the existence of a "core sexual orientation" despite high degrees of variability in daily same-sex attraction. The ability of such models to capture stability despite variability has exciting potential for further applications within the broader desire literature, particularly in assessing the potential for a "core" sexual desire trait.

Our data also support Stark et al's (2015) assertion that a desire "state" should not be limited to the "in-the-moment" desire experience, but rather should capture context-dependent

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changes of a longer duration. Our categories of circumstantial and suppressed desire, which were state-like insofar as they were time-limited and context-dependent, ranged from brief to years long. Researchers must bear in mind the extent to which "trait" assessments are actually evaluating desire states. Further, in dynamical models that simultaneous evaluate both state and trait characteristics, the question of what constitutes a desire state becomes crucial.

To further investigate trait desire in an objective manner, assessment of variability over time through longitudinal studies using quantitative methods, as well as research determining predictive validity are needed. Our data suggest that a trait of high desire is expressed not only in sexual behavior, but in the intensity of desire when experienced, the existence of an active fantasy world, as well as the extent to which men and women enjoy sex and valued their desire. Thus, the potential for what a desire trait might "predict" extends beyond that which is directly observable.

Questionnaire	Authors	Purpose of Measure	Recall Period	Definition of Desire Provided	Assesses Desire As:				
		intradure renov		to Respondents		Cognitive	Dyadic/ Solitary	Spontaneous/ Responsive	Trait / State
Derogatis Sexual Function Inventory	Derogatis, 1975	Global sexual function	Not specified	None provided	Yes	Yes	Collapsed within questions	No	Trait
Brief Index of Sexual Function – Women	Taylor, Rosen, & Leiblum, 1994	Global sexual function	4 weeks	None provided	Yes	Yes	Collapsed within questions	Receptivity, not responsivity	Unclear
Brief Sexual Function Inventory – Urology	O'Leary et al, 1995	Global sexual function	4 weeks	Sexual drive: a feeling that may include wanting to have a sexual experience (masturbation or intercourse), thinking about having sex, or feeling frustrated due to lack of sex.	Yes	Unclear	No	No	Unclear
International Index of Erectile Function	Rosen et al, 1997	Global sexual function	4 weeks	None provided	No	No	No	No	Unclear
Derogatis Interview for Sexual Function (SF)	Derogatis, 1997	Global sexual function	30 days	None provided	Yes	Yes	Dyadic only	No	Unclear

Table 1. Characteristics of Validated Questionnaires that Assess Sexual Desire

McCoy Female Sexuality Questionnaire	McCoy & Matyas, 1998	Global sexual function	4 weeks	None provided	Yes	Yes	Not specified	No	Unclear
Female Sexual Function Index	Rosen et al, 2000	Global sexual function	4 weeks	Sexual desire/interest: a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.	Yes	Yes	Collapsed within questions	Combined	Unclear
Sexual Function Questionnaire	Quirk et al, 2002	Global sexual function	4 weeks	None provided	Yes	Yes	Dyadic focus	No	Unclear
Hurlbert Index of Sexual Desire (HISD)	Apt & Hurlbert, 1992	Desire level		None provided	Yes	Yes	Dyadic focus	No	Unclear
Sexual Desire Inventory (SDI)	Spector, Carey, & Steinberg, 1996	Desire level	4 weeks	Interest in or wish for sexual activity	Yes	Yes	Yes	No	Unclear
Sexual Drive Questionnaire	Ostovich & Sabini, 2004	Sexual drive level	Not specified	None provided	Yes	No	Solitary focus	No	Unclear

## Table 1. Characteristics of Validated Questionnaires that Assess Sexual Desire

Sexual Interest and Desire Inventory – Female (SIDI-F)	Clayton et al, 2006	HSDD symptom severity	4 weeks	Desire: Interest in having a sexual experience, alone or with a partner Interest: Thoughts, feelings, and/or a willingness to become involved in some sort of sexual activity	Yes	No	Collapsed within questions	Receptivity not responsive desire	Unclear
HSDD Screener	Leiblum et al, 2006	HSDD diagnostic screening tool	3 months	None provided	Yes	No	No	Receptivity, not responsive desire	Unclear
Cues for Sexual Desire Scale (CSDS)	McCall & Meston, 2006	Triggers of sexual desire	N/A	None provided	Yes	Yes	No	Responsive desire only	No
Women's Sexual Interest Diagnostic Interview (WSID)	Derogatis et al, 2008	HSDD diagnostic interview	4 weeks	Sexual Desire/Interest: wanting to have a sexual experience, being receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.	Yes	Yes	Collapsed within questions	Receptivity, not responsive desire	Unclear
Female Sexual Desire Questionnaire (FSDQ)	Goldhammer & McCabe, 2011	Desire Level	4 weeks	None provided	Yes	Yes	Yes	Responsive desire subscale only	Unclear

## Table 1. Characteristics of Validated Questionnaires that Assess Sexual Desire

	Won (N =			/len = 10)
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Age	49.80	5.29	42.63	1.69
Age of first intercourse	17.31	1.93	15.40	1.84
Total sexual partners	11.08	7.05	3-300	-
Total significant relationships	3.31	1.18	3.00	1.63
	N	%	N	%
Ethnicity				
European American	7	54	10	100
African American	2	15	0	0
Hispanic/Latino/Latina	4	31	0	0
Religious Affiliation				
Protestant	0	0	1	10
Roman Catholic	1	8	1	10
Jewish	2	15	0	0
Other Christian	2	15	1	10
None	8	62	7	70

# Table2. Sociodemographic Characteristics of Sample(N = 23)

	Wor (N =		M (N =	en : 10)
	N	%	Ν	%
Relationship Status				
Single, not dating	1	8	3	30
Dating one partner	1	8	0	0
Dating multiple partners	0	0	1	10
In a relationship, not cohabiting	2	15	1	10
Cohabiting	1	8	0	0
Married	7	54	5	50
Divorced	1	8	0	0

## Table 2. Sociodemographic characteristics of sample (N = 23)(cont'd)

ID	Age	Relationship	Children	Trait Self- Assessment	Current Desire	FSFI Desire Subscale*	FSFI Total**	SDI Total***	Content with Desire Level	Centrality/ Importance to Identity/Life
F1 (Susan)	45	In relationship 2 yrs	Yes	High	High	3.6	31.8	57	Yes	Important
F3 (Margaret)	58	Divorced, Single	Yes	High	High	2.4		61	Yes	Central
F4 (Gloria)	45	Married 12 years	Yes	N/A	High	3.6	32.0	67	Yes	Central
E5 (Anna)	53	Married 12 yrs	No	High	High	3.0		70	No	Important
F6 Tamara)	56	Married 26 yrs	No	High	High	5.4	35.4	82	Yes	Central
F7 Bernice)	48	In relationship 4 yrs	Yes			2.4	27.1	53	Yes	Important
F8 (Renata)	55	Married 31 yrs	Yes	Low	Low	3.0	24.2	47	No	Neither
79 Janice)	51	Married 24 yrs	Yes	N/A	Low	2.4	18.1	29	Yes	Important
F10 Lydia)	45	In relationship 6 mo.	Yes	High	High	3.6	30.8	57	Yes	Central
F11 Whitney)	47	Married 22 yrs	Yes	Low-med	Low	2.4	27.1	62	Yes	Neither
F12 Sharon)	52	Divorced, Single	Yes	Med	Med.	3.0		61	Yes	Neither
F13 Marie)	40	Married 5 yrs	Yes	High	High	6.0	35.2	82	Yes	Central
F14 (Nadine)	53	In relationship 3 yrs	No	High	High	4.8	34.8	54	Yes	Important

Table 3. Summary of Female Participant Characteristics and Desire Assessments

\*Range 1.6 - 6.0, clinical cutoff  $\leq$ 3.0; \*\* Range 2.0-36.0. clinical cutoff  $\leq$  26 to differentiate sexually functional vs at-risk for sexual dysfunction \*\*\*Range 0-108

ID	Age	Relationship	Children	Trait Self-	Current	IIEF	SDI	Content	Centrality/
				Assessment	Desire	Desire	Total**	with	Importance
						Subscale*		Desire	to
								Level	Identity/Life
M1	42	In a relationship	Yes	Mod	Mod	7.00	75	Yes	No
(Brent)		18mo							
M2	44	Married 5 yrs	No	High	High	9.00	85	Yes	Central
(Sam)		-		_	-				
M3	42	Dating multiple	No	High	High	8.00	68	Yes	Central
(Jake)		partners, 3 yrs		-	-				
M4	45	Married 18 yrs	Yes	High	High	8.00		No	Important
(Timothy)				-	-				-
M5	41	Married 8 yrs	No	Mod	Mod	6.00	53	Yes	No
(Todd)		-							
M6	63	Single, not	Yes	High	Low	5.00	27	No	No
(Charles)		dating 10 yrs		-					
M7	43	Married 22 yrs	No	High	High	10.00	81	Yes	Central
(Scott)				-	-				
M8	44	Single, not	No	N/A	Low	8.00		No	No
(Peter)		dating 5 yrs							
M9	40	Single, not	No	Mod	Mod	9.00		Yes	No
(Greg)		dating 5 yrs							
M10	50	Married 30 yrs	Yes	High	High	8.00	60	Yes	Important
(Mark)		•		C	C				*

Table 4. Summary of Male Participant Characteristics and Desire Assessments

\* Score range 2-10. Scores of 9-10 = no dysfunction; 7-8 = mild dysfunction; 5-6 = mild-moderate dysfunction \*\*0-108

Categories	Second Order Themes	First Order Themes
DEVELOPMENTAL/	Others' expectations	Sex to fulfill expectations
LIFESPAN	interfere with desire	Societal constraints
	Sex for validation when	Confusion of desire with desirability
	young	Desirability tied to identity
		Desirability tied to self-esteem
	Shame about sexuality	Negative family or religious messages
		Trying to hide/suppress desire when young
RELATIONSHIP	Positive Relationship	Trust
	Characteristics	Intimacy/Good relationship
		Prioritizing sex in relationship
		Safety to feel vulnerable
		Openness/Lack of inhibition
		Reinforcing effect of good sex
		Feeling desired
		Chemistry
	Negative Relationship	Abuse/assault/violation of boundaries
	Characteristics	Sex out of obligation
		Partner approach not stimulating
		Suppressing desire when unsafe
		Monogamy bad for desire
	Stagnation	Familiarity/routine
		Complacency
		Dissatisfaction with monogamy
	Novelty/Excitement	Novelty
		Transgression/risk
SELF	Self-Awareness	Self-knowledge
		Authenticity
	Self-esteem	Self-esteem/confidence
		Self-desirability
	Well-being	Happiness
PHYSICAL	Hormonal Changes	(Peri)menopause
		Postpartum
		Hormone Replacement Therapy
		General hormonal fluctuation
	Health Problems	Chronic pain/health conditions
		Medication side-effects
	Healthy Living	Healthy Living
STRESS	Daily stressors	Stress/Overworking/Fatigue
	Family demands	Children

Table 5. Causal Factors for Women's Desire Level

Categories	Second Order Themes	First Order Themes
EXPERIENCE OF	Ownership/Autonomy	Ownership of desire
DESIRE		In control of keeping or losing drive
	Value of desire	Joy/Fulfillment/Fun
		Lucky/grateful to have desire
		Makes her feel good about herself
		Desire creates wholeness as a woman
		Desire declines – sad, ill, tired
		Refusing to let age stifle
	Expectations	Works on it/wants it to be good
		Belief she deserves pleasure
		Bad sex is deal breaker
	Strength of desire	Intensity/drug/manic
	Negative experience of	Productivity/energy loss
	high desire	Hard to be high desire partner
		Anxiety part of desire
ENACTMENT OF		Active fantasy world
DESIRE		Primarily physical
		Gussying up when desirous
		Desire is wanting to have sex
		Desire is not solely sexual
		Distinction between lust and intimacy
		based sex

 Table 6. Experience and Enactment of Women's Desire

Categories	Second Order Themes	First Order Themes
RELATIONSHIP	Positive Relationship	Intimacy/Good relationship
	Characteristics	Reinforcing effect of good sex
		Feeling desired
	Stagnation	Familiarity/routine
		Dissatisfaction with monogamy
	Novelty/Excitement	Novelty
		Transgression/risk
INDIVIDUAL	Self-esteem	Self-esteem/confidence
		Success
		Comfort with masculinity
	Well-being	Happiness
	Stress	Stress/overworking/fatigue
	Health Problems	Chronic pain/health conditions
		Medication side-effects
		Testosterone fluctuation
	Age	Age-related decline

 Table 8. Causal Factors for Men's Desire Level

 Table 9. Experience and Enactment of Men's Desire

Categories	Second Order Themes	First Order Themes
EXPERIENCE OF	Valuing Desire	Fulfillment/Fun
DESIRE		Makes him feel good about himself
		Bad sex dealbreaker
	Strength of desire	Intensity/drug/manic
	Cost of high desire	Productivity/energy loss
	_	Relationship loss
		Financial loss
		Sad that desire needs interfere with
		relationship
		Desire cannot be re-sparked
ENACTMENT OF		Primarily physical
DESIRE		Desire is wanting to have sex
		Desire is not solely sexual
		Distinction between lust and intimacy
		based sex

#### APPENDIX A

#### TELEPHONE SCREENING QUESTIONS

Pre-screening consent:

Thank you for your interest in this study. I would like to provide you with some further information, and ask you some questions to determine your eligibility for this study. This study is being conducted by the Human Sexuality Laboratory in the Psychology Department at the University of Nevada, Las Vegas. The purpose of this study is to understand men and women's experience of sexual desire through their life. During this study, you will have the opportunity to review the study purpose and procedure with me before agreeing to participate. If you decide to proceed with the study, we will sit down for an individual interview of about 60-75 minutes at a clinic on UNLV campus. The interview will focus on your level of sexual desire and any changes you have noticed in your level of desire through your life, and on some different aspects of your experience of desire. Following our interview, I will ask you to complete a few brief questionnaires about desire and sexual function.

Each interview will be audio recorded to allow us to look at your responses carefully. Each recorded interview will be immediately transcribed, and the audio recordings destroyed. Our interviews will be identified with a participant code, so your identifying information will be confidential and not associated with your transcribed interview or any of your questionnaire responses. At any time during the interview, you may choose to withdraw without penalty to your compensation. You are also welcome to refrain from answer any questions that are uncomfortable for you. At the end of the study, you will receive \$20 (community participants) / 2 research credits (UNLV Subject Pool). Do you have any questions about the study procedure I have described?

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If you are interested in participating, I would like to ask you a few questions about your personal history, including sexual history, medical and psychiatric history, in order to determine if you meet criteria to participate in the study. This brief screening interview will not be recorded. Please notify me if you are uncomfortable answering any questions or if you become upset. As a reminder, your participation is voluntary and you may refuse to answer questions or stop the screening at any time. Your answers to these questions will also be kept completely confidential. If you are eligible for the study, a full consent form detailing the rest of the study will be reviewed with you during the appointment and you will be able to consent to the complete procedure at that time. At this time, do you consent to proceed with our screening questions?

Consent Obtained? Yes No-discontinue

Date: \_\_\_\_\_

#### **Begin Screening Questions**

How did you hear about our study?

How old are you?

The purpose of this study is to understand men and women's experiences of sexual desire through their lives. Do you believe that you would feel comfortable participating in an interview of this nature and discussing your experience of sexual desire in detail? **Yes No** 

#### Sexual History

- 1. How would you describe your sexual orientation? (Heterosexual, bisexual, gay, lesbian, asexual, other? \_\_\_\_\_
- 2. Have you felt sexual desire in your lifetime?
- 3. Have you ever had sexual intercourse in your lifetime?
- Has there ever been a period of time in which you've experience recurrent genital or pelvic pain with intercourse or sexual activity? Yes No (*please describe*)

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## Medical and Psychiatric History

- 5. Do you have any current medical conditions? Yes No (please describe)
- Have you ever been diagnosed with a mental or psychiatric disorder, or sought treatment for psychological or psychiatric symptoms? Yes No (*please describe*)
- If no history of psychiatric diagnosis: Do you suspect that you may have a mental or psychiatric disorder? Yes No (please describe)
- 8. Are you currently taking any medications? Yes No

Dosage	Reasoning	Date Started
	Dosage	Dosage Reasoning

## Depression and Manic Episode Screen (if no endorsement of depression or manic episodes):

- 9. Has there ever been a period of time when you were feeling depressed or down most of the day, nearly every day, for at least two weeks? *Please describe*.
  - a. How many times have you experienced episodes such as this?
  - b. How old were you when you had your first episode?
  - c. How long was your longest episode?
  - d. When was your most recent episode?
- 10. Has there ever been a period of time when you were feeling so good, high, excited or hyper that other people thought you were not your normal self or you were so hyper that you got into trouble? If yes, explain.
  - a. How many times have you experienced episodes such as this?

- b. How old were you when you had your first episode?
- c. How long was your longest episode?
- d. When was your most recent episode?

## Psychotic symptom screen:

Now I'm going to ask you about unusual experiences that people sometimes have.

a. Has it ever seemed like people were taking about you or taking special notice of you?

b. What about anyone going out of their way to give you a hard time, or trying to hurt you?

c. Have you ever felt that you were especially important in some way, or that you had special powers to do things that other people couldn't do?

d. Have you ever felt that something was very wrong with you physically even though your doctor said that nothing was wrong... like you had cancer or some other terrible disease?

e. Did you ever hear things that other people couldn't hear, such as noises, or the voices of people whispering or talking?

f. Did you ever have visions or see things that other people couldn't see?

g. Have you ever had any unusual religious experiences?

## End Screening Questions

#### APPENDIX B

#### BRACKETING

The following is a summary of the primary researcher's biases and assumptions about the questions under investigation.

#### Variability in Desire Levels

In general, women's desire will be more variable in response to contextual influences than men's, particularly interpersonal and intrapersonal influences. As women appear more prone to responsive, context-dependent desire than men, their desire level may also be more sensitive to longer-term contextual factors, such as relationship variables. The more frequent fluctuation in endogenous sex hormone levels in women, due to menstrual cycle changes, pregnancy, and menopause will also contribute to more frequent variation in desire level. Therefore, women's desire trajectories may show more variability, and a greater tendency to fluctuate from high to low points more frequently than men's desire.

Men's desire will generally be steadier, with increases and decreases occurring more slowly over longer periods of time. While men's desire will still be influenced by interpersonal and intrapersonal variables, biological factors may be more prominent in the variability observed in their trajectories.

#### Endorsement of trait and state desire

The constructs of trait and state desire are not dichotomous, and men and women's narratives may include themes of both. There is little doubt that state desire is a valid construct, and thus state desire in particular will be a part of most, if not all, participant narratives. The extent to which men and women discuss longer periods of fluctuation as states remains to be seen. Individuals who report a typical "baseline" level of desire that fluctuations happen around

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may be more likely to endorse long-term desire changes (e.g. several months) as state-like experiences.

In general, men and women who indicate a baseline level of desire, with little variation, or with variation that returns to a consistent baseline, will be more likely to speak about desire as a trait. However, while men and women with typically low or moderate levels of desire may describe desire as trait-like, the phenomenon of desire as a component of identity will be most present in high-desiring individuals. It may be difficult to view the absence of something as a part of personality composition. Men and women with a strong sense of desire self-concept may be more likely to report formative early experiences related to sexuality and desire.

## APPENDIX C

## INTERVIEW GUIDE

The purpose of this project is to look at individual experiences of sexual desire. Through our interview today I'd like to gain an understanding of what your level of sexual desire has been over the course of your life, how it has changed, and how you think about your sexual desire. I understand that this may be a lot to piece together, so just do the best you can, and I'll help you as much as you need. Take your time, feel free to think aloud, and do not feel pressured to answer perfectly. There are no right or wrong answers here. My goal today is simply to understand your experience as best as I can.

Do you have any questions before we begin?

I will begin recording now.

## Section 1: Graphing sexual desire

On this graph, we have Time along the bottom, which we'll think of as the course of your life. Along the side, we've got desire level, from low to high. If I asked people to draw their level of desire over their life along this graph, some people would say that their desire is usually pretty low, but gets higher during certain times. For others, it's pretty high with low periods. Some people might be pretty consistently at a medium level. Some might have been high early on, with a steady drop over time – or vice versa (*interviewer will draw these options as they are described*). There are many ways that this graph can look.

1.1 Now, take as much time as you need, and draw me yours.

Participant will be given a blank Time x Desire Level graph, and will graph their desire.

## **Section 2: Trait Desire**

- 2.1 Some people identify as having high desire, although it might fluctuate. Others might say that they're generally a low or medium-desiring person. On the other hand, some people would say that they're not generally any particular way. How would you describe yourself as being? Tell me what makes you think that.
- 2.2 Tell me about how you came to that understanding of yourself. [When? Circumstances? Significance?]

- 2.3 You see yourself as a \_\_\_\_\_- desiring person now. How has that changed through adolescence, early adulthood, until the present?
- 2.4 What are your theories about why you have <u>desire</u>? (e.g. to what extent do you think you're "wired" this way? And to what extent do you think environmental/relationship/other contextual factors influenced your general level of desire?)
- 2.5 We all have a lot of characteristics that make up who we are. If I asked you to describe yourself to me, you'd probably give me a lot of adjectives to give me a sense of who you are as a person. Some of those qualities are really central to who we are or how we see ourselves, and others are less so. You've described yourself as a \_\_\_\_\_- desiring person. How central is this to your self-concept? Has your desire always had the same importance to you? If not, how has it changed? Why do you think it changed?
- 2.6 How would your partner(s) describe your level of desire? What about other people in your life, like friends? Do you think other people would describe you as a \_\_\_\_\_desiring person? Is it important to you for partners/friends to see you this way? Why or why not?
- 2.7 In what ways has being a \_\_\_\_\_-desiring person affected your life? What about your relationships? How has it affected your sexuality, more broadly?
- 2.8 What do you like about being a \_\_\_\_\_-desiring person? What do you not like about it?

## Section 3: Variability in Desire Level

I'd like to look more closely at this graph you drew for me.

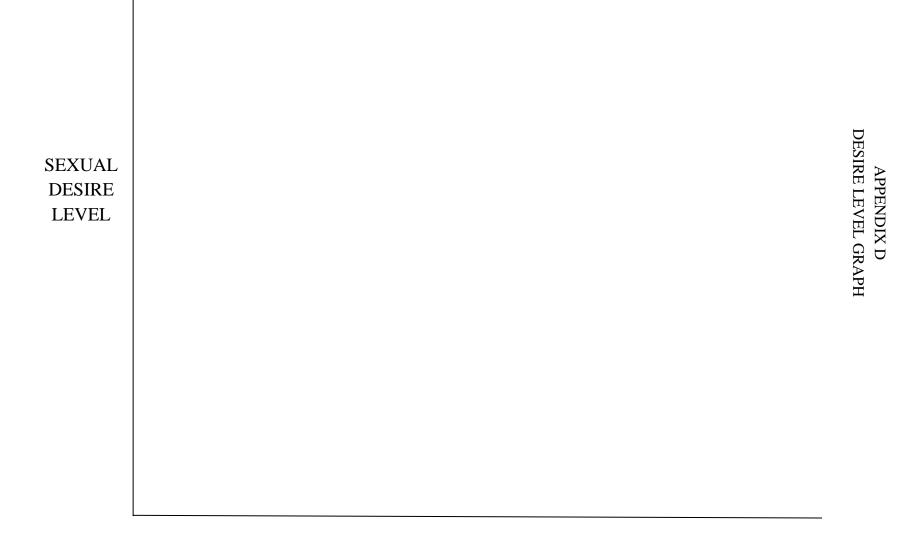
- 3.1 Tell me about where you started the graph, along the "time" dimension? What made you start it there? What stands out to you about that time? What about before you were that age/before that relationship (whatever their starting anchor was) how do you think about your desire before that time?
- 3.2 Now I'd like to look at the pattern you've described. Tell me more about when your desire changes. You can go through this in whatever way is easiest we can go chronologically, or however makes the most sense to you.

Questions 3.3-3.6 are prompts, and may change slightly based on the overall pattern the participant reports. The purpose of this section is to understand in detail the desire pattern they

*describe (understand context, duration, intensity, of changes and their perception of causal factors)* 

- 3.3 What do you think caused/causes these changes in your desire? How do you make sense of them? What was going on in your life/relationships at the time?
- 3.4 Has your desire always [increased/decreased] in [that situation]? If no, when did you first notice that? What do you think was different about that time? Does your desire still change in that situation?
- 3.5 How long do changes in your desire level last? Are there certain situations/circumstances that cause your desire to change for a short time vs. a longer time?
- 3.6 How strong are these changes in your desire level? Are they subtle, drastic, abrupt, gradual? What types of situations/other factors lead to subtle vs drastic changes, abrupt vs gradual changes?
- 3.7 How do you feel during periods of high, moderate, low desire? How does having high desire make you feel about yourself? About your relationships (when applicable)? What about low desire?
- 3.8. Is there a level of desire that you are most comfortable or most happy with? What is it, and why? Or why not?
- 3.9 How do you feel when you're aware of your desire level changing, or when you are anticipating a change in desire (e.g. are changes enjoyable, worrisome)?
- 3.10 Do you ever do things to try and prevent your desire from increasing/decreasing? Or, to try and make it increase/decrease? For example, if you know that your desire usually decreases a few months into a relationship, do you make efforts to keep it higher? What do you do, and is it effective? How easy/difficult is it for you to do that? Has it always been easy/difficult?

That is all the questions I have for you today. Is there any part of what we've discussed that you feel we need to spend more time on? Is there anything else about your experience of desire that you feel is important for me to know? Thank you for your time.



TIME

## APPENDIX E

Sociodemographic and Relationship History Questionnaire.

How old are you? \_\_\_\_\_

What is your gender?

- a) Female
- b) Male

How would you describe your sexual orientation?

- a) Heterosexual or "straight"
- b) Bisexual
- c) Gay/Lesbian
- d) Other (please specify): \_\_\_\_\_

What is your current relationship status?

- a) single, not dating
- b) dating one partner regularly
- c) dating multiple partners
- d) In a relationship, not cohabiting
- e) Cohabiting
- f) Married
- g) Divorced
- h) Widowed

How long have you been in this situation?

What is the highest level of education you have completed?

- a) Elementary school
- b) High school
- c) Diploma
- d) Undergraduate degree
- e) Master's degree
- f) Doctorate/Professional degree

How would you classify your ethnic background?

- a) White/Caucasian
- b) Black/African American
- c) Hispanic
- d) Asian/Pacific Islander

e) Native American

f) Other

What religion were you raised in?

- a) Protestant
- b) Roman Catholic
- c) Jewish
- d) Other Christian
- e) Other non-Christian
- f) Atheist
- g) None/NA

What religion do you currently follow?

- a) Protestant
- b) Roman Catholic
- c) Jewish
- d) Other Christian
- e) Other non-Christian
- f) Atheist
- g) None/NA

How old were you when you had your first experience with sexual intercourse?

How many sexual partners have you had in your lifetime?

How many significant relationships have you had in your lifetime?

## APPENDIX F

Female Sexual Function Index (Rosen, 2000)

INSTRUCTIONS: These questions ask about your sexual feelings and responses during the past 4 weeks. Please answer the following questions as honestly and clearly as possible. Your responses will be kept completely confidential. In answering these questions the following definitions apply:

Sexual activity can include caressing, foreplay, masturbation and vaginal intercourse.

Sexual intercourse is defined as penile penetration (entry) of the vagina.

Sexual stimulation includes situations like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.

## CHECK ONLY ONE BOX PER QUESTION.

Sexual desire or interest is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

1. Over the past 4 weeks, how **often** did you feel sexual desire or interest?

- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_ A few times (less than half)
- \_\_\_\_ Almost never or never

2. Over the past 4 weeks, how would you rate your level (degree) of sexual desire or interest?

- \_\_\_\_ Very high
- \_\_\_\_ High
- \_\_\_\_ Moderate
- \_\_\_\_ Low
- \_\_\_\_ Very low or none at all

Sexual arousal is a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication (wetness), or muscle contractions.

3. Over the past 4 weeks, how often did you feel sexually aroused ("turned on") during sexual activity or intercourse?

\_\_\_\_ No sexual activity

- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (more than half the time)

- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_\_ A few times (less than half the time)
- \_\_\_\_ Almost never or never

4. Over the past 4 weeks, how would you rate your level of sexual arousal ("turn on") during sexual activity or intercourse?

\_\_\_\_ No sexual activity

\_\_\_\_ Very high

\_\_\_\_ High

\_\_\_\_ Moderate

\_\_\_\_ Low

\_\_\_\_ Very low or none at all

5. Over the past 4 weeks, how confident were you about becoming sexually aroused during sexual activity or intercourse?

- \_\_\_\_ No sexual activity
- \_\_\_\_ Very high confidence
- \_\_\_\_\_ High confidence
- \_\_\_\_ Moderate confidence
- \_\_\_\_ Low confidence
- \_\_\_\_ Very low or no confidence

6. Over the past 4 weeks, how often have you been satisfied with your arousal (excitement) during sexual activity or intercourse?

- \_\_\_\_ No sexual activity
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_\_A few times (less than half the time)
- \_\_\_\_ Almost never or never

7. Over the past 4 weeks, how often did you become lubricated ("wet") during sexual activity or intercourse?

- \_\_\_\_ No sexual activity
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_\_A few times (less than half the time)
- \_\_\_\_ Almost never or never

8. Over the past 4 weeks, how difficult was it to become lubricated ("wet") during sexual activity or intercourse?

- \_\_\_\_ No sexual activity
- \_\_\_\_ Extremely difficult or impossible

\_\_\_\_ Very difficult \_\_\_\_ Difficult \_\_\_\_ Slightly difficult

\_\_\_\_ Not difficult

9. Over the past 4 weeks, how often did you maintain your lubrication ("wetness") until completion of sexual activity or intercourse?

\_\_\_\_ No sexual activity

\_\_\_\_ Almost always or always

\_\_\_\_ Most times (more than half the time)

\_\_\_\_ Sometimes (about half the time)

\_\_\_\_\_A few times (less than half the time)

\_\_\_\_ Almost never or never

10. Over the past 4 weeks, how difficult was it to maintain your lubrication ("wetness") until completion of sexual activity or intercourse?

\_\_\_\_ No sexual activity

\_\_\_\_ Extremely difficult or impossible

\_\_\_\_ Very difficult

\_\_\_\_ Difficult

\_\_\_\_ Slightly difficult

\_\_\_\_ Not difficult

11. Over the past 4 weeks, when you had sexual stimulation or intercourse, how often did you reach orgasm (climax)?

\_\_\_\_ No sexual activity

\_\_\_\_ Almost always or always

\_\_\_\_ Most times (more than half the time)

\_\_\_\_ Sometimes (about half the time)

\_\_\_\_\_A few times (less than half the time)

\_\_\_\_ Almost never or never

12. Over the past 4 weeks, when you had sexual stimulation or intercourse, how difficult was it for you to reach orgasm (climax)?

\_\_\_\_ No sexual activity

\_\_\_\_ Extremely difficult or impossible

\_\_\_\_ Very difficult

\_\_\_\_ Difficult

\_\_\_\_ Slightly difficult

\_\_\_\_ Not difficult

13. Over the past 4 weeks, how satisfied were you with your ability to reach orgasm (climax) during sexual activity or intercourse?

\_\_\_\_ No sexual activity

\_\_\_\_ Very satisfied

\_\_\_\_ Moderately satisfied

\_\_\_\_ About equally satisfied and dissatisfied

- \_\_\_\_ Moderately dissatisfied
- \_\_\_\_ Very dissatisfied

14. Over the past 4 weeks, how satisfied have you been with the amount of emotional closeness during sexual activity between you and your partner?

- \_\_\_\_ No sexual activity
- \_\_\_\_ Very satisfied
- \_\_\_\_ Moderately satisfied
- \_\_\_\_ About equally satisfied and dissatisfied
- \_\_\_\_ Moderately dissatisfied
- \_\_\_\_ Very dissatisfied

15. Over the past 4 weeks, how satisfied have you been with your sexual relationship with your partner?

- \_\_\_\_ Very satisfied
- \_\_\_\_ Moderately satisfied
- \_\_\_\_ About equally satisfied and dissatisfied
- \_\_\_\_ Moderately dissatisfied
- \_\_\_\_ Very dissatisfied

16. Over the past 4 weeks, how satisfied have you been with your overall sexual life?

- \_\_\_\_ Very satisfied
- \_\_\_\_ Moderately satisfied
- \_\_\_\_ About equally satisfied and dissatisfied
- \_\_\_\_ Moderately dissatisfied
- \_\_\_\_ Very dissatisfied

17. Over the past 4 weeks, how often did you experience discomfort or pain during vaginal penetration?

- \_\_\_\_ Did not attempt intercourse
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_\_A few times (less than half the time)
- \_\_\_\_ Almost never or never

18. Over the past 4 weeks, how often did you experience discomfort or pain following vaginal penetration?

- \_\_\_\_ Did not attempt intercourse
- \_\_\_\_ Almost always or always

- \_\_\_\_ Most times (more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_\_A few times (less than half the time)
- \_\_\_\_ Almost never or never

19. Over the past 4 weeks, how would you rate your level (degree) of discomfort or pain during or following vaginal penetration?

- \_\_\_\_ Did not attempt intercourse
- \_\_\_\_ Very high
- \_\_\_\_ High \_\_\_\_ Moderate
- \_\_\_\_ Low
- \_\_\_\_ Very low or none at all

## APPENDIX G

International Index of Erectile Function (IIEF) Rosen, 1997

INSTRUCTIONS: These questions ask about your sexual feelings and responses during the past 4 weeks. Please answer the following questions as honestly and clearly as possible. Your responses will be kept completely confidential. In answering these questions the following definitions apply:

Sexual activity can include caressing, foreplay, masturbation and intercourse.

Sexual intercourse is defined as penile penetration (entry) of the vagina.

Sexual stimulation includes situations like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.

## CHECK ONLY ONE BOX PER QUESTION

1. Over the past 4 weeks, how often were you able to get an erection during sexual activity?

- \_\_\_No sexual activity
- \_\_\_Almost always or always
- \_\_Most times (much more than half the time)
- \_\_\_Sometimes (about half the time)
- \_\_\_\_A few times (much less than half the time)
- \_\_\_Almost never or never

2. Over the past 4 weeks, when you had erections with sexual stimulation, how often were your erections hard enough for penetration?

- \_\_\_\_No sexual stimulation
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (much more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_ Almost never or never

# The next three questions will ask about the erections you may have had during sexual intercourse.

3. Over the past 4 weeks, when you attempted sexual intercourse, how often were you able to penetrate (enter) your partner?

\_\_\_Did not attempt intercourse

- \_\_\_Almost always or always
- \_\_\_Most times (much more than half the time)
- \_\_\_Sometimes (about half the time)

- \_\_\_\_A few times (much less than half the time)
- \_\_\_Almost never or never

4. Over the past 4, how often were you able to maintain your erection after you had penetrated (entered) your partner?

- \_\_\_ Did not attempt intercourse
- \_\_\_\_ Almost always or always
- \_\_\_\_Most times (much more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_ Almost never or never

5. Over the past 4 weeks, how difficult was it to maintain your erection to completion of intercourse?

- \_\_Did not attempt intercourse
- \_\_Extremely difficult
- \_\_\_Very difficult
- \_\_\_Difficult
- \_\_Slightly difficult
- \_\_Not difficult

6. Over the past 4 weeks, how many times have you attempted sexual intercourse?

- \_\_\_ No attempts
- \_\_\_\_1-2 attempts
- \_\_\_\_ 3-4 attempts
- \_\_\_\_ 5-6 attempts
- \_\_\_\_7-10 attempts
- \_\_\_\_11+ attempts

7. Over the past 4 weeks, when you attempted sexual intercourse how often was it satisfactory for you?

- \_\_\_ Did not attempt intercourse
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (much more than half the time)
- \_\_\_\_Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_Almost never or never

8. Over the past 4 weeks, how much have you enjoyed sexual intercourse?

- No intercourse
- \_\_\_\_ Very highly enjoyable
- \_\_\_\_Highly enjoyable

\_\_\_\_ Fairly enjoyable

\_\_\_\_ Not very enjoyable

\_\_\_\_No enjoyment

9. Over the past 4 weeks, when you had sexual stimulation or intercourse how often did you ejaculate?

- \_\_\_ No sexual stimulation/intercourse
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (much more than half the time)
- \_\_\_\_Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_ Almost never or never

10.Over the past 4 weeks (if your first visit) or since your last office visit, when you had sexual stimulation or intercourse, how often did you have the feeling of orgasm (with or without ejaculation)?

- \_\_\_\_ No sexual stimulation/intercourse
- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (much more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_ Almost never or never

The next two questions ask about sexual desire. Let's define sexual desire as a feeling that may include wanting to have a sexual experience (for example masturbation or intercourse), thinking about having sex, or feeling frustrated due to lack of sex.

11. Over the past 4 weeks, how often have you felt sexual desire?

- \_\_\_\_ Almost always or always
- \_\_\_\_ Most times (much more than half the time)
- \_\_\_\_ Sometimes (about half the time)
- \_\_\_\_ A few times (much less than half the time)
- \_\_\_\_ Almost never or never

12. Over the past 4 weeks, how would you rate your level of sexual desire?

- \_\_\_\_ Very high
- \_\_\_ High
- \_\_\_ Moderate
- \_\_Low
- \_\_\_\_ Very low or none at all

13. Over the past 4 weeks, how satisfied have you been with your overall sex life?

- \_\_\_ Very satisfied
- \_\_\_\_ Moderately satisfied
- \_\_\_\_About equally satisfied and dissatisfied
- \_\_\_\_ Moderately dissatisfied
- \_\_\_ Very dissatisfied

14. Over the past 4 weeks, how satisfied have you been with your sexual relationship with your partner?

\_\_\_\_ Very satisfied

- \_\_\_\_\_ Moderately satisfied
- \_\_\_\_ About equally satisfied and dissatisfied
- \_\_\_\_ Moderately dissatisfied
- \_\_\_\_ Very dissatisfied

15. Over the past 4 weeks, how do you rate your confidence that you can get and keep your erection?

- \_\_\_\_ Very high
- \_\_\_ High
- \_\_\_\_ Moderate
- \_\_\_Low
- \_\_\_ Very low

## Appendix H

Sexual Desire Inventory – second version (SDI-2:Spector, Carey, & Steinberg)

This questionnaire asks about your level of sexual desire. By desire, we mean INTEREST IN or WISH FOR SEXUAL ACTIVITY. By each item, please circle the number that best shows your thoughts and feelings. Your answers will be private and anonymous.

1. During the last month, <u>how often</u> would you <u>have liked</u> to engage in sexual activity with a partner (for example, touching each other's genitals, giving or receiving oral stimulation, intercourse, etc.)?

- 0. Not at all
- 1. Once a month
- 2. Once every two weeks
- 3. Once a week
- 4. Twice a week
- 5. Three to four times a week
- 6. Once a day
- 7. More than once a day
- 2. During the last month, how often have you had sexual thoughts involving a partner?
  - 0. Not at all
  - 1. Once or twice a month
  - 2. Once a week
  - 3. Twice a week
  - 4. Three to four times a week
  - 5. Once a day
  - 6. A couple times a day
  - 7. Many times a day

3. When you have sexual thoughts, how <u>strong</u> is your desire to engage in sexual behavior with a partner?

0	1	2	3	4	5	6	7	8
No Desire							Strong	Desire

4. When you first see an attractive person, how strong is your sexual desire?

No	0 Desire		2	3	4	5	6		8 g Desire
5. When you spend time with an attractive person, how strong is your sexual desire?							your sexual desire?		
No	0 Desire		2	3	4	5	6		8 g Desire
6. When you are in romantic situations (such as a candle lit dinner, a walk on the beach, etc.), <u>how strong</u> is your sexual desire?							, a walk on the beach, etc.),		
No	0 Desire		2	3	4	5	6	7 Strong	8 g Desire
7. <u>How strong</u> is your desire to engage in sexual activity with a partner?						artner?			
No	0 Desire	1	2	3	4	5	6	7 Strong	8 g Desire
8. <u>How</u>	impo:	rtant is :	it for yo	ou to ful	fill you	r desire	through	h activit	y with a partner?
	0 at all ortant	1	2	3	4	5	6	7	8 Extremely important
9. Compared to other people of your age and sex, how would you rate your desire to behave sexually with a partner?									
Muo	0 ch less	1 Desire	2	3	4	5	6	7	8 Much more desire
10. During the last month, <u>how often</u> would you <u>have liked</u> to behave sexually by yourself (for									

10. During the last month, <u>how often</u> would you <u>have liked</u> to behave sexually by yourself (for example, masturbating, touching your genitals, etc.?)

Not at all
 Once a month
 Once every two weeks
 Once a week
 Twice a week
 Three to four times a week

- 6. Once a day
- 7. More than once a day

11. How strong is your desire to behave sexually by yourself?

0 1 2 3 4 5 6 7 8 No Desire Strong Desire

12. <u>How important</u> is it for you to fulfill your desires to behave sexually by yourself?

0	1	2	3	4	5	6	7	8
Not at all								Extremely
important								important

13. Compared to other people of your age and sex, how would you rate your desire to behave sexually by yourself?

0	1	2	3	4	5	6	7	8
Much less	s Desir	e						Much more desire

14. How long could you go comfortably without having sexual activity of some kind?

- Forever
   A year or two
   Several months
   A month
   A few weeks
   A week
   A few days
   One day
- 8. Less than one day

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Worthington, R. L., Savoy, H., Dillon, F. R., & Vernaglia, E. R. (2002). Heterosexual identity development: A multidimensional model of individual and group identity. *Counseling Psychologist, 30,* 496-531

## CURRICULUM VITAE

## **Caroline Maykut**

Department of Psychology, University of Nevada, Las Vegas 4505 S. Maryland Parkway, Box 455030 Las Vegas, NV 89154-5030 caroline.maykut@gmail.com

### **EDUCATION**

Doctor of Philosophy: Clinical Psychology	2017
University of Nevada, Las Vegas Dissertation: Sexual Desire Trajectories: Heterosexual Individuals' Perceptions o State and Trait Characteristics of Desire Advisor: Dr. Marta Meana	f the
Master of Arts: Clinical Psychology University of Nevada, Las Vegas Thesis: Who or What Should I Be Like? The Self-Assessment of Sexual Desire Advisor: Dr. Marta Meana	2014
Bachelor of Arts: Psychology, Music McGill University Montreal, Quebec	2008

## **RESEARCH CONTRIBUTIONS**

#### Peer Reviewed Publications:

Farmer, M.A., **Maykut, C.A.**, Huberman, J.S., Huang, L., Kahlife, S., Binik, Y.M., Apkarian, A.V., & Schweinhardt, P. (2013). Psychophysical properties of female genital sensation. *Pain*, *154*, 2277-86.

Post-publication peer-reviewed by Faculty of 1000 as "Recommended."

Davis, S.N.P., **Maykut, C.A.,** Binik, Y.M., Amsel, R., & Carrier, S. (2011). Tenderness as measured by pressure pain thresholds extends beyond the pelvis in Chronic Pelvic Pain Syndrome in men. *Journal of Sexual Medicine*, *8*, 232-239.

Book Chapters Maykut, C.. & Meana, M. (in press). Genito-Pelvic Pain/Penetration Disorder. In Wenzel, A. (Ed.) *The SAGE Encyclopedia of Abnormal and Clinical Psychology*. SAGE Publications.

Meana, M., Fertel, E., & **Maykut, C.** (2017). Treating genital pain associated with sexual intercourse. In: Z. Peterson (Ed.) *Handbook of Sex Therapy*. Wiley-Blackwell.

Meana, M., **Maykut, C.**, & Fertel, E. (2015). Painful intercourse: Genito-pelvic pain/penetration disorder. In K.M. Hertlein, G. R. Weeks, & N. Gambescia (Eds). *Systemic Sex Therapy* (2<sup>nd</sup> Edition) New York: Haworth Press.

**Conference Presentations** 

**Maykut, C.A**. & Meana, M. (April, 2015). Who or what should I be like? Sexual desire self-assessment. Poster presented at the Western Psychological Association in Las Vegas, Nevada.

Farmer, M.A., **Maykut, C.A.,** Huberman, J., Binik, Y.M., & Apkarian, V. (February, 2015). Brain global and local network properties differentiate naturalistic vulvovaginal distention from vulvar pressure pain in women with provoked vestibulodynia. Paper presented at the International Society for the Study of Women's Sexual Health in Austin, Texas.

Farmer, M.A., **Maykut, C.A.**, Binik, Y.M., & Schweinhardt, P. (August, 2012). Dissociating nonpainful and painful vulvar mechanical pressure: An examination of psychophysical properties. Poster presented at the International Association for the Study of Pain (IASP) meeting, Milano, Italy.

#### **RESEARCH EXPERIENCE**

Human Sexuality Lab University of Nevada, Las Vegas Supervisor: Dr. Marta Meana Sept 2011- present

Laboratory for the Biopsychosocial Study of Sexuality July 2008 – August 2011 McGill University, Montreal, Quebec Supervisor: Dr. Yitzchak (Irv) Binik

**TEACHING AND MENTORING EXPERIENCE** 

<b>Graduate Student Coordinator</b> Outreach Undergraduate Mentorship Program (OUMP) Department of Psychology, University of Nevada, Las Vegas	Aug 2014-May 2015
<b>Teaching Assistant, University of Nevada, Las Vegas</b> Introduction to Statistical Methods Social Psychology Motivation & Emotion	Aug 2012 – May 2013
<b>Teaching Assistant, University of Nevada, Las Vegas</b> History of Psychology Perception Motivation & Emotion Social Psychology	Aug 2011-May 2012

Psychology of Personality

## CLINICAL TRAINING

<b>Pre-doctoral Intern</b> Norton Sound Health Corporation – Behavioral Health Services Nome, Alaska	<b>July 2016 – July 2017</b>
<b>Doctoral Practicum Student</b> Family and Child Treatment of Southern Nevada (FACT) Las Vegas, Nevada	Aug 2014 – May 2016
<b>Doctoral Practicum Student/Clinical Graduate Assistant</b> UNLV Disability Resource Center/The PRACTICE Las Vegas, Nevada	Aug 2015 – June 2016
<b>Doctoral Practicum Student</b> Advanced Psychological Care Las Vegas, Nevada	Jan 2015 – June 2016
<b>Doctoral Practicum Student/Clinical Graduate Assistant</b> UNLV Counseling and Psychological Services (CAPS) Las Vegas, Nevada	Aug 2013 – Aug 2014
<b>Doctoral Practicum Student</b> UNLV The PRACTICE: A Community Mental Health Center Las Vegas, Nevada	Sept 2012 – July 2013
<b>Doctoral Practicum Student</b> UNLV Psychological Assessment and Testing Clinic Las Vegas, Nevada	Sept 2012 – June 2015
SERVICE	
Intern Co-Representative Alaska Psychology Internship Consortium – Class of 2017	July 2017-July 2017
<b>Cohort Representative</b> <b>Co-Chair</b> Clinical Student Committee, UNLV Department of Psychology	Aug 2015 – May 2016 Aug 2014 – Aug 2015
<b>Graduate Student Member</b> Graduate Student Coordinator Diversity Committee, UNLV Department of Psychology	Aug 2015 – May 2016 March 2015 – May 2015

# COMMUNITY OUTREACH

**Maykut, C.**, & Paul, M. (October, 2014). Managing stress in dental school. Presentation to the UNLV School of Dental Medicine, class of 2018, Las Vegas, Nevada.

Paul, M., & **Maykut, C.** (October, 2014). Conflict resolution. Presentation to the UNLV School of Dental Medicine, class of 2018, Las Vegas, Nevada.

Tracy, K., & **Maykut, C.** (February, 2013). Managing stress and conflict. Presentation to the freshman class at Northwest Career and Technical Academy, Las Vegas, Nevada.

#### **PROFESSIONAL AFFILIATION**

Western Psychological Association, Student member<br/>Society for Sex Therapy and Research, Student memberNovember 2014 - present<br/>February 2012- present<br/>September 2011- presentNevada Psychological Association, Student memberSeptember 2011- present

## SPECIALITY CLINICAL TRAINING & WORKSHOPS

FASD 4-Digit Diagnostic Code Online Course Washington University	January 2017
Multidimensional Assessment American Society of Addiction Medicine	<b>July 2016</b>
Trauma-Focused Cognitive-Behavioral Therapy (web-based) Medical University of South Carolina	August 2015
Treatment of Children with Sexual Behavior Problems: Part I (8 hours) Family and Child Treatment (invited training) Jane Silovsky, Ph.D., & Jimmy Widdifield, Jr., LPC – University of Okl	August 2014 lahoma
Comprehensive training in Dialectical Behavior Therapy: Part II Alan Fruzetti, Ph.D. Nevada Psychological Association (Las Vegas, Nevada)	February 2013
Comprehensive training in Dialectical Behavior Therapy: Part I Alan Fruzetti, Ph.D. Nevada Psychological Association (Las Vegas, Nevada)	November 2012
Ethics and Ethical Decision Making (6 hours) Stephen Behnke, Ph.D. Nevada Psychological Association (Las Vegas, Nevada)	October 2012
Eating Disorders and Obesity: Outpatient Assessment and Treatment (6)	hours) <b>Nov 2011</b>

Eating Disorders and Obesity: Outpatient Assessment and Treatment (6 hours) **Nov 2011** Lindsey Ricciardi, Ph.D. Nevada Psychological Association (Las Vegas, Nevada)

Working With Challenging Couples (6 hours) John C. Friel, Ph.D. Nevada Psychological Association, (Las Vegas, Nevada) October 2011