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Self-Expansion as a Predictor of Attention to Alternative Romantic Partners

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Abstract of the Dissertation

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Focusing on attractive alternative partners when one is already in an established relationship can lead to several negative outcomes, including infidelity and relationship dissolution. The extent to which individuals attend to and remember such alternatives, however, may be affected by various factors within the relationship, including love for the partner, commitment to the relationship, and self-expansion in the relationship. This research examined the role of such relationship factors in predicting cognitive processes associated with attractive alternatives. Specifically, two studies tested hypotheses derived from the self-expansion model of close relationships (e.g, Aron et al., 2000) that predict key factors associated with attention to, and memory for, attractive alternative partners. Study 1 examined the relative influence of romantic love, commitment, and relational self-expansion in reducing attention to attractive alternatives. Study 2 examined need for self-expansion (in one's life in general) and how this may affect attention to, and memory for, alternatives, as well as the type of alternatives one may find appealing. Love for the

partner predicted reduced visual attention to photos of attractive alternatives. Love, commitment, and relational self-expansion were associated with reported attention to alternatives. Further, need for self-expansion predicted memory for (but not attention to) alternatives that differed from the partner in terms of self-expansion promoting attributes, which could therefore supplement one's level of self-expansion. Implications regarding the application of the self-expansion model to the study of infidelity are discussed, as well as potential directions for future research.

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Infidelity in romantic relationships is a subject that has concerned people throughout various historical and cultural contexts and continues to be a relevant phenomenon today. In the last 30 years, researchers from a wide array of disciplines have studied various correlates and predictors of infidelity, including individual difference and demographic variables (e.g., attachment style, gender), and characteristics involving the primary relationship (e.g., commitment, satisfaction). Further, the underlying processes involved in infidelity have been approached from a variety of theoretical perspectives, including evolutionary, attachment, and investment theories, and, most recently, the self-expansion model. Much of the latest research in social psychology, largely based on investment theory and the self-expansion model, has employed a social cognitive approach, with a focus on what could be the starting point for infidelity: attention to alternative partners when one is already in a relationship. This proposal first provides an overview of major findings in the infidelity literature, focusing in more detail on recent work involving the perception of alternative partners and how the self-expansion model can inform this research. Finally, a two-study research project will be elaborated in which commitment, romantic love, and self-expansion in one's primary relationship will be examined in the context of attention to alternative partners.

BACKGROUND (LITERATURE REVIEW)

Infidelity can take different forms, including flirting, sexual fantasies, extramarital sex, and emotional attachment. Even within the contemporary Western context, the specific behaviors considered to represent infidelity can vary from individual to individual because of differences in relationship norms (Drigotas et al., 1999). In recent infidelity research, sexual infidelity (extra-dyadic sexual relationships without emotional involvement) is often distinguished from emotional infidelity (extra-dyadic romantic feelings without sexual

involvement; e.g., Glass & Wright, 1992), but in many cases both types of infidelity seem to be present.

Although most forms of extra-dyadic involvement outside a committed relationship are viewed as a serious betrayal, infidelity is nevertheless a widespread phenomenon (for a more detailed review see Tsapelas, Fisher, & Aron, 2011). Data from community studies of married heterosexual U.S. participants indicate that 20%-40% of men and 20%-25% of women have engaged in an extramarital affair (e.g., Greeley, 1994) and that approximately 2%-4% of married men and women are likely to have had extramarital sex in the past year (e.g., Whisman et al., 2007). After reviewing 12 studies of extramarital behavior, Thompson (1983) concluded that 13% of men and 21% of women reported having been at some point in their marriage purely emotionally involved with someone else, and 31% of men and 16% of women reported having had a purely sexual affair at some point in their marriage. However, 20% of both married men and women reported having engaged in an affair that included both sexual and emotional involvement.

In general, extra-dyadic sex seems to occur more often in dating and cohabiting couples, compared to married couples. With regard to infidelity in heterosexual U.S. dating couples, many studies (which included a broad range of infidelity behaviors) have found prevalence rates of about 70% (e.g., Allen & Baucom, 2006). Among gay men, extra-dyadic sex seems more common, and in lesbian relationships less common, than in heterosexual relationships (Blumstein & Schwartz, 1983).

Characteristics of the Primary Relationship and Infidelity

Relationship Satisfaction and Quality

Certain characteristics of the primary relationship have been investigated as predictors of infidelity behavior. In an early review of sexual infidelity in marriage, Thompson (1983) found extramarital sex to be particularly related to relationship satisfaction variables and to sexual frequency and sexual quality variables; these characteristics taken together were found to reliably account for about 25% of the variance in extramarital sex.

Other research also supports the strong association between relationship satisfaction and infidelity. Glass and Wright (1985) found that partners involved in both sexual and emotional infidelities were found to be even more dissatisfied with their marriages than those engaged in either sexual-only or emotional-only infidelities. Another study (Buss & Shackelford, 1997) found that individuals who report being unhappy in their marriage expect that they will engage in infidelity behaviors in the future (e.g., flirting, going on a date, having an affair) and that their spouses will do the same.

A recent longitudinal study of U.S. participants (Allen et al., 2008) found that dissatisfaction with one's marriage unfolds in different ways for men and women. More specifically, men who went on to engage in sexual infidelity (compared to those who did not) reported less satisfaction with the relationship before getting married, however wives who went on to engage in infidelity did not report lower levels of premarital satisfaction. Women may be experiencing a disillusionment process in which early shortcomings are overlooked but still take their toll over time, increasing the likelihood of infidelity during marriage.

Commitment Level, Duration, and Communication in the Primary Relationship

In addition to relationship satisfaction variables, other issues involving the primary relationship have also been investigated. Some work suggests that marriage may serve as a protective factor against infidelity for some couples. For instance, married women were found

to be less likely to engage in sexual infidelity, compared to cohabiting or dating women, while cohabiting and dating women were equally likely to engage in sexual infidelity (Forste & Tanfer, 1996). Thus, the association between marriage and a decreased likelihood of infidelity may be mediated by commitment level.

Duration of the relationship also plays a role in infidelity. Among married women, the likelihood of extramarital involvement peaks in the seventh year of marriage, then declines; but among married men, the likelihood of extramarital involvement decreases over time until the eighteenth year of matrimony, after which the likelihood of extramarital involvement increases (Liu, 2000). Similarly, in a sample of couples in therapy for infidelity, sexual infidelity first occurred after an average of 7 years of marriage (Wiggins & Lederer 1984). Lawson and Samson (1988) reported, however, that the length of marriage prior to initial sexual infidelity is decreasing with younger cohorts. Among husbands, a wife's pregnancy and the months following the birth of a child are also high-risk times for infidelity (Brown, 1991; Whisman et al., 2007).

Susceptibility to infidelity has also been associated with the way couples communicate. In an 8 year study of premarital precursors of infidelity, Allen and colleagues (2008) found strong and consistent effects of communication patterns: couples who experienced sexual infidelity in the first year of marriage indicated more problematic communication before marriage, such as lower levels of positive interaction and higher levels of negative and invalidating interaction. The authors concluded that susceptibility to infidelity should be viewed in terms of couples' communication dynamics, as opposed to individual processes involving one partner or the other.

Gender and Infidelity

Gender differences in infidelity have been explored at length. A large body of research with American samples indicates that men, compared to women, have a stronger desire to engage in sexual infidelity (Prins et al., 1993), are more likely to engage in sexual infidelity (e.g., Allen et al., 2004), have more sexual partners outside their primary relationship (e.g., Blumstein & Schwartz, 1983; Wiggins & Lederer, 1984), more episodes of infidelity (e.g., short- or long-term affair, one-night stand; Brand et al., 2007), have more physical contact with the extra-dyadic partner (including intercourse) (Wiederman & Hurd, 1999), are less likely to fall in love with this partner (Glass & Wright, 1985), and cite more sexual motivations for infidelity (e.g., Barta & Kiene, 2005). Women, compared to men, tend to have a greater emotional connection with the extra-dyadic partner (Spanier & Margolis, 1983), report more intimacy and self-esteem motivations for infidelity, endorse higher levels of feeling this behavior is unlike them, and feel more concerned about the negative judgment of others (Brand et al., 2007). For men, the desire to engage in infidelity may also be somewhat independent of the state of the primary relationship. Prins and colleagues (1993) found that among women, but not men, the strength of extra-dyadic sexual desires and the frequency of affairs were related to the degree of reciprocity in the primary relationship.

Although gender differences in infidelity have been found in past research, the gender gap appears to be getting smaller, particularly within younger cohorts (e.g., Wiederman, 1997). Some recent research suggests that men are only somewhat more likely to engage in infidelity, compared to women (e.g., Atkins et al., 2001; Choi et al., 1994), and that male and female rates of infidelity are becoming increasingly similar (Feldman & Cauffman, 1999). In a recent study of U.S. undergraduates, Brand and colleagues (2007) found that women had slightly higher prevalence rates of infidelity (although men still reported more episodes of

infidelity). This finding may be due to the broader definition of infidelity used in this study (i.e., any form of short- or long-term romantic or sexual involvement). Similarly, another study (Wiederman, 1997) did not find any gender differences in extramarital sex for men and women under 40 years old; other work (Laumann et al., 1994) found higher rates of sexual infidelity for women in younger cohorts (18-29 years old). Finally, Seal and colleagues (1994) found that although men were more likely to report a desire to seek extra-dyadic partners, a behavioral measure of actual extra-dyadic sexual encounters did not indicate a gender difference.

<div align="center">Theoretical Models in Infidelity Research</div>

Recently, various theoretical perspectives including evolutionary theory, attachment theory, the investment model, and the self-expansion model have been applied to the study of infidelity.

Evolutionary Approaches

Evolutionary approaches have focused on gender differences in infidelity which are hypothesized to relate to reproductive success (e.g., Buss, 1993). Evolutionary theorists have suggested that because women have historically had greater parental investment in their offspring, including gestation and nursing, and men have had more time and resources to devote to mating, women are obliged to compete for men and men have more opportunities to engage extra-dyadic partners (Buss, 1993). In this view, engaging in sexual infidelity may be more beneficial to men, since they are able to mate with a potentially large number of women without sacrificing much in terms of time or resources.

Although the reproductive benefits of sexual variety and infidelity in particular seem to be greater for men, evolutionary theory points to several reasons why infidelity may be

adaptive for women as well. Fisher (1992) has proposed that during prehistory, unfaithful females reaped economic resources from their extra-dyadic partnerships, as well as additional individual(s) to help with parenting duties if their primary partner died or deserted them. If they bore a child with this extra-marital partner they also increased the genetic variety in their forthcoming young. Buss (2000) has suggested that women may use affairs as a means of "trading up" and finding a more desirable partner. In short, infidelity had biological payoffs for both males and females throughout prehistory, perhaps perpetuating the propensity for infidelity in both sexes today. Similarly, women may have a "back-up" mate to serve various functions (e.g., offer protection, resources) when the regular mate is not present (Buss, 2000).

Finally, recent work suggests that subtle fertility cues in women prime both cognitive and behavioral mating motivations in men. In a series of studies, Miller and Maner (2010) exposed men to the scent of an ovulating woman (near peak levels of fertility) and found that this increased men's accessibility to sexual concepts, heightened men's perceptions of women's sexual arousal, and resulted in behavioral mimicry of a female interaction partner. According to evolutionary theory, one way that men maximize their reproductive success is by mating with women during their peak period of fertility. Thus, such research points to adaptive mechanisms that may allow men to monitor phases in women's reproductive cycles, and then think and behave accordingly so as to facilitate the pursuit of a female sexual partner.

Attachment Style

Researchers have also studied infidelity from the perspective of attachment theory (e.g., Bogaert & Sadava, 2002). According to this approach, children develop a specific

attachment style (expectations about the availability and supportiveness of their caregiver) based on the way they are treated by caregivers (e.g., Bowlby, 1973). In adulthood, individuals with a secure attachment style feel comfortable with intimacy and tend to have more long-term and stable relationships compared to individuals with insecure attachment styles (Miller & Fishkin, 1997). As a result, insecurely attached individuals may have more extra-dyadic involvement due to conflicts in their relationships (Bogaert & Sadava, 2002).

Insecure attachment has also been linked to attention to attractive alternative partners, which could represent the initial phase of infidelity. Using a diary study, Overall and Sibley (2008) found that individuals high in attachment avoidance (compared to those low in attachment avoidance) experienced relatively lower romantic attraction in interactions with current partners and greater romantic attraction when interacting with potential alternatives. Attachment avoidance has also been associated with greater attention to alternative partners (Miller, 2008) and more positive attitudes toward becoming sexually involved with alternative partners (e.g., Brennan & Shaver, 1995). It seems that highly avoidant individuals retain emotional distance from the current partner and display a more proactive orientation toward potential alternatives, both in terms of attention and attraction. Although additional work is needed to elucidate the role of attachment style in infidelity (especially work using interview and implicit measures of attachment), Allen and Baucom (2004) concluded that there is support for "the hypothesis that attachment style is related to intimacy regulating functions of extra-dyadic involvement" (p. 482).

Investment Model

According to the investment model (e.g., Rusbult, 1980; Rusbult et al., 1994), commitment (a psychological attachment to and a motivation to continue a relationship) is a

main force in maintaining romantic relationships. Factors that influence commitment include satisfaction (how happy the individual is with the relationship), alternative quality (potential satisfaction provided outside the relationship such as dating another person, being alone, etc.), and investments (things the individual would lose if the relationship ends such as shared possessions, friends, etc.). Individuals who are highly committed may be less likely to engage in infidelity because they are motivated to derogate potential alternative partners in order to protect the relationship, and consider the long-term ramifications of infidelity when tempted. In this way, commitment reduces the frequency of temptation and allows the individual to focus on long-term consequences.

The investment model has been particularly generative of research relevant to infidelity, focusing particularly on interest in potential alternatives. In one series of studies, Johnson and Rusbult (1989) demonstrated that individuals who are highly committed to their relationships actively derogate attractive, available alternative partners on several interpersonal dimensions (e.g., intelligence, sense of humor, similarity of attitudes). Derogation was particularly pronounced when available alternatives were physically attractive and could pose a clear threat to the relationship (i.e., when positive judgments of attractive alternatives might have produced an opportunity to interact with them). Similarly, another study (Rusbult, 1983) found that as individuals became increasingly involved with their partners, they described alternative partners in increasingly negative terms.

A later study (Simpson et al., 1990) found that individuals involved in committed dating relationships tend to perceive potential alternatives as less physically and sexually attractive, compared to single or uncommitted individuals. In contrast to the Johnson and

Rusbult (1989) studies, this research focused on attractive yet unavailable alternatives (i.e., photos of models) and still found the derogation effect.

Related research has been done based on the "closing time effect" (Pennebaker et al., 1979) in which the perceived attractiveness of opposite-sex participants in a bar was found to increase as closing time approached, thereby reducing the time left to make a decision. Specifically relevant to the focus of this proposal on interest in alternatives, a key study building on the closing time effect (Madey et al., 1996) found that participants who were in a relationship (compared to those who were single) not only rated opposite-sex bar patrons as less attractive from the beginning of the evening, but they did not significantly differ in their attractiveness ratings throughout the evening, as did their single counterparts. It seems that just being in an exclusive dating relationship (which implies some level of commitment) is linked to evaluative processes in which potential alternatives are dismissed.

Commitment has also been linked to actual infidelity behavior: Drigotas and colleagues (1999) found that measures of commitment successfully predicted physical and emotional infidelity in a sample of college students both over the course of a semester and over spring break vacation. Therefore, commitment in an exclusive dating relationship may protect individuals from the threat of an attractive alternative.

Self-Expansion Model

Aron and Aron's (1986) self-expansion model of close relationships posits that people are motivated to enter relationships in order to enhance the self and increase self-efficacy. The main way that people seek to expand the self in the context of relationships is in terms of "including others in the self" (IOS) so that the other's resources, perspectives, and identities are to some extent experienced as one's own. The principles of self-expansion and IOS have

received considerable research support and have been applied to the study of various relationship issues, including romantic love, intergroup relations, breaking up, and relationship boredom (for a review, see Aron et al., 2004).

With regard to romantic relationships, the self-expansion model suggests that in the beginning of a relationship, partners typically engage in a large amount of self-disclosure (e.g., talking on the phone for hours, spending extensive time with each other, constantly thinking about the partner, etc.) which results in rapid self-expansion. This rapid self-expansion is associated with feelings of great pleasure, arousal, and excitement (e.g., Aron et al., 2001). However, as time passes, couples become accustomed to one another and the self-disclosure process slows down resulting in a decline or complete cessation of self-expansion. As a result, couples may not be as satisfied or passionate about the relationship as they once were, and they may also experience boredom or distress.

The principles of the self-expansion model have important implications for the well documented decline in satisfaction over the course of a relationship (e.g., Bradbury et al., 2000). Loss of excitement due to habituation appears to be a major driving force behind the frequently experienced decline in relationship quality over time (Tsapelas, Aron, & Orbuch, 2009). Dissatisfaction with one's partner and relationship may also lead to more serious problems, such as arguing, and may result in boredom and a decline in satisfaction, which in turn may cause people to seek extra-dyadic partners in order to fulfill these self-expansion needs.

In a recent study of infidelity motivations, Lewandowski and Ackerman (2006) directly investigated this idea. In a sample of dating college students, they found that self-expansion variables (self-expansion, potential for self-expansion, and inclusion of the other in

the self) accounted for a large portion of the variance in susceptibility to infidelity (i.e.,

likelihood that participants would engage in various infidelity behaviors). Further, other

research (VanderDrift et al., 2011) found that lacking relationship-derived self-expansion

leads to greater attention to alternatives, and less devaluation of alternatives. This research

indicates that if one's primary relationship is not meeting self-expansion needs, individuals

may look outside the relationship in order to fulfill these needs.

More recent work (Le et al., 2009) examined the relative strength of relationship

closeness (IOS) and self-expansion opportunities in predicting sexual infidelity. In a sample

of college student participants, self-expansion but not closeness, significantly predicted less

sexual infidelity. The same results were found in a second study of college students over a 4

week winter break. This work highlights the distinction between the process of self-expansion

and the state of self-other inclusion.

Although minimal research has been devoted to this topic, there are several ways in

which self-expansion and IOS could be linked to infidelity. As previously mentioned, the

general tendency to decline in self-expansion over time could reduce primary relationship

satisfaction and lead to boredom. A decline in self-expansion could also lead to reduced

feelings of romantic love, which is often felt in the initial stages of a relationship when self-

expansion is high. Similarly, reduced IOS (feeling that one's partner is part of the self) could

lead to a reduction in commitment and the motivation to maintain the relationship. For some

individuals, such conditions may increase the likelihood of engaging in infidelity and

fulfilling self-expansion and closeness needs with an extra-dyadic partner.

The self-expansion model may also indicate the type of extra-dyadic partner that

would be most attractive to an individual engaging in infidelity. Although some self-

expansion needs may be fulfilled through the primary relationship, an individual may choose an extra-dyadic partner that is able to fulfill other self-expansion needs that have not been met. (Indeed, Aron et al., 2006, found in the context of initial attraction that when people are confident that they are able to form a relationship with someone, they prefer those who have different interests from their own. And Wright et al., 2004, found that when people are primed with a high need for self-expansion they are more interested in becoming friends with someone of a different ethnicity than their own.) More specifically, a person that is quite different from the primary partner in terms of background, skills, and perspectives may be chosen as a way of accessing a broader range of characteristics to include in the self. Finally, if self-expansion is low in one one's relationship and/or in one's life in general, this could lead to a general propensity for infidelity regardless of the specific attributes of the extra-dyadic partner.

Cognitive Processes in Infidelity and Attention to Alternative Partners

As previously discussed, feeling committed and simply being in an exclusive dating relationship can lead to the derogation of attractive alternative partners, however other work indicates that committed individuals actually pay less attention to such alternatives. Miller (1997) asked participants in romantic relationships to inspect an array of magazine photos that included images of physically attractive members of the opposite sex. Vigilance toward desirable alternatives (e.g., "I am distracted by other people that I find attractive") was found to be highly and negatively correlated with commitment to, satisfaction with, and investment in a dating relationship. People who were attentive to their alternatives also evidenced less adjustment and closeness in their relationships and were less likely to be dating the same partner 2 months later. Further, high attentiveness to alternatives was the best predictor of

relationship failure (compared to variables such as satisfaction and investments). Following from this initial work, Miller (2008) also found that attending to alternatives undermines the relationship satisfaction and commitment of both partners over time, but people who are more satisfied with and committed to their current partner pay less attention to alternatives and are therefore more likely to maintain their relationship over time.

In addition to commitment, romantic love also seems to reduce attention to alternatives, and perhaps deter infidelity. Maner and colleagues (2008) found that priming thoughts and feelings of romantic love for one's current partner reduced attention to photos of physically attractive alternatives in a visual cueing measure. In this study, participants were assigned to either a romantic love condition (in which they wrote a brief essay about a time they experienced strong feelings of love for their current partner) or a control condition (in which they wrote about a time they felt extremely happy). After writing the essay, participants completed a version of the visual dot-probe procedure which assessed how efficiently they were able to shift away their attention away from one stimulus location to another. The photographs used for this task were of (a) highly attractive women, (b) highly attractive men, (c) average-looking women, and (d) average-looking men. The procedure for each trial was as follows: first, a fixation cross ("x") appeared in the center of the computer screen for 1000 ms. Next, a target face was displayed for 500 ms in one quadrant of the screen. Concurrent with the disappearance of the target face, a categorization object (circle or square) appeared in either the same location as the picture ("filler trials") or in a different quadrant ("attentional shift trials"). When this object appeared, the participant's task was to categorize the object as a circle or a square, by pressing one of two computer keys. On attentional shift trials (which were the trials of interest), participants were required to shift their attention away from the

location of the target face to a different location on the screen. The response latency between the appearance of the categorization object and the participant's response provided a reaction time measure of attentional adhesion. Larger response latencies indicated that it took the participant longer to shift attention away from the location of the target face. Participants primed for romantic love (compared to those in the control condition) evidenced less visual attention to the photos of attractive alternative partners.

A later study (Maner et al., 2009) used the same visual cueing task with two different implicit manipulations intended to prime mating: in study 1, participants were primed with words highly relevant to mating (e.g., kiss, lust) and in study 2, participants completed a sentence unscrambling task with words highly relevant to mating. Single participants responded to the mating primes by increasing attention to physically attractive alternatives, but participants in a committed romantic relationship were inattentive to those alternatives. Another study (Gonzaga et al., 2008) found that romantic love and commitment (but not sexual desire) led participants to display poorer memory for characteristics of an attractive alternative, specifically attractiveness-related details (e.g., fitness and beauty cues) but not attractiveness-irrelevant details of the alternative. Further, romantic love, but not sexual desire, predicted greater commitment to the current partner.

Whereas earlier research on attention to and derogation of attractive alternatives has focused on processes involving explicit, higher-order cognitive mechanisms (e.g., time spent viewing a photo; Miller, 1997), recent work involving implicit cognitive mechanisms provides a novel approach for examining automatic, early-stage attentional processes in romantic relationships. This research also indicates that commitment and romantic love may discourage partners from straying via explicit and implicit cognitive mechanisms. Perceiving

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and focusing on desirable alternatives weakens relationship satisfaction and stability, so individuals who are motivated to maintain their relationships will either be inattentive towards alternatives and/or perceive alternatives as less desirable. In contrast, partners lower in love and commitment may be more likely to attend to and be attracted to alternatives.

The Current State of Infidelity Research

In the last 30 years, researchers in a wide array of disciplines have investigated various correlates and predictors of infidelity and have come to certain conclusions based on this work. Gender has been extensively studied in relation to infidelity. Although earlier research indicated greater gender differences in prevalence and incidence of infidelity, as well as in motivations for infidelity, recent work shows that such reported differences may have been misleading or outdated. Further, a great deal of research suggests that infidelity is associated with deficits in the primary relationship (e.g., low satisfaction) and that certain conditions (e.g., love, commitment, being in an exclusive relationship) can protect against potential infidelity.

With regard to theory, infidelity has been mainly studied from the perspective of evolutionary theory, the investment model, and to a lesser extent attachment theory and self-expansion theory. The evolutionary approach has focused on gender differences in infidelity which are hypothesized to relate to reproductive success (e.g., Buss, 1998). Research involving attachment theory suggests a link between insecure attachment styles and infidelity (e.g., Bogaert & Sadava, 2002). The investment model suggests that susceptibility to infidelity is directly influenced by commitment to the primary relationship (a hypothesis strongly supported in previously mentioned work). Finally, research from the perspective of the self-

expansion model suggests that a lack of self-expansion (and perhaps closeness) in one's primary relationship predicts infidelity (e.g., Lewandowski & Ackerman, 2006).

As previously discussed, past work in this field has contributed to our understanding of infidelity in various ways. However, other facets of this experience are only beginning to be explored; this includes cognitive processes involving the perception of alternative partners (which can be a potential starting point for infidelity) and how these processes are influenced by important relationship variables such as commitment, love, and self-expansion. Further, characteristics of the primary partner and how this may influence attention to alternative partners and infidelity (particularly via self-expansion needs), which would seem to be enormously important, has not been studied at all.

The Current Research

The proposed research builds directly on what seems to be the central opportunities offered by the current state of the literature, including the promising new theoretical directions suggested especially by the self-expansion model (including both the role of relationship boredom vs. self-expansion that is only beginning to be studied, and as suggesting directions to explore for the first time the specific characteristics that might be desired in a potential partner). Further, this research also builds on the promising new methodological approaches focusing on early-stage attention to potential alternatives (and the seemingly central importance of this variable as a marker for the prospect of infidelity).

Thus, this research examined hypotheses derived from the self-expansion model that predict key factors associated with early-stage attention to attractive alternative partners. Specifically, these studies focused on the degree and type of self-expansion one is receiving from the primary relationship (which has not been at all examined with regard to attention to

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alternatives), as well as the hypothesis that such self-expansion mediates the association between romantic love and attention to alternatives, and between commitment and attention to alternatives. Although the self-expansion model has been used to predict infidelity behavior in a small number of recent studies (Lee et al., 2009; Lewandowski & Ackerman, 2006), this initial work has not specifically examined the theoretically crucial role of self-expansion in early stage attention to alternatives, or how it may mediate effects of love and commitment. In addition, the proposed research examined for the first time the role of self-expansion in shaping the specific qualities of potential alternatives that might make particular alternatives especially appealing. Finally, in contrast to most infidelity research, which has mainly employed questionnaire methods and retrospective accounts, the present study employed state of the art social cognition methods (i.e., the dot-probe measure of visual attention) that provide an objective assessment of attention to alternatives at an early, automatic stage of perception. The dot-probe measure of visual attention is a relatively new and advanced method to study attention to alternatives, which can provide a direct and automatic assessment of this construct, without being affected by biases involving memory and inaccurate self-report.

Adapting the procedure used successfully by Maner et al. (2008), both of my studies included a dot-probe task to measure visual attention to photos of attractive, opposite-sex faces. Study 1 employed primes for commitment, love, and self-expansion, and examined the extent to which each of these variables predicts attention to alternatives, specifically focusing on the hypotheses that the strongest effect will be from self-expansion and that self-expansion will mediate effects of love and commitment. Study 2 focused on degree of self-expansion in one's life and how this may impact attention to alternative partners and on the specific

characteristics that make a potential alternative especially attractive (as indicated by attention and memory). Study 2 employed the same visual dot-probe task, but the photos of the attractive alternatives were first presented with a purported description of each person (designed to either match or differ from one's partner in terms of desirable self-expansion promoting attributes) so that participants may associate these photos with particular attributes. Need for self-expansion in one's life (either high or low) was manipulated following a priming procedure developed and used successfully by Wright and colleagues (2004); and then attention to and memory for the two types of alternatives (possessing interesting/exciting attributes that either do or do not match those of the partner) was assessed. Thus, Study 1 investigated the ways in which commitment, love, and self-expansion predict attention to alternatives, and Study 2 investigated how need for self-expansion and the characteristics of one's primary partner (both individually and in tandem) influence attention to and memory for specific alternatives.

<div align="center">Hypotheses</div>

Study 1

     1. Attention to alternatives will be lower in the commitment prime condition, compared to the neutral prime condition.

     2. Attention to alternatives will be lower in the romantic love prime condition, compared to the neutral prime condition.

     3. Attention to alternatives will be lower in the self-expansion prime condition, compared to the neutral prime condition.

4. Attention to alternatives will be lower in the self-expansion prime condition, compared to both the commitment and romantic love prime conditions.

5. The effect of romantic love (vs. neutral) on reduced attention to alternatives will be mediated by self-expansion.

6. The effect of commitment (vs. neutral) on reduced attention to alternatives will be mediated by self-expansion.

Study 2

7. Attention to both types of alternatives will be higher in the high self-expansion need condition, compared to the low self-expansion need condition.

8. In the high self-expansion need condition, attention to alternatives who possess self-expansion promoting attributes that differ from those of the partner will be higher, compared to attention to alternatives who share such attributes with the partner.

Method

Study 1

143 participants (99 women and 43 men) recruited from the Stony Brook University campus took part in this study. Most participants were part of the Stony Brook psychology department subject pool, signed up for the experiment online, and received course credit for their participation. A small number of participants were recruited via advertisements posted around the Stony Brook campus and received a $5.00 payment at the end of the experiment. All participants were in a committed, exclusive relationship of at least 6 months. The mean age of participants was 20.52 years; and mean relationship length was 23.28 months; 91.4% of participants were exclusively dating their partner and the remainder were either engaged or

married; and 93.7 % of participants identified themselves as heterosexual, 3.5% as bisexual, and 2.8% as gay or lesbian. Additional information on participants' ethnicity, relationship status and length, attachment, and relationship quality variables is provided in Tables 1-4. Given the difficulties involved in analyzing the attractiveness of target photos for bisexual participants, these participants were eliminated from analyses involving reaction time data.

Participants first completed a demographics questionnaire and baseline measures of the three major variables (i.e., love, commitment, self-expansion) and were then randomly assigned to one of four conditions. Commitment was measured with a short version of the commitment scale from the Investment Model Scale (Rusbult, 1983). Example items include, "I want our relationship to last forever", and "I would not feel very upset if our relationship were to end in the near future" (α =.86 in this sample). Romantic love was assessed with a short version of the Passionate Love Scale (PLS; Hatfield & Rapson, 1987) and included items such as "I would rather be with my partner than anyone else," and "My partner always seems to be on my mind" (α = .88 in this sample). Self-expansion was measured with a short version the Self-Expansion Questionnaire (SEQ; Lewandowski & Aron, 2002) with items including, "How much does being with your partner result in your having new experiences?" and "How much does your partner help to expand your sense of the kind of person you are?" (α = .92 in this sample).

Participants then completed the dot-probe visual cueing task (adapted from Maner et al., 2008 and previously described in the background section) for the first time (i.e., pre-priming dot-probe) with four types of photos varying in attractiveness and gender, with a total of 40 photos (i.e., 10 attractive opposite-sex, 10 attractive same-sex, 10 average opposite-sex,

10 average same-sex). These photos were successfully used in past studies (e.g., Maner et al., 2009, Maner et al., 2008).

In the three experimental conditions, participants were primed for either love, commitment, or self-expansion with their partner; in the fourth condition, the control condition, the prime involved experiences unrelated to their romantic partner. Immediately following the prime, participants completed the dot-probe task for a second time (i.e., post-priming dot-probe) and then again completed brief measures of each of the three variables (i.e., love, commitment, and self-expansion; these measures were administered at this point to permit testing for whether they serve as mediators of effects of the different primes on the dependent variable of attention; the order of all measures pre and post-test was also counterbalanced across participants within each condition). Although it would have been preferable to test for manipulation effects (and potential mediation) immediately following the manipulation, we decided to measure the three relationship variables after the dot-probe so as not to undermine the manipulations by exposure to questions regarding the three conditions. Finally, participants then completed a standard measure of attachment style, the Experiences in Close Relationships Scale (ECR; Brennan et al., 1998), a global measure of relationship satisfaction, the Relationship Assessment Scale (RAS; Hendrick, 1981), the Inclusion of Other in the Self Scale (IOS; Aron et al., 1992), and a self-report measure of attention to alternative partners, the Attention to Alternatives Scale (Miller, 2010).

Priming

Feelings of romantic love for one's current partner were primed by having participants write a brief essay about a time in which they experienced strong feelings of love for the partner (as in Maner et al., 2008). Commitment towards one's current partner was primed by

having participants write a brief essay designed to activate thoughts of dependence and commitment (e.g., "If your relationship were to end in the near future, what would upset you the most about not being with your partner anymore?", "Describe two ways in which you feel that your life has become "linked" to your partner?"). This priming procedure was taken from Finkel and colleagues (2002). Self-expansion in the relationship was primed by having participants write an essay describing the ways in which life with their partner is exciting, engaging, novel, and challenging (e.g., things they do together, joint projects). The neutral condition prime adapted from Maner and colleagues (2008), required participants to write a brief essay about a time in which they felt very happy, but that did not involve a romantic partner or someone for whom they had romantic feelings. The full instructions that participants viewed during priming are listed in Appendix A.

Results

Data screening. Data were screened for missing values, normality, and outliers. Active Prowling, one of the factors comprising the Attention to Alternatives Scale, was positively skewed and transformed by taking the log of each subject's score. A log transformation was also used on relationship length, which was positively skewed as well. In the case of relationship length, it is often standard to transform it in order to accurately reflect the underlying construct (i.e., the impact and meaning of length may be quite different in the first few months of a relationship, versus in the later stages).

Individual reaction time values (measured in milliseconds) for the eight types of targets (e.g., attractive opposite sex, average same sex; pre and post-priming) were selected to include only 'attentional shift trials' (in which participants viewed a photo in one quadrant of the computer screen, and then were required to categorize a shape that appeared in another

quadrant). These trials were chosen in order to accurately assess attentional adhesion to the photos – the degree to which attention was captured, and shape categorization delayed. As in past research (e.g., Maner et al., 2009; Maner et al., 2008), data cleaning for reaction time variables involved eliminating incorrect categorizations, then eliminating any reaction times lower than 150 milliseconds, and finally, eliminating any reaction times that were 2 standard deviations above the overall subject's mean. Mean reaction times for each type of target photo and in each of the four conditions are shown in Table 5.

Manipulation checks. I then examined the effectiveness of the four priming manipulations with three separate one-way ANCOVAs, with condition predicting post measures on each of the three focal variables (i.e., love, commitment, self-expansion), controlling for the pre-test measure of that variable, with planned contrasts for each condition versus control. In the love condition, there was a near significant increase in love for the partner post-priming [t (136) = 1.27, p = .10, one-tailed]. In the commitment condition and self-expansion conditions, the increase post-priming was not significant [t (137) = .69, p = .25 for commitment and t (138) = .35, p = .36 for self-expansion, one-tailed]. Thus, the manipulations for the three conditions were not successful. Several factors may have contributed to this, including administering the primes immediately following the first dot-probe session, but not assessing the manipulation check until after the second dot-probe rating. It is also possible that participants recalled their responses on the focal measures at pre-test and responded in a similar manner post-test, and that high pre-test scores resulted in ceiling effects on the measures of the three variables. But it is also quite possible that the primes were not successful.

Hypotheses. In order to evaluate the effects of the experimental conditions from pre-

to post-test, I first computed for each of the four dot-probe stimulus types (attractive opposite

sex, attractive same, etc.) the standardized residual of post-test mean response time for that

stimulus as predicted by pre-test mean response time (that is, I computed what remained in

the post-test after controlling for the pre-test). Using these post-test residuals I then conducted

a 4 X 2 ANCOVA in which the independent variables were condition and gender, the

dependent variable was the standardized post residual of attention to attractive opposite-sex

targets, and the covariates were the standardized post residuals of the other three target types.

Deviation contrasts to evaluate the overall effect of the experiment, indicated that the mean of

the three experimental conditions was significantly different from the mean of the control

condition [t (130) = 2.11, p = .02, one-tailed], and there was no main effect or interaction with

gender. As an additional analysis focusing only on post-test scores (to be consistent with the

approach used in Maner, 2008, where there was no pre-test), I also conducted the same

analysis focusing only on post-test scores predicting attention to attractive opposite-sex

targets and controlling for attention to all other targets (post-priming). Again, the mean of the

three experimental conditions was significantly different from the control mean [t (129) =

2.04, p = .02, one-tailed], and there was no main effect or interaction with gender.

In light of the above results suggesting there was an overall experimental effect in the

expected direction (less attention to attractive opposites versus to other targets) of the set of

experimental conditions versus control, I proceeded to examine the effects of the individual

experimental conditions versus control. Thus, I conducted the same overall ANCOVA (with

condition and gender as IVs, post residual of attention to attractive opposite-sex targets as the

DV, and the post residuals of the other three targets as covariates), but this time with simple

contrasts comparing each experimental condition to the control. A significant difference was found in the predicted direction between love and control [t (130) = -2.15, $p < .05$, one-tailed]. A near significant difference was found in the predicted direction between commitment and control [t (130) = -1.62, p = .05, one-tailed]. The difference between self-expansion and control was also in the predicted direction, but did not reach significance [t (130) = -1.11, p = .13, one-tailed].

Added based on the committee's suggestions. I also tested the main hypotheses with various comparisons of the four types of photos, including using the attractive opposite-sex photos as the dependent measure, controlling for the other three types of photos (both entered individually and simultaneously, as well as controlling for the mean of the three types of photos), and using the difference between attractive opposite-sex photos and the mean of the three types (or the difference between attractive opposite-sex photos and each of the other three types individually) as the dependent measure. These analyses did not yield any significant main or interaction effects with condition or gender. Further, I tested the main hypotheses with all of the previously mentioned analyses using only White participants (N = 35; since the majority of the photos used in the study were of Caucasian faces), however none of the main or interaction effects reached significance.

Added based on the committee's suggestions Finally, in some exploratory analyses, I focused on participants in the bottom 50% of pre-priming love, commitment, and self-expansion (N = 30), and conducted the main analysis of condition and gender predicting attention to attractive opposite-sex targets, controlling for the other three targets types (again, using the standardized residuals pre to post-test). This particular subset of participants was explored since the effect of the manipulations may be stronger for individuals indicating

relatively lower levels of pre-priming love, commitment, and self-expansion (i.e., priming effects may be obscured for participants with higher pre-prime levels of these variables). Condition [$F(3, 29) = 3.39$, $p < .05$] and the interaction between condition and gender [$F(3, 29) = 3.82$, $p < .05$] significantly predicted attention to attractive opposite-sex targets. As hypothesized, participants in the control condition displayed greater attention to attractive, opposite-sex photos, followed by participants in the commitment and love conditions; participants primed for self-expansion displayed the least attention (controlling for attention to the other types of photos). With regard to gender, men's attention to attractive, opposite-sex targets was greater than that of women in the control and commitment conditions, but lesser in the love and self-expansion conditions.

In addition to my main hypotheses examined above, I also hypothesized that self-expansion will mediate the association between love and attention to alternatives, and between commitment and attention to alternatives. Following Baron and Kenney's (1986) recommendations and steps for testing mediation, I confirmed that the love prime condition (compared to the control condition in the simple effects analysis) was a significant predictor of attention to post-prime opposite-sex targets (controlling for the other three targets). Then, I tested whether the love prime condition (compared to the control condition in the simple effects analysis) was a significant predictor of post-prime self-expansion. However, this effect was not significant so I could not proceed with mediation testing. Similarly, the commitment prime condition (compared to the control condition in the simple effects analysis) was a near significant predictor of attention to post-prime attractive opposite-sex targets (controlling for the other three targets), however it was not significant in predicting post-prime self-

expansion. Thus, I could not establish self-expansion mediation of the love or commitment priming effects.

Exploratory analyses focusing on association of pre-test variables with pre-priming dot-probe response times. I also conducted exploratory analyses focusing on the extent to which pre-test measures of relationship and individual difference variables predicted pre-priming reaction times. Linear regressions were conducted with gender, the particular pretest variable of interest (e.g., attachment style, self-reported attention to alternatives, relationship length, pre-priming love, commitment, and self-expansion, closeness to the partner) and the interaction of each variable with gender predicting pre-priming attention to attractive opposite-sex targets (also controlling for the other three target reaction times, pre-priming). Participants in longer relationships paid greater attention to attractive opposite-sex targets (controlling for other targets and gender) [$t (133) = 2.10, p < .05, \beta = .31$], however, this overall effect was strongly driven by the males ($t (37) = 2.89, p < .01, \beta = .17$ for males; $\beta = .01$, and $p = .86$ for females). No other relationship or individual difference variables yielded significant main effects or interaction effects with gender in predicting attention to attractive opposite-sex alternatives.

Exploratory analyses focusing on association of pre-test variables with the Attention to Alternatives Scale. Additional exploratory analyses separately examined the four factors of the Attention to Alternatives Scale (Miller, 2010) as dependent measures. These factors include Active Prowling (e.g., "I'm always looking for new romantic partners, even when I'm already in a relationship;" "If my relationship were to end, I know who my next partner would be," Passive Awareness ("I believe its okay to look as long as I don't touch;" "I can't help but notice when attractive members of the opposite sex are around"), Willful Disinterest (e.g.,

"My partner has my undivided attention; "When I'm dating someone, I don't check out other people"), and Cluelessness (e.g., "I don't notice when attractive people try to flirt with me;" "I think about my partner too much to notice other members of the opposite sex"). These variables were considered to be self-report measures analogous to the reaction time measures of attention to attractive alternatives.

Each relationship and individual difference variable tested previously (e.g., relationship length, pre-prime love, commitment, and self-expansion, attachment style) was included in a separate analysis with gender (and the interaction of gender and the particular variable) predicting each of the four facets of Attention to Alternatives. Greater relationship satisfaction was found to predict less Active Prowling [t (109) = -6.48, $p < .001$, $\beta = -.52$], and greater Willful Disinterest [t (109) = 6.49, $p < .001$, $\beta = .53$].   Closeness to the partner was negatively associated with Active Prowling [t (110) = -6.09, $p < .001$, $\beta = -.49$], and Passive Awareness [t (110) = -2.43, $p < .05$, $\beta = -.21$], and positively associated with Willful Disinterest [t (110) = 6.25, $p < .001$, $\beta = .51$].   Similarly, higher self-expansion in one's relationship also predicted less prowling for alternatives [t (110) = -2.78, $p < .01$, $\beta = -.25$] and greater disinterest in alternatives [t (110) = 4.77, $p < .001$, $\beta = .41$]. Further, commitment to the partner also predicted less Active Prowling [t (110) = -7.19, $p < .001$, $\beta = -.56$], less Passive Awareness [t (110) = -3.02, $p < .01$, $\beta = -.26$], and greater Willful Disinterest [t (110) = 7.93, $p < .001$, $\beta = .60$]. With regard to attachment style, greater avoidance was associated with Active Prowling [t (110) = 6.14, $p < .001$, $\beta = .49$], however this effect was mainly driven by the women [t (110) = 6.92 $p < .001$, $\beta = .62$]. Avoidance also predicted less Willful Disinterest [t (110) = -5.04, $p < .001$, $\beta = -.43$], and greater Passive Awareness [t (110) = 2.28, $p < .05$, $\beta = .20$]. Finally, no other main or interaction effects were found for any other

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individual difference or relationship variables predicting these facets of Attention to Alternatives. Results from these analyses are shown in Table 6.

Study 2

149 participants (111 women and 38 men) recruited from the Stony Brook University campus took part in this study. Participants were part of the Stony Brook psychology department subject pool, signed up for the experiment online, and received course credit for their participation. All participants were in a committed, exclusive relationship of at least 6 months. The mean age of participants was 19.76 years old and mean relationship length was months 22.91 months. 87.9% of participants were exclusively dating their partner and the remainder was either married or engaged. 98.6 % of participants identified themselves as heterosexual and 1.4% as gay or lesbian. Additional information on participants' ethnicity, relationship status and length, attachment, attention to alternatives, and relationship quality variables is provided in Tables 7-10.

Partner Attributes

In the first session (which was conducted online), participants rated a list of 48 potentially self-expanding attributes (e.g., traits, abilities, interests, background characteristics) for how desirable these would be in a potential romantic partner, and how representative each of these were of their current romantic partner. Example traits and attributes included 'ambitious,' 'funny,' 'talented,' 'sensitive,' 'creative,' 'musical,' and 'intelligent,' and were used in prior research (Anderson, 1968). (To minimize suspicion, participants rated the list of attributes initially for representativeness of the partner, then other questionnaires were completed, and finally, participants rated the same list of attributes for general desirability in a potential partner). These traits were used in the second part of the

study. Participants also completed the same demographics questionnaire and baseline

measures of the three major variables (i.e., commitment, love, self-expansion), as well as the

standard measures of attachment and global relationship satisfaction, closeness, etc. that were

completed in Study 1.

Before Session 2, for each participant, the ratings of the attributes that were rated as

highly desirable were used to create 10 unique profiles of the attractive, opposite-sex

alternatives. Thus, photos of attractive, opposite-sex faces were paired with an attribute

purportedly describing the alternative designed (unknown to the participant) to reflect either

(a) potentially self-expanding attributes rated as highly desirable that the participant's actual

romantic partner possesses or (b) potentially self-expanding attributes rated as highly

desirable that the participant's actual partner does not possess. Thus, for each participant, 10

traits were chosen for subsequent use in session 2. The overall attractiveness of the

characteristics in the two alternative partner conditions was matched in terms of mean level of

exciting/interestingness to have in a partner (as rated by the participant him/herself in Session

1).

Self-Expansion manipulation and Visual Dot-Probe Task

In Session 2, participants were randomly assigned to either a high or low self-

expansion need condition (i.e., how much self-expansion one feels they are experiencing in

life in general) based on a self-expansion manipulation used in prior research (see Wright et

al., 2004). First, they completed a short self-description and then a bogus personality test the

ostensible results of which were later used to alter the level of their self-expansion needs. In

the high self-expansion need condition, participants were told that the personality test

demonstrated that their life was rather predictable and stagnant – that they were in a bit of a

"rut," and that they demonstrated concern that they were not getting the resources needed to meet potential upcoming challenges. In the low self-expansion need condition, participants were told that the personality test indicated that they had recently experienced considerable psychological change, that they were somewhat overwhelmed with the number of new things they were trying to manage in their life, and that they probably needed time to sort out these changes.

Following this, participants were asked to take part in a purported memory task in which they viewed photos of 10 attractive, opposite-sex faces that were each paired with an attribute. (Traits that were rated as highly desirable and very representative of the partner were used to describe the partner-similar photos; traits that were rated as highly desirable but not very representative of the partner were used to describe the partner-dissimilar photos). This was presented on a computer screen in a timed fashion so that each photo-attribute pairing was viewed for 10 seconds. Participants were told that they would take part in a subsequent memory test so that they should try to remember as many of the photo-attribute pairings as possible.

Participants in these two conditions then completed the dot-probe computer task with the same photos of attractive alternatives they previously viewed (but without the traits). This was the same dot-probe measure used in Study 1, however in this experiment only photos of attractive, opposite-sex faces were included (i.e., a total of 10 photos – 5 previously associated with traits similar to the partner, and 5 previously associated with traits different from the partner). As in Study 1, the 10 attractive, opposite-sex faces were adapted from past research (e.g., Maner et al., 2008; Maner et al., 2009). Following the dot-probe task, participants were tested on their recall memory for the attribute-photo pairings to ensure that

they adequately remembered them during the dot probe task, and correctly associated the photos and attributes.

Predictions

Overall, attention to both types of attractive alternatives was predicted to be higher in the high self-expansion need condition, compared to the low self-expansion need condition. Further, in the high self-expansion need condition, attention to alternatives who possess interesting/exciting attributes that differ from those of the partner was expected to be higher than attention to alternatives who share such attributes with the partner. Feeling that one's life is boring and in a rut (insufficient self-expansion) was hypothesized to lead to increased attention to alternatives (particularly those who are different from one's partner) and who could perhaps provide additional and varied forms of self-expansion. I also conducted exploratory analyses focusing on potential moderation of effects by gender, relationship length, IOS, attachment style, general relationship quality, love, commitment, or general (pre-prime) relationship self-expansion.

Results

Data screening. Data screening followed the same procedures as Study 1. Data were screened for missing values, normality, and outliers. Active Prowling, one of the factors comprising the Attention to Alternatives Scale, was positively skewed and transformed by taking the log of each subject's score. A log transformation was also used on relationship length, which was positively skewed. As in Study 1, individual reaction time values for the two types of traits (measured in milliseconds) were selected to include only 'attentional shift trials' (in which participants viewed a photo of an attractive alternative in one quadrant of the computer screen, and then were required to categorize a shape that appeared in another

quadrant). Again, as in Study 1, data cleaning for reaction time variables involved eliminating incorrect categorizations, then eliminating any reaction times lower than 150 milliseconds, and finally, eliminating any reaction times that were 2 standard deviations above the overall subject's mean (as in Maner et al., 2009, Maner et al., 2008). The mean reaction time associated with partner-similar photos was 609.27 milliseconds, and 608.90 milliseconds for partner-dissimilar photos. The mean number traits recalled (out of 5) was 3.25 for partner-similar traits, and 3.22 for partner-dissimilar traits. The mean attractiveness ratings (out of 7) of opposite-sex photos were 4.16 for female photos, and 4.06 for male photos. Added based on committee's suggestions.

Hypothesis tests: A 2 X 2 X 2 mixed-design ANCOVA was employed in which self-expansion need (high vs. low need, a between-subjects variable) and gender (between-subjects variables) were crossed with mean reaction times to photos associated with traits that the partner does and does not posses (a within-subjects variable). We also controlled for the difference in rated desirability of the partner-similar and dissimilar traits (i.e., the 10 attributes that were selected for the experiment). None of the main or interaction effects were significant in this analysis ($F<1$), indicating that the two Study two hypotheses regarding self-expansion need and attention to alternatives were not supported.

As in Study 1, I tested the main hypotheses with all of the previously mentioned analyses using only White participants (N = 64; since the majority of the photos used in the study were of Caucasian faces), and participants in the bottom 50% of relationship self-expansion (as measured in Session 1; N = 66), however none of the main or interaction effects reached significance.

Exploratory analyses focusing on trait recall. I then repeated this analysis but instead of including reaction times, I used mean recall of partner-similar traits and mean recall of partner-dissimilar traits as the within-subjects variable. The interaction between condition and target recall was significant [F (1, 141) = 10.94, $p < .01$], with participants primed for primed for high self-expansion need recalling significantly more interesting/exciting attributes that differed from those of the partner. However, those primed for low self-expansion need recalled more interesting/exciting attributes similar to the partner, as opposed to traits dissimilar to the partner. Means and standard deviations for recall of partner-similar and partner-dissimilar traits by condition are shown in Table 11. No other main or interaction effects were significant.

Exploratory analyses for moderation. In addition, I also examined various relationship variables for potential moderation. Several linear regressions were conducted predicting both attention to and recall of partner-similar and dissimilar attributes (separately for each dependent variable), with gender, condition, and the relationship variable of interest entered in the first step, their three two-way interaction terms entered in the second step, and the three-way entered in the third step. None of the effects involving the two reaction time dependent measures were significant.

With regard to the recall dependent measures, level of self-expansion in one's relationship (measured in Session 1; pre-priming) predicted recall of partner-similar traits [t (148) = 3.06, $p = .003$, $\beta = .28$], which was greater for those with higher relationship self-expansion. Inclusion of other in the self (IOS), or closeness to the partner, also had a similar pattern in which greater relationship IOS predicted increased recall of partner-similar traits [t

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(148) = 3.01, p = .003, β = .23]. However, relationship self-expansion or IOS did not predict the number of partner-dissimilar traits recalled.

Self-reported love for one's partner was associated with higher recall of partner attributes [t (148) = 2.49, p = .014, β = 1.13], and also interacted with gender to predict recall of partner traits [t (148) = -2.35, p < .05, β = −.76]. Among men, those feeling greater love for the partner recalled more partner-similar traits; among women, those feeling greater love for the partner remembered less partner-similar traits. Finally, attachment avoidance interacted with gender to predict recall of traits resembling the partner [t (148) = 2.11, p < .05, β = .64]. Among those high in avoidance, women recalled significantly more traits than men; among those low in avoidance, men recalled more traits than women.

One of the facets of Attention to Alternatives, Willful Disinterest, was found to significantly predict recall of partner-similar traits [t (148) = 2.16, p < .05, β = .17], with those higher in Willful Disinterest recalling a greater number of partner traits. Finally, I did not find any significant main effects or interactions for any of the other relationship variables, including relationship satisfaction, relationship length, commitment, or any of the other Attention to Alternatives factors (e.g., Passive Awareness, Active Prowling, Cluelessness).

Exploratory Analyses focusing on the Attention to Alternatives Scale. As in Study 1, additional exploratory analyses separately examined the four factors of the Attention to Alternatives Scale (Miller, 2010) as dependent measures (the main results are shown in Table 12). Participants in longer relationships reported less Active Prowling [t (146) = -2.94, p < .01, β = −.23], and greater Willful Disinterest for alternatives [t (146) = 3.58, p < .001, β = .28]. Higher relationship self-expansion [t (146) = -2.26, p < .05, β = −.18], greater closeness to the partner [t (146) = -4.00, p < .001, β = −.31] and greater love for the partner [t

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(146) = -2.76, $p < .01$, $\beta = -.22$] predicted less Active Prowling for alternative partners. Love

[t (146) = 6.07, $p < .001$, $\beta = .45$], closeness [t (146) = 5.28, $p < .001$, $\beta = .40$], and self-

expansion [t (146) = 5.61, $p < .001$, $\beta = .42$], also predicted Willful Disinterest of alternatives.

Further, love, [t (146) = 2.20, $p < .05$, $\beta = -.17$], self-expansion [t (146) = -2.31, $p < .05$,

$\beta = -.19$], and closeness [t (146) = -2.57, $p = .01$, $\beta = -.20$] predicted significantly less

Passive Awareness.

With regard to attachment, anxiety [t (146) = 3.33, $p = .001$, $\beta = .26$] and avoidance [t

(146) = 4.63, $p < .001$, $\beta = .35$] predicted more Active Prowling. Attachment avoidance also

predicted less Willful Disinterest [t (146) = -6.11, $p < .001$, $\beta = -.45$], and greater Passive

Awareness [t (146) = 2.30, $p < .05$, $\beta = .18$]. No other main or interaction effects predicting

facets of Attention to Alternatives was found.

Discussion

The present research is one of the first to examine how important relationship

processes, most notably self-expansion, influence basic cognitive and perceptual mechanisms

involving alternative partners. Relationship variables, including love, commitment and self-

expansion, were examined with respect to how they may impact attention to attractive

alternative partners. Further, particular attributes and traits of potential alternatives were

investigated in relation to individual need for self-expansion. Priming love for the partner,

commitment to one's relationship, and self-expansion in one's relationship was hypothesized

to reduce attention to photos of attractive opposite-sex people. Relationship self-expansion

was further investigated by focusing on the type of self-expansion one receives from a partner

versus an alternative, in addition to the general degree of self-expansion in one's relationship.

Such factors were hypothesized to be influenced by overall need for self-expansion in life.

Study 1

In this study, I hypothesized that priming participants for love, commitment, and self-expansion (with regard to their partner) would reduce early-stage visual attention to attractive alternatives, and that this effect would be strongest for self-expansion. It was also hypothesized that the effect of love on attention to alternatives, and that the effect of commitment on attention to alternatives, will be mediated by self-expansion.

Participants were randomly assigned to the love, commitment, or self-expansion conditions where they wrote brief essays designed to activate such feelings. They also completed the computer dot-probe task (with faces of both genders varying in attractiveness) before and immediately following priming. Brief measures of love, commitment, and self-expansion were administered before priming and after the final dot-probe administration.

Based on the manipulation check, priming for love was the most successful (although it only approached significance); the priming effects for commitment and self-expansion were not significant. Although the love and commitment primes were successfully used in past research (e.g., Maner et al., 2008, Finkel et al., 2002), and the self-expansion prime was developed based on past self-expansion manipulations (e.g., Aron, 2000), it is quite possible that the primes were not successful. However, it is also possible that failing to check the manipulation immediately after priming may have resulted in inaccurate assessment, or that participants recalled their responses on the focal measures at pre-test and responded very similarly at post-test. Ceiling effects for such relationship variables are also quite common; in this sample, commitment and self-expansion in particular had very high means pre-prime so as a result, it may have been difficult to detect a significant change. Finally, in both Studies 1 and 2, the selection and use of photos was problematic, given that attractiveness is a

subjective assessment and may vary based on gender, age, ethnicity, culture, and other factors that were not considered.

Although the tests of manipulation indicated that the primes were mainly unsuccessful in producing a substantial increase in love, commitment, and self-expansion, I nevertheless tested the effects of priming on dot-probe response times. In these analyses, I focused on the difference between each experimental condition and the control condition in predicting attention to attractive opposite-sex targets (controlling for attention to the other three targets). There was a significant difference between the love and control conditions (replicating results from Maner et al., 2008), and the commitment-control comparison approached significance. However, the difference between self-expansion and control conditions was not significant. (In light of the manipulation check and these results, it seems that the primes, particularly commitment and self-expansion, could benefit from further testing for use in future research). Finally, I tested the love and commitment effects for potential mediation by post-prime self-expansion, however I did not obtain significant results.

In subsequent exploratory analyses, I focused on various individual difference and relationship variables as predictors of attention to alternatives (all measured pre-prime). I also ran separate analyses including the four factors of the Attention to Alternatives Scale (Miller, 2010) as dependent variables. Individuals in longer relationships, particularly men, paid more attention to attractive alternatives. (This is consistent with self-report measures of attention in Study 2 indicating that participants in longer relationship show less prowling and greater inattention to alternatives). Individuals in long-term relationships may pay greater attention to alternatives (compared to those in the early stages) due to factors such as boredom and a decrease in the rate of relationship self-expansion. In longer relationships, partners have

presumably spent a great deal of time together, gotten to know one another well, and perhaps habituated. Inevitably, self-expansion declines as time progresses; this can result in boredom with the relationship, greater attention to alternatives, and perhaps even set the stage for infidelity.

Results from the Attention to Alternatives Scale (Miller et al., 2010) also support a potential link between self-expansion and attention to alternatives. Higher relationship self-expansion predicted less Active Prowling, and more Willful Disinterest with regard to alternative partners. Similarly, Inclusion of other in the Self (closeness to the partner), predicted less Active Prowling and Passive Awareness, and greater Willful Disinterest. These findings point to the central role of self-expansion and IOS in reducing attention to alternatives, and perhaps deterring subsequent infidelity. If individuals are receiving adequate self-expansion from their relationship and feel connected to the partner, they may be less likely to notice and attend to attractive alternatives.

In addition, commitment to the partner also predicted less Active Prowling and Passive Awareness, and greater Willful Disinterest. This finding is consistent with past research from the Investment Model approach, indicating that level of commitment can predict infidelity (e.g., Drigotas, 1998). If individuals are committed, they may be less likely to attend to alternatives, and in turn, less likely to be unfaithful. Finally, attachment avoidance was associated with less Active Prowling (particularly for women), less Willful Disinterest, and greater Passive Awareness. This is supported by past research indicating that attachment insecurity (and specifically avoidance) is associated with attention to alternatives and infidelity (e.g., Maner et al., 2008; Allen & Baucom, 2004). In terms of gender and avoidance the data are mixed, but some recent studies confirm these findings and suggest that slightly

more women are characterized by avoidant attachment (e.g., Consedine et al., 2009; Kafetsios & Sideridis, 2006).

Study 2

In this study, I hypothesized that visual attention to both types of alternatives (with partner-similar and partner-dissimilar traits) will be greatest when participants are primed for high self-expansion need (compared to low self-expansion need). I also hypothesized that among those primed for high self-expansion need, attention to alternatives paired with partner-dissimilar traits will be highest (compared to those with partner-similar traits). These hypotheses were not supported. One explanation for this involves the similarity of participant ratings between the partner-similar and dissimilar traits, and the fact that the mean reaction times to the two types of photos were also very similar. Further, so that participants could successfully associate the photo-trait pairings and remember them for the dot-probe, a total of only 10 photo-trait pairings (five partner similar; five partner-dissimilar) were used. However, this limited amount of stimuli may have made it difficult to detect differences in reaction times to the two types of photos. This lack of variability could certainly contribute to a failure to find effects.

Although hypotheses regarding response times were not supported, additional analyses focusing on recall of the two types of traits (following the dot-probe) lend support to the central premise of this research. Specifically, participants who felt they did not have sufficient self-expansion in their lives overall had better memory for potentially self-expanding traits that differed from those their partner already possesses (compared to memory for self-expanding traits their partner possesses). Participants who felt overwhelmed with their general level of self-expansion had better memory for traits representing their partner, as opposed to

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the partner-dissimilar traits. Further, greater self-expansion (specifically from the relationship) and closeness to the partner, predicted recall of partner-similar traits.

Exploratory analyses investigated several relationship and difference variables for moderation. Again, reaction time variables (attention to the two types of photos) were not significantly predicted by any of the relationship variables, individual difference variables, or their interactions. As previously noted, this may be due to participants having very similar response times to both types of photos, an insufficient number of photos used in the experiment, and to individual differences in attractiveness assessments of the photos.

Recall of the partner-similar traits, however, was associated with some relationship and individual difference factors. One of the Attention to Alternatives factors, Willful Disinterest, significantly predicted recall of partner-similar traits. Since this factor represents an active effort to largely ignore potential alternatives, it is not surprising that it is positively related to memory for partner-attributes. Although Willful Disinterest did not significantly predict reaction time measures of attention, the significant finding with recall points to a link between memory for the partner and inattention to attractive alternatives.

Self-reported love for one's partner predicted higher recall of partner-similar attributes; love also interacted with gender to predict recall of partner-similar traits. Among men, those feeling greater love for the partner recalled more partner-similar traits; among women, those feeling greater love for the partner remembered less partner-similar traits. Gender differences were also found in the association between attachment avoidance and recall of partner-similar traits, with women low in avoidance remembering less partners-similar traits. Based on these interactions, the results for men seem unsurprising and would perhaps be expected of both genders – greater love and less avoidance predicted better

memory for partner attributes. However, the results for women are in the exact opposite direction of what would be expected– greater love and less avoidance predicted *less* recall of partner attributes. This may be related to a general tendency of women to have poorer memory for attractive opposite-sex faces (Maner et al., 2003; perhaps of traits associated with these faces). However, in that case, I may have also found main effects of gender, predicting both partner-similar and partner-dissimilar traits.

Exploratory analyses also examined the four factors of Attention to Alternatives as dependent variables. Various relationship and individual difference variables (and their interactions with gender and condition) were included (in separate analyses) as predictors of each factor of Attention to Alternatives. Participants in longer relationships reported less Active Prowling and greater Willful Disinterest, indicating less interest in alternative partners, compared to those in newer relationships. Relationship self-expansion, IOS (closeness to the partner), and love for the partner predicted less Active Prowling, less Passive Awareness, and greater Willful Disinterest. As in study 1, these results suggest that certain relationship factors, most notably self-expansion and IOS (a result found in both studies), may play a role in deterring attention to alternatives, and perhaps infidelity.

Attachment avoidance predicted less Willful Disinterest, and greater Passive Awareness, and more Active Prowling; attachment anxiety predicted greater Active Prowling as well. Again, these findings are generally consistent with the results from Study 1(with the exception of the anxiety result that did not reach significance in the Study 1), and they are also supported by past work highlighting the role of insecure attachment in attention to alternatives and infidelity (e.g., Allen & Baucom, 2006; Miller, 2010).

General Discussion

The present research is one of the first to examine how important relationship processes, most notably self-expansion, influence basic cognitive and perceptual mechanisms involving alternative partners. In the first study, relationship variables, including love, commitment and self-expansion, were examined with respect to how they may impact attention to attractive alternative partners. Priming love for one's partner significantly reduced attention to attractive opposite-sex alternatives, however this effect was not found for commitment or self-expansion primes.

A second study examined general need for self-expansion and potentially self-expanding attributes and traits of alternative partners, and how this may influence attention to such alternatives. Hypotheses regarding reaction time measures of attention were not supported; however, analysis of trait recall indicated that high self-expansion need results in greater memory of alternative traits, compared to memory for partner traits.

Although many of the hypotheses were not supported, both studies suggest a central role of self-expansion and IOS (closeness to the partner) in relationship cognition, particularly cognitive processes involving the perception of alternative partners, and perhaps even infidelity. Results from recall measures from Study 2, and self-report measures of Attention to Alternatives from Studies 1 and 2, support the notion that need for self-expansion can lead to a greater focus on alternatives in general, and specifically on alternatives that can offer greater and more varied forms of self-expansion. If self-expansion needs are not met, an alternative's potentially self-expanding traits may be more appealing than such traits of the partner (which are presumably already contributing to the individual's self-expansion). In this case, the alternative may be attractive due to the new and varied forms of self-expansion (and new

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traits to include in the self) that he or she can offer. However, when self-expansion needs are already met, individuals may not feel it necessary to look outside the relationship for additional self-expansion opportunities, and may focus more on the self-expanding attributes of the partner. Thus, maintaining adequate levels of self-expansion in one's life (by engaging in self-expanding activities, via closeness to the partner – incorporating their traits into the self, etc.) seems to reduce memory for alternatives, and perhaps deter one's focus on alternatives. Promoting self-expansion in one's relationship and one's life in general, therefore, may be one way to protect a relationship against the lure of attractive alternatives.

These studies did not measure variables such as need for novelty and self-expansion. However, including such variables would be beneficial in examining the role of self-expansion in attention to alternatives. Need for self-expansion and novelty may affect the degree of one's attention to alternatives, as well as the particular alternatives one may find attractive. It is quite possible that individuals who need greater novelty and self-expansion in life will focus more on alternatives in general, and specifically on alternatives who may offer new and varied forms of self-expansion. This propensity may also result in a greater likelihood of actual infidelity behaviors. Future research can examine these issues by including broader measures of personality and individual differences.

This research also supports the concept of romantic love as a protective factor against attention to alternative partners. In Study 1, eliciting thoughts and feelings of love for the partner reduced attention to attractive alternative partners. Similarly, self-report measures in Study 2 indicated that love for the partner was associated with less prowling for alternatives, and a lesser awareness of alternatives in general. Some theorists have viewed love as an emotion (e.g., Frank, 1988), while others have viewed it as a motivational state (e.g., Fisher,

Aron, & Brown, 2006) that is likely to increase one's reproductive fitness (e.g., raising healthy offspring, building social alliances) by promoting relationship maintenance. Early on in a relationship (before individuals become very committed and forge a long-term bond), romantic love may be particularly instrumental in maintaining the relationship via a number of mechanisms, including reducing attention to alternatives. Study 2 also found that among men, greater feelings of love predicted higher recall of partner attributes, but among women, the opposite pattern was found. It is possible that the function of love in relationship maintenance may differ by gender (specifically when involving memory for an alternative), however future research is needed to elucidate these issues.

Commitment to the partner also plays a significant role in relationship maintenance. In Study 1, priming commitment did not lead to a reduction in attention to alternatives, but reported commitment was significantly associated with less reported attention to alternatives. Research from the perspective of the Investment Model (e.g., Rusbult, 1983; Johnson & Rusbult, 1989) contends that partners oftentimes maintain commitment in the face of attractive alternatives by derogating them, or simply being inattentive to these alternatives. Like romantic love, commitment may also have evolved to promote relationship maintenance via reduced attention to attractive alternatives. Compared to the offspring of many other mammals, human offspring benefit from a high level of investment from both parents (e.g., Daly & Wilson, 1983) so maintaining commitment in the long-term (when partners are likely to produce and raise offspring) is beneficial for relationship maintenance, and in turn, reproductive fitness. Although evolutionary perspectives suggest several reproductive benefits associated with infidelity (for both men and women; e.g., Fisher, 1992), the evolutionary

benefits of maintaining a long-term relationship are highlighted by the pro-relationship functions of romantic love and commitment.

This research adds to the literature on the role of various relationship processes (e.g., love, IOS, self-expansion and, commitment) in attention to alternatives and infidelity. Several of the results suggest that fostering certain relationship outcomes, including promoting romantic love and commitment, can make attractive alternatives less tempting and less threatening to one's relationship, thus promoting relationship maintenance. Further, the results indicate that self-expansion and IOS can significantly impact attention or inattention to alternatives, and in turn, influence relationship satisfaction and maintenance. In order to deter attention to alternatives and prevent infidelity, partners can make it a point to encourage self-expansion in all areas of life, particularly within the context of their relationship. This would seem to be particularly relevant to long-term couples that may have experienced a decline in self-expansion, and as a result, may be especially prone to the attraction of alternatives. As previously noted, many couples face a decline in relationship self-expansion over time (which is usually accompanied by habituation and boredom) and as a result, partners may show greater interest in alternatives, and perhaps even engage in infidelity behaviors. However, by promoting self-expansion in one's relationship and one's life in general, long-term couples can maintain a sense of excitement and engagement, which in turn, promotes relationship satisfaction and maintenance.

Limitations and Future Directions

Several limitations of the current studies can provide useful directions for future research. One limitation involves the order of experimental procedures and priming manipulation in Study 1. This study was based on the work of Maner and colleagues (2008)

who primed love and a neutral control condition and then measured attention to four types of targets (i.e., attractive opposite sex, attractive same sex, average opposite sex, average same sex) using the dot-probe. For Study 1, I added two additional conditions (e.g., commitment and self-expansion), a pre-priming dot-probe session, and brief measures of love, commitment, and self-expansion pre and post-priming. With these additional factors, I was hoping to test both priming effects, and mediation and moderation effects, however the particular sequence of events may have made it difficult to accurately assess such effects. For instance, administering the dot-probe immediately after priming (instead of the brief questionnaires on the conditions, and *then* the dot-probe) may have been helpful in assessing reaction times to primes, but it also made it difficult to check the manipulation. As previously noted, the manipulation may also have been affected by issues such as ceiling effects, and participants mirroring their response patterns from the pre-prime questionnaires, or the primes may just not have been successful. Other Study 1 variables that may have been affected by the order of the experiments are pre and post-prime reaction times to the four target photos. Although my analyses controlled for pre-post differences, reaction times (post-priming) may have been influenced by the pre-prime dot-probe task earlier in the study (i.e., habituation to the faces, improvement at the task).

In both studies, the selection of photos was also problematic, given that attractiveness is a very subjective assessment. For Study 1, both pre and post, I used the same 40 photos used by Maner and colleagues (2008; i.e., 10 photos for each of the four target types), however, it is quite likely that participants from different samples (and within the same sample) have very different views of what is 'attractive' and what is 'average.' For Study 2, as previously mentioned, there was also the issue of limiting the number of photos to 10

attractive opposite-sex faces, so as to make the memorization of the photo-trait pairings feasible. This resulted in 5 photos per condition (partner-similar and partner-dissimilar), which may have been too few to assess reaction times accurately (however, the total of 10 photos were repeated several times in the dot-probe).

For Study 2, the selection of potentially self-expanding traits was also challenging. All participants were in an exclusive relationship and for the most part, indicated high ratings on relationship variables such as love, commitment, and self-expansion. Thus, it was not surprising that they rated their partner as very high on the majority of traits desired in a potential partner. However, this made it difficult to identify traits that participants considered highly desirable, and also not very representative of their partner (i.e., the partner-dissimilar traits).

In addition to addressing the previously mentioned limitations, future research may benefit from testing links between relationship cognition (e.g., visual attention and memory for alternatives) and actual behavior in relationships, including infidelity. Future research may also consider individual differences in need for novelty and self-expansion, and how this may affect processes involving attention to alternative partners. The present research suggests that self-expansion, love, and commitment may play an important role in cognitive processes involving attractive alternatives and subsequent relationship behaviors, including infidelity, however additional work employing more sensitive and varied methods is needed to examine these issues in greater depth.

Conclusion

In sum, the main purpose of this research was to test hypotheses from the self-expansion model regarding early-stage attention to potential alternatives. Infidelity is a

widespread phenomenon that affects couples and families to a very great extent, however many central aspects of this phenomenon, especially regarding basic mechanisms, have yet to be explored. Early-stage visual attention to and recall of alternative partners is a promising new direction for infidelity research and can help us understand the cognitive processes that can lead one to stray despite being in an established relationship. Further, the application of the self-expansion model represents a novel approach that may elucidate many of the factors involved in attention to alternatives and infidelity that have not been previously studied, particularly the potential mediating role of relational self-expansion, and the role of life self-expansion in shaping the specific attributes of alternatives that would make them appealing.

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Table 1

Study 1: Ethnicity

	Women	Men	Total
Caucasian	31.1%	38.2%	33.3%
Asian	39.2%	29.4%	36.1%
Latino/Hispanic	17.6%	11.8%	15.7%
African-American	4.1%	11.8%	6.5%
Other	5.6%	8.7%	8.2%

Table 2

Study 1: Relationship Status and Relationship Length Variables

	Women	Men	Total
Dating	77.8%	84.1%	79.7%
Living together (not engaged or married)	11.8%	9.1%	10.5%
Engaged	4%	___	2.8%
Married	____	2.3%	0.7%
Relationship Length (months)	25.09	19.20	23.28

Table 3

Study 1: Means and Standard Deviations for Relationship Quality Variables

	Women	Men	Total
IOS (1-6 scale)	5.37 (1.29)	5.18 (1.56)	5.31 (1.38)
Self-Expansion (1-7 scale; pre-prime)	5.01 (1.15)	5.34 (.97)	5.11 (1.10)
Love (1-6 scale; pre-prime)	4.27 (.81)	4.44 (.97)	4.32 (.86)
Commitment (0-8 scale; pre-prime)	6.54 (1.55)	6.42 (1.60)	6.51 (1.56)
Relationship Satisfaction (1-7 scale)	5.25 (1.05)	5.25 (.94)	5.25 (1.02)

Table 4

Study 1: Means and Standard Deviations of Attachment Variables and the Attention to Alternatives Factors
(All on a 1-7 scale)

	Women	Men	Total
Anxiety	3.40 (1.14)	3.66 (1.38)	3.48 (1.22)
Avoidance	2.26 (.97)	2.23 (.87)	2.25 (.94)
Active Prowling	1.57 (.72)	1.89 (.88)	1.67 (.79)
Willful Disinterest	4.36 (1.30)	4.08 (1.36)	4.27 (1.32)
Passive Awareness	3.96 (1.38)	4.97 (1.44)	4.29 (1.47)

Table 5

Study 1: Means and Standard Deviations of Reaction Times (in milliseconds) for each type of Target Photo (within each condition) Pre and Post-Priming

	Love	Commitment	Self-Expansion	Control
Pre-Priming				
Attractive Opposite	576.71 (173.72)	576.55 (97.59)	565.28 (93.72)	555.59 (107.41)
Attractive Same	590.57 (188.47)	585.34 (114.61)	566.65 (88.33)	562.41 (140.29)
Average Opposite	579.07 (199.77)	570.13 (89.68)	564.01 (91.37)	562.02 (136.69)
Average Same	578.15 (148.41)	585.63 (112.10)	570.09 (98.48)	558.97 (132.06)

(Table 5 continued)

Study 1: Means and Standard Deviations of Reaction Times (in milliseconds) for each type of Target Photo (within each condition) Pre and Post-Priming

Post-Priming

	Love	Commitment	Self-Expansion	Control
Attractive Opposite	519.31 (99.13)	543.14 (105.85)	505.62 (81.61)	550.58 (134.54)
Attractive Same	529.67 (101.24)	545.91 (108.97)	508.48 (88.72)	541.27 (111.73)
Average Opposite	539.92 (120.58)	540.40 (86.68)	505.52 (86.54)	538.22 (102.11)
Average Same	529.30 (101.50)	543.92 (124.82)	507.53 (81.48)	540.67 (123.79)

Table 6

Study 1: Betas for the Association of Pre-Test Variables with the Attention to Alternatives Factors

	Active Prowling	Willful Disinterest	Passive Awareness
Relationship Satisfaction	-.52 **	.53 **	__
IOS	-.49 **	__	-.21*
Self-Expansion	-.25 *	.41 **	__
Commitment	-.56 **	.60 **	-.26 *
Avoidance	.62 **	-.43 **	.20 *

** p < .001; * p < .05

Table 7

Study 2: Ethnicity

	Women	Men	Total
Caucasian	44.4%	48.6%	45.5 %
Asian	32.4%	40.5%	34.4%
Latino/Hispanic	8.3%	8.1%	8.3%
African-American	3.7%	___	2.8%
Other	11.2%	2.7%	9%

Table 8

Study 2: Relationship Status and Relationship Length Variables

	Women	Men	Total
Dating	87.4%	89.5%	87.9%
Living together (not engaged or married)	9%	2.6%	7.4%
Engaged	.18%	_	.14%
Married	0.9%	2.6%	1.3%
Relationship Length (months)	23.34	21.66	22.91

Table 9

Study 2: Means and Standard Deviations of Relationship Quality Variables

	Women	Men	Total
IOS (1-6 scale)	4.76 (1.44)	4.89 (1.62)	4.79 (1.49)
Self-Expansion (1-7 scale; pre-prime)	5.29 (.72)	5.24 (.93)	5.28 (.73)
Love (1-6 scale; pre-prime)	4.69 (.84)	4.73 (.96)	4.70 (.87)
Commitment (0-8 scale; pre-prime)	3.63 (.67)	3.46 (.44)	3.59 (.62)
Relationship Satisfaction (1-7 scale)	5.41 (.99)	5.29 (1.01)	5.38 (.99)

Table 10

Study 2: Means and Standard Deviations of Attachment Variables and the Attention to Alternatives Factors

	Women	Men	Total
Anxiety	3.29 (1.02)	3.35 (1.30)	3.31 (1.09)
Avoidance	2.06 (.81)	2.18 (.93)	2.10 (.84)
Active Prowling	1.49 (.63)	1.74 (.85)	1.55 (.70)
Willful Disinterest	4.71 (1.23)	4.54 (1.39)	4.67 (1.27)
Passive Awareness	3.90 (1.42)	4.59 (1.79)	4.07 (1.55)

(All on a 1-7 scale)

Table 11

Study 2: Mean Recall for Partner-Similar and Partner-Dissimilar Traits in High and Low Self-Expansion Need Conditions

	Low Self-Expansion Need	High Self-Expansion Need
Partner-Similar Traits	3.57 (1.48)	2.80 (1.45)
Partner-Dissimilar Traits	3.17 (1.55)	3.23 (1.57)

Table 12

Study 2: Betas for the Association of Relationship and Attachment Variables with the Attention to Alternatives Factors

	Active Prowling	Willful Disinterest	Passive Awareness
Relationship Length	-.23 *	.28 ***	___
IOS	-.31 ***	.40 ***	-.20 *
Self-Expansion	-.18 *	.42 ***	-.19 *
Love	-.22 **	.45 ***	-.17 *
Anxiety	.26 ***	___	___
Avoidance	.35 ***	-.45 ***	.18 *

*** p < .001; ** p < .01; * p < .05

APPENDIX A

Writing Activity Primes for Four Conditions (Instructions to Participants)

1. Commitment: Please briefly describe two ways in which you feel that your life has become "linked" to your partner. If your relationship were to end in the near future, what would upset you the most about not being with your partner anymore?

2. Romantic Love: Please briefly describe a time in which you experienced strong feelings of love for your partner.

3. Self-Expansion: Please briefly describe some ways in which life with your partner is exciting, engaging, novel, and challenging (e.g., things you do together, joint projects).

4. Neutral/Control: Please briefly describe a time when you felt very happy (not involving a romantic partner or someone for whom you had romantic feelings).