

A LONGITUDINAL ANALYSIS OF EXTRADYADIC INVOLVEMENT IN DATING
RELATIONSHIPS

Michael A. Peterman

A dissertation submitted to the faculty of The University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Psychology (Clinical Psychology).

Chapel Hill
2008

Approved by:

Advisor: Donald H. Baucom, Ph.D.

Reader: Deborah J. Jones, Ph.D.

Reader: Joseph C. Lowman, Ph.D.

Reader: Abigail T. Panter, Ph.D.

Reader: Mitchell J. Prinstein, Ph.D.

ABSTRACT

Michael A. Peterman: A Longitudinal Analysis of Extradyadic Involvement in Dating Relationships
(Under the direction of Donald H. Baucom, Ph.D.)

Extradyadic involvement (EDI) refers to physical or emotional intimacy that takes place outside an existing romantic relationship. When EDI violates relationship standards of exclusivity, infidelity is said to have occurred. Although EDI and infidelity are both fairly prevalent, their underlying causes have not been well understood historically, and many questions remain about why some individuals become extradyadically involved while others do not. Prior research has uncovered several factors that might contribute to EDI, perhaps the most notable of which have been individual attitudes, relationship quality, and contextual opportunity. General trends suggest that forbidding beliefs, high relationship quality, and low contextual opportunity serve to diminish the likelihood of EDI. However, effects have by no means been unequivocal, in large measure because of the methodological limitations of earlier work. Specifically, the predictors of interest have not been appropriately examined within a longitudinal framework, nor have they typically been integrated into a unified theoretical model. Moreover, opportunity and beliefs have almost uniformly been assessed using measures with questionable psychometric properties, whereas relationship quality has been operationalized differently from one study to the next.

In an effort to redress these limitations, and thereby better elucidate the underlying determinants of EDI, the current study integrated relationship quality, individual beliefs, and contextual opportunity into a unified theoretical model of EDI development and tested its

validity within a longitudinal framework. Relationship quality was operationalized in terms of commitment, as defined by the Investment Model, and beliefs and opportunity were evaluated using newly devised scales exhibiting sound measurement properties. As predicted, lower opportunity, along with more forbidding beliefs about extradyadic participation, diminished the likelihood of subsequent EDI. Importantly, the effects remained even after controlling for the level of extradyadic engagement observed at time 1. In contrast, commitment had no discernable impact on the development of EDI. However, because of a restricted range in commitment, its non-significant effect may have been spurious.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	viii
Chapter	
I. INTRODUCTION.....	1
A. Dating Relationships versus Marriage.....	2
B. Attitudes and EDI.....	3
C. Relationship Quality and EDI.....	10
D. Opportunity and EDI.....	19
E. Aims of the Present Study.....	26
II. METHOD.....	30
A. Study 1 – Scale Construction.....	30
1. Procedure.....	30
2. Participants.....	31
3. Measures.....	32
a. Physical Involvement Scale.....	32
b. Extradynamic Involvement Scale.....	32
c. Extradynamic Beliefs Inventory.....	33
d. Extradynamic Opportunity Scale.....	34
e. Extradynamic Inappropriateness Scale.....	34

f.	Single Attitudinal Item.....	35
g.	Sociosexual Orientation Inventory.....	35
h.	Moral Traditionalism Scale.....	35
i.	Extradydic Involvement Scale.....	36
j.	Dating History.....	36
k.	Physical Attractiveness Item.....	36
l.	Interpersonal Attractiveness Item.....	37
m.	NEO Personality Inventory – Extraversion Scale.....	37
n.	Brief Sensation Seeking Scale.....	37
B.	Study 2 – Longitudinal Analysis.....	38
1.	Procedure.....	38
2.	Participants.....	38
3.	Measures.....	39
a.	Investment Model Scale.....	39
b.	Background and Relationship Characteristics.....	39
III.	RESULTS.....	40
A.	Study 1.....	40
1.	Factor Analytic Strategy.....	40
2.	Factor Analysis of the Extradydic Beliefs Inventory.....	41
3.	Factor Analysis of the Extradydic Opportunity Scale.....	45
4.	Factor Analysis of the Extradydic Inappropriateness Scale.....	47
5.	Group Comparisons by Gender and Semester of Data Collection...	49
6.	Nomological Network.....	49

a.	Extradyadic Beliefs Inventory.....	49
b.	Extradyadic Opportunity Scale.....	53
c.	Extradyadic Inappropriateness Scale.....	55
7.	Correlations Among the Different Sub-Scales.....	56
B.	Study 2.....	57
1.	Data Analytic Strategy.....	57
2.	Missing Data.....	58
3.	Descriptive Statistics.....	61
4.	Findings from the Logistic Regression.....	62
5.	Influences of Gender and Semester of Data Collection.....	66
6.	Effects of the Extradyadic Inappropriateness Scale.....	69
IV.	DISCUSSION.....	72
V.	APPENDIX A: Physical Involvement Scale.....	82
VI.	APPENDIX B: Extradyadic Involvement Scale.....	83
VII.	APPENDIX C: Extradyadic Beliefs Inventory.....	84
VIII.	APPENDIX D: Extradyadic Opportunity Scale.....	86
IX.	APPENDIX E: Extradyadic Inappropriateness Scale.....	87
X.	APPENDIX F: Single Attitudinal Item.....	91
XI.	APPENDIX G: Sociosexual Orientation Inventory.....	92
XII.	APPENDIX H: Moral Traditionalism Scale.....	93
XIII.	APPENDIX I: Sexual and Dating History.....	94
XIV.	APPENDIX J: Physical Attractiveness Item.....	95
XV.	APPENDIX K: Interpersonal Attractiveness Item.....	96

XVI.	APPENDIX L: Brief Sensation Seeking Scale.....	97
XVII.	APPENDIX M: Investment Model Scale.....	99
XVII.	APPENDIX N: Background and Relationship Characteristics.....	105
XIX.	REFERENCES.....	108

LIST OF TABLES

Table 1	Means and Standard Deviations for the EBI Items.....	41
Table 2	Factor Structure of the Extradyadic Beliefs Inventory.....	43
Table 3	Means and Standard Deviations for the EOS Items.....	45
Table 4	Factor Structure of the Extradyadic Opportunity Scale.....	46
Table 5	Item Means and Standard Deviations for EIS Items.....	47
Table 6	Factor Structure of the Extradyadic Inappropriateness Scale.....	47
Table 7	Correlational Patterns for the EBI Values Dimension.....	49
Table 8	Correlational Patterns for the EBI Justifications Dimension.....	50
Table 9	Correlational Patterns for the EBI Incentives Dimension.....	50
Table 10	Correlational Patterns for the EBI Peers Dimension.....	51
Table 11	Correlational Patterns for the EOS Opportunity Dimension.....	53
Table 12	Correlational Patterns for the EIS Inappropriateness Dimension.....	54
Table 13	Interrelationships Among Predictors of EDI.....	56
Table 14	Frequency of EDI by Category.....	57
Table 15	Descriptive Statistics of Proposed EDI Determinants.....	60
Table 16	Summary of Logistic Regression Results for EBI Dimensions Predicting EDI.....	61
Table 17	Summary of Logistic Regression Results for Values, Opportunity, Gender, and Initial Status Predicting EDI with Five Multiply Imputed Data Sets.....	61
Table 18	Summary of Logistic Regression Results for Commitment, Opportunity, and Values Predicting EDI.....	62
Table 19	Summary of Logistic Regression Results for Values, Opportunity, and Initial Status Predicting EDI with Five Multiply Imputed Data Sets.....	63

Table 20	Summary of Logistic Regression Results for Values, Opportunity, and Initial Status Predicting EDI.....	63
Table 21	Summary of Logistic Regression Results for Values, Opportunity, and Initial Status Predicting EDI with Five Multiply Imputed Data Sets.....	64
Table 22	Summary of Logistic Regression Results for Values, Opportunity, Gender, and Initial Status Predicting EDI.....	65
Table 23	Summary of Logistic Regression Results for Values, Opportunity, Gender, and Initial Status Predicting EDI with Five Multiply Imputed Data Sets.....	66
Table 24	Summary of Logistic Regression Results for Composite Index, Opportunity, Gender, and Initial Status Predicting EDI.....	68
Table 25	Summary of Logistic Regression Results for Values, Opportunity, Gender, and Initial Status Predicting EDI with Five Multiply Imputed Data Sets.....	68

Introduction

A large body of research indicates that even while engaged in an exclusive relationship, a number of individuals become romantically involved with someone other than their partner. This type of involvement is commonly labeled in the literature as “extradyadic,” signifying that it occurs beyond the bounds of a current relationship or dyad. In the past, extradyadic involvement (EDI) has been defined variably, sometimes referring to physical intimacy, emotional intimacy, or a combination of the two. Undoubtedly, physical and emotional EDI often occur together, but they are nevertheless distinguishable from one another (Allen, Atkins, Baucom, Snyder, & Gordon, 2004). Generally, physical EDI is considered to include sexual intercourse, along with other perhaps less intimate behaviors, such as oral sex, petting, and kissing. It is, therefore, differentiable from emotional EDI, which is characterized by a combination of affective intimacy and sexual feelings but an absence of physical intimacy itself. An additional concept that is tied closely to both emotional and physical EDI is infidelity. Typically, infidelity is considered to represent a type of emotional and/or physical EDI that also violates relationship standards of exclusivity. Stated differently, infidelity occurs when a partner becomes extradyadically involved in some capacity despite relational proscriptions against such behavior.

Most research has focused on the physical aspects of EDI, prompting criticism from some who contend that emotional involvement has been understudied (Glass & Wright, 1985;

Thompson, 1984). Surprisingly, though, even with the level of emphasis given to the physical aspects of involvement, their underlying causes are not well understood. For this reason, physical EDI will be the subject of this investigation. This emphasis in no way reflects the assumption that emotional EDI is of lesser importance, but is instead given because of the many significant questions about physical EDI that remain unanswered.

In the interest of addressing some of these questions, the current study tested a longitudinal model of physical EDI for those involved in dating relationships. The model largely consists of variables that have been evaluated previously, but, in the present context, they are either measured or conceptualized differently than in earlier work. These changes, along with the longitudinal modeling framework itself, are motivated to a considerable extent by the limitations of previous studies. Therefore, in addition to detailing important findings, the following review identifies the specific shortcomings in the existing literature that were redressed in this investigation. Acknowledgement must be given to Allen et al. (2004), who recently provided a comprehensive and useful analysis of the EDI literature. Some of their organizational strategies are applied in the sections that follow.

Dating Relationships versus Marriages

As noted, this study investigated the physical EDI of persons engaged in exclusive dating relationships, but not of those who are married. The exclusion of the latter group stems from both logistical factors, primarily those relating to participant availability, and the desire to limit sources of extraneous variance within the research sample. Indeed, with regard to EDI, and probably some of its related variables, persons in dating and married relationships differ considerably. For example, as compared to persons who are married, those in dating relationships have a greater propensity to engage in extradyadic behavior

(Allen, 2001), and at least to an extent, this difference likely reflects the entailment of less commitment within a dating relationship than a marriage (Forste & Tanfer, 1996). Also, some theoreticians (Brown, 1991; Pittman, 1989; and Reibstein & Martin, 1993) posit the existence of certain developmental stages within marriage, such as the period following the birth of a child, that increase the likelihood of EDI, and this idea has received some empirical support (Allen, 2001). Thus, for each type of relationship, unique factors might influence extrarelational behavior, such that a theoretical model accounting for EDI in one type of relationship might not be equally applicable to the other. Despite these potential differences, the current study was motivated to a significant extent by findings from the marital literature, and hence these are reviewed below along with other relevant work. Importantly, though, marital study interpretation should not overlook the possibility that EDI may differ as a function of relationship type. That being noted, a divergent point of view acknowledges the possible similarity between dating and marital relationships with respect to extrarelational behavior. Central to this perspective is the notion that during dating and courtship, individuals develop relationship scripts that carry over into marriage (Hansen, 1987; Wiederman & Hurd, 1999; Roscoe, Cavanaugh, & Kennedy, 1988), and although this position will not be tested here, it is important to acknowledge the potential similarities of EDI across relationship types, along with its possible differences.

Attitudes and EDI

Researchers have evaluated several individual factors that might predispose one to EDI. Included among these factors are individual attitudes, which have been studied on a number of occasions, with the idea that peoples' beliefs about EDI's acceptability should partially determine the extent to which they become extradyadically involved. For the most

part, a reliable level of concordance between EDI attitudes and behaviors has been observed empirically, but due primarily to issues of methodology, prior studies have done little to establish a causal link between attitudes and actual involvement. Here, relevant findings are presented, along with a review of the methodological limitations of earlier work.

A common approach to evaluating the relationship between EDI attitudes and behavior has involved the extraction of pertinent data from large national surveys. For example, in an effort to evaluate both the incidence and correlates of EMI, Wiederman (1997) analyzed data from a general social survey that, among many other issues, asked participants to concurrently report on their history of, and attitudes toward, extramarital involvement. Involvement history was coded dichotomously on the basis of whether participants reported “having sex” with someone other than their spouses while married. Attitudes toward the permissibility of EMI were solicited through the single item, “What is your opinion about a married person having sexual relations with someone other than the marriage partner—is it always wrong, almost always wrong, wrong only sometimes, or not wrong at all?”

Consistent with prediction, those respondents with a history of EMI were more permissive relative to those reporting no history of involvement. Furthermore, after controlling for the effects of EMI history, men and women did not differ in their attitudes toward extramarital relations. Thus, among both men and women, more tolerant attitudes were correlated with a history of extramarital involvement. However, despite this finding, it is interesting to note that even among respondents with a reported history of EMI, a majority of men (57%) and women (56%) characterized such behavior as “always wrong.” Thus,

while attitudes were correlated with actual extradyadic involvement, the two were by no means entirely in concert with one another.

Using an approach similar to that of Wiederman (1997), other investigators have also found evidence supporting a relationship between EDI attitudes and behavior. Choi, Catania, and Dolcini (1994) used national survey data assessing the incidence of extramarital sex within the last 12 months, along with beliefs about monogamy. Respondents rated their level of agreement with the statements, “Sometimes it is okay for married people to have sex outside their marriage,” and “Having sex with someone other than your husband/wife is always wrong.” Consistent with Wiederman’s (1997) findings, stronger beliefs in the importance of monogamy were associated with lower levels of EMI within the preceding 12 months. The effect was independent of respondent ethnicity. Using national survey data and a single item to assess EDI attitudes, Treas and Giesen (2000) observed a similar relationship between EDI beliefs and behavior, one that remained even after the effects of other important variables, such as opportunity and relationship satisfaction, were statistically controlled. Together then, the results derived from survey data are indicative of a fairly reliable and perhaps unique association between EDI attitudes and behavior. However, because of methodological considerations, the findings from each of these studies must be interpreted with qualification.

First, in each study, attitudes and behavior were assessed concurrently, thus precluding a conclusive judgment of whether beliefs actually determine the level of extradyadic involvement. Additionally, attitudes were evaluated on the basis of only one or, in the case of Treas and Giesen (2000), only two items. Thus, the attitudinal measures were probably limited both in terms of their reliability and discriminative power. Moreover,

because the items ask about the behavior of a hypothetical other and not the respondents themselves, their validity is questionable, given the primary interest in participants' attitudes about their own behavior. Together, these factors militate against a clear understanding of whether beliefs about EDI influence its actual occurrence.

Different methodology has been used elsewhere. Rather than using only a single item to assess attitudes toward EDI, Buunk and Baker (1995) employed an eight-item scale on which respondents indicated their level of agreement with four statements that approved of extramarital relations and four that disapproved. The investigators also departed from others by selecting the willingness to engage in EMI, should the opportunity present itself, instead of actual engagement as their dependent variable. Even with these differences, the findings were largely consistent with those of other studies. Specifically, attitudes were significantly predictive of extradyadic sexual willingness, accounting for approximately 8% of the variance among participants in one sample and 32% among participants in a second sample assessed 15 years after the first. As predicted, respondents with tolerant attitudes were more willing than those opposed to EDI to become involved extradyadically. However, the findings do not indicate how closely EDI attitudes relate to actual behavior, which is probably not equivalent to the mere willingness to become extradyadically involved.

Like Buunk and Baker (1995), Glass and Wright (1992) used a multiple item measure of EMI attitudes but predicted extramarital behavior itself rather than the simple willingness to engage in such behavior. Through a review of the extant literature, the authors identified 17 frequently cited justifications for EMI, each corresponding to one of four underlying factors: a sexual dimension, an emotional intimacy dimension, a love dimension, and an extrinsic motivation dimension, which included reasons such as the desire to advance in

one's career. Respondents were asked to indicate on a four-point scale the degree to which each factor would justify their own extramarital involvement. It is noteworthy that relative to a single item, this measure likely has more discriminative power. Presumably, a respondent not justifying EMI for any of the reasons given would be less permissive than one justifying such behavior on some grounds but not others. If so, the measure might be more sensitive to attitudinal differences between respondents.

To assess EMI itself, the authors inquired about a continuum of behaviors, including kissing and caressing, rather than sexual intercourse exclusively. As predicted, both men and women who justified EMI along the sexual dimension were more likely to report a history of sexual EMI. Moreover, for men but not women, justification along the love dimension was significantly correlated with sexual EMI. Therefore, with both an attitudinal measure of presumably greater reliability and the assessment of a broader range of extradyadic behaviors, more accepting attitudes toward EMI were significantly related to actual involvement. While this further supports the influence of attitudes on behavior, the largest effects in the study were only moderate in size, indicating that much of the variance in sexual EMI was unrelated to EMI justifications. Also, as in other studies, attitudes and extramarital involvement were measured concurrently, precluding any meaningful assessment of the potential causal relationship of attitudes to involvement.

In addition to those who are married or cohabiting, attitudes also predict EDI for persons in dating relationships, although this population has admittedly garnered only scant attention in earlier work. Among individuals in "exclusive" relationships, characterized by the expectation of sexual and dating infidelity, those with unrestricted sociosexual orientations more often pursue extradyadic activity relative to their restricted counterparts

(Seal, Agostinelli, & Hannett, 1994). Generally, sociosexuality refers to a person's willingness to engage in uncommitted sexual behavior (Simpson & Gangestad, 1991). Compared to restricted persons, those unrestricted are more likely to have sex earlier in a relationship, to report a history of multiple sex partners, and to engage in sexual relationships not characterized by love, commitment, involvement, and dependency (Simpson & Gangestad, 1991).

Using both a self-report measure and a behavioral experiment, Seal et al. (1994) examined the willingness of individuals to engage in extradyadic behaviors with attractive opposite-sex partners. For the behavioral component, respondents were given the option of pursuing a date with someone who appeared briefly in a mock video. Both in terms of their own self-report and their actual behavior, those with unrestricted sociosexual orientations, relative to those with less restricted orientations, were more willing to engage in extradyadic behavior. Additional evidence corroborates this finding (Wiederman & Hurd, 1999). College students who dissociated sex, love, and marriage, along with those who were more sexually sensation seeking, reported higher rates of extradyadic activity. Together, these findings suggest that for those in "exclusive" dating relationships, permissive sexual attitudes promote EDI, but the results also raise the question of whether permissive sexual attitudes in general equate to a more liberal perspective regarding extradyadic behavior.

Elsewhere, attitudes about EDI among those in dating relationships have been evaluated more precisely (Hansen, 1987). On a six-item scale, participants rated the acceptability of different extradyadic behaviors for a hypothetical man and woman, each engaged in a committed dating relationship. Similar to those engaged in cohabiting or marital relationships, respondents who disapproved of the hypothetical scenarios reported less

extradyadic involvement relative to those more tolerant of EDI. Thus, while evidence for those in dating relationships is limited, there exists at least a preliminary indication that irrespective of relationship type, attitudes about EDI influence the level of actual involvement.

Summary

Together, available findings support a number of broad conclusions each critical to an understanding of the relationship between EDI behavior and attitudes. To be certain, attitudes about EDI and involvement are fairly reliably correlated, and individuals who are more accepting of EDI generally report higher levels of involvement compared to those with less permissive beliefs. However, EDI behaviors and attitudes are by no means entirely concordant. Typical effects are only modest in size, suggesting that individuals do not always behave in congruence with their beliefs. Also, because the two have always been examined concurrently, there exists no clear indication that EDI beliefs actually engender different levels of extradyadic behavior. A longitudinal investigation would address the latter point, clarifying whether beliefs expressed at one point influence subsequent levels of extradyadic activity. As for the seemingly modest correlation between attitudes and involvement, it might accurately reflect the true strength of the relationship in question. However, effects may have been attenuated by methodological limitations, most notably the low reliability and potentially poor discriminative power of current attitude measures. The limitations could be remedied with a more elaborate measure showing greater sensitivity to differences in EDI beliefs. Finally, in most cases, the validity of existing attitudinal measures can be questioned as well, given references to a hypothetical other rather than to respondents themselves. A

more direct measure might also help to clarify the proposed relationship of EDI attitudes to involvement.

Related to issues of measurement, it might also be necessary to more broadly conceptualize EDI attitudes themselves. In past studies, attitudes have often been defined narrowly, usually reflecting a simple judgment about the acceptability of extradyadic behavior. The tendency ignores potential variability both in the form and nature of EDI beliefs. For example, along with general opposition to extradyadic activity, an individual may hold the more fundamental belief that anyone engaging in EDI is necessarily unscrupulous and immoral. Furthermore, some individuals may see EDI as the potential cause of aversive outcomes, such as damaged self-concept, alienation from friends, and emotional distress. When considered together, such a network of cognitions might better encapsulate an individual's underlying beliefs. If so, it should predict actual behavior more robustly than a simple attitudinal measure.

Relationship Quality and EDI

In addition to individual factors, such as EDI attitudes, relationship variables have been evaluated as possible antecedents to extradyadic involvement. In large part, this line of research has been organized around the position that EDI is more likely to occur when individuals feel distressed in, or otherwise displeased with, a primary relationship. Generally, extant findings support this broad conclusion. Important results are reviewed here, both in terms of their substantive relevance and implications for future research.

General relationship quality has been posited as one determinant of EDI. As others have noted (Allen et al., 2005), relationship quality has been operationalized in different ways, and these have varied both in their degree of specificity and overall focus. As for EDI

attitudes, many investigators have relied on data from surveys as a means of assessing relationship quality, which usually is the subject of only one or a few items, and concurrent levels of extradyadic involvement. Using this approach with a sample of individuals who were either married or cohabiting, Treas and Giesen (2000) defined overall relationship satisfaction in terms of the emotional fulfillment and physical pleasure derived from the union. Importantly, although respondents differed considerably in the duration of their relationships, satisfaction data were only available for those establishing their unions within the prior 12 months. For this subset of participants, relationship dissatisfaction was positively associated with recent extradyadic sexual intercourse, and this effect remained significant even after the effects of attitudinal and opportunity variables were statistically controlled.

Utilizing a similar approach, Atkins, Baucom, and Jacobson (2001) asked participants to categorize their primary relationships as “very happy, pretty happy, or not too happy.” Consistent with their hypothesis, level of satisfaction was significantly related to the incidence of extramarital sex (EMS). Indeed, as compared to those who described their relationships as “very happy”, those with “pretty happy” and “not too happy” unions were two and four times as likely, respectively, to report EMS. Glass and Wright (1977) also measured relationship satisfaction through a single item asking respondents to rate the overall quality of their marriage on a scale ranging from “very happy” to “very unhappy.” Marital satisfaction was significantly associated with extramarital sexual involvement, with less satisfied partners reporting more extramarital behavior. In a subsequent study, the investigators replicated this earlier finding but further evaluated the association of relationship quality and EMI as a function of respondent gender (Glass & Wright, 1985).

Notably, the relationship between the two was more pronounced for women than men, an indication that the influence of relationship quality on EDI may differ by gender.

This interaction has been supported elsewhere, albeit on the basis of a slightly different research design (Buss & Shackelford, 1997). Rather than reporting their actual extramarital involvement, participants estimated the likelihood of their eventual engagement in a variety of physical extradyadic acts. As in Glass and Wright (1985), marital satisfaction was negatively correlated with the estimated likelihood of future EDI, and the strength of this correlation was greater for women than men. Allen et al. (2000) also found a larger effect of relationship satisfaction on EDI for women relative to men. Thus, not only do available findings support the general link between relationship quality and EDI, they also provide converging evidence of a stronger association for women than men. Overall, though, the more general association has received wider support.

Although relationship quality has often been measured with a single item or composite score, alternative means of assessment have also been used. For example, Edwards and Booth (1976) used multiple indicators of marital satisfaction, including the frequency of arguments, threats by either party to leave home, and decrements in affection. Of these, only threats to leave home were significantly predictive of extramarital sex, and this effect was present across gender. However, data were gathered concurrently, which clearly obfuscates interpretation of this finding, especially since learning of a partner's EMI could prompt one to consider leaving home. Yet another approach to evaluating relationship quality has involved a focus on specific variables perhaps contributing to overall satisfaction with the union. Among these more precise factors, sexual satisfaction has garnered considerable attention, and results generally support an association between sexual dissatisfaction and

EDI. Indeed, those reporting a history of extradyadic sex are typically less satisfied with coital frequency and/or quality in their primary relationships (Traeen & Stigum, 1998; Bell, Turner and Rosen 1975; Spanier & Margolis, 1983; Thompson, 1983). Moreover, extradyadic sex is less common among those who are more emotionally satisfied with their primary sexual relationships and among women who derive more physical pleasure from those relationships (Waite & Joyner, 2001).

Disparities of equity, which certainly might influence relationship quality, have also been evaluated as possible contributors to EDI. Briefly, an equitable relationship is often defined as one that is equally beneficial to both partners. According to equity theory, inequitable relationships almost invariably cause both the under- and over-benefited partners to feel distressed, and their distress encourages them to restore equity within the relationship. On these theoretical grounds, Walster, Traupmann, and Walster (1978) reasoned that in an attempt to establish equity, under-benefited partners might participate in extramarital relations. To evaluate this prediction, married and cohabitating individuals were asked to concurrently report on their relationship equity and level of extradyadic involvement. As expected, under-benefited partners, in comparison to both the over-benefited and those in equitable relationships, admitted to more extradyadic encounters. Furthermore, the under-benefited partners became extradyadically involved earlier during the course of their primary relationships. Additional evidence tacitly suggests that the appeal of a more equitable relationship promotes extradyadic activity, as those engaging in EMI report greater equity in their extradyadic relationships as compared to their marriages (Glass, 2003).

Of importance, though, all findings on the relationship of equity to EDI are not entirely consistent. Elsewhere, inequity has predicted greater involvement for women but not

men, and interestingly, both under- and over-benefited women have been more inclined to engage in EDI, a finding that diverges from the prevailing assumption that extrarelational activity is more common among those under-benefited in their primary relationships (Prins, Buunk, & VanYperen, 1993). These effects were independent of both relationship and sexual satisfaction, in addition to individual attitudes about EDI. It does, however, bear mentioning that relative to relationship factors, attitudes were more strongly associated with both the desire for, and the engagement in, extrarelational activity. Thus, the importance of inequity relative to other factors, along with its effects across gender, are somewhat unclear. Further obfuscating these issues, Prins et al. (1993) operationalized EMI as the number of extramarital partners, a measurement strategy that probably lacks precision. For these reasons, the influence of equity on extradyadic involvement requires additional clarification.

Related to equity is the distribution of relationship power, an imbalance of which may promote EDI. On the basis of who usually prevails in disagreements, Edwards and Booth (1976) classified relationships as male- or female-dominated. Although a disparity in power had a negligible effect for men, women dominant in their relationships were more likely to report EMI. Using employment status as an indicator of power, Atkins et al. (2001) found similar results, although without any moderation by gender. For both men and women, a discrepancy in spouses' employment status predicted greater extramarital involvement, although, as noted by the authors, this finding could also reflect an increase in EMI opportunity following status ascension. Variables of opportunity will be discussed in greater detail in a later section.

EDI and the Investment Model

Typically, relational factors have been examined individually for their effects on EDI. In contrast to this trend, however, the impact of relationship variables has also been evaluated within the context of a broader and more unifying theoretical framework (Drigotas, Satstrom, & Gentilia, 1999). Based on the assertion that infidelity is principally a function of relationship commitment, the authors utilized an investment model of commitment, originally proposed by Rusbult (1980, 1983), to predict EDI longitudinally. Within this model, commitment, defined as the intent to persist in a relationship, has three bases of dependence: (a) satisfaction, which relates to the outcomes derived from a relationship; (b) investment, referring to those things that would be lost were the relationship to terminate; and (c) alternative quality, as represented by the most attractive alternative to the relationship.

More so than its underlying determinants, commitment is thought to influence relationship behavior directly, affecting decisions to persist and fostering a long-term orientation to the involvement. Furthermore, commitment seems to elicit pro-relationship transformation (Rusbult, Martz, & Agnew, 1998), a process in which one's own self-interest is subjugated to the needs of the relationship (Holmes, 1981; Kelley & Thibaut, 1978). Indeed, commitment is associated with a number of actions beneficial to a relationship, including tendencies to accommodate a partner who has behaved negatively (Rusbult, Bissonnette, Arriaga, & Cox, 1998; Rusbult et al., 1991; Rusbult, Martz, & Agnew, 1998), to denigrate appealing alternative partners (Johnson & Rusbult, 1989; Simpson, Gangestad & Lerma, 1990; Rusbult et al., 1998), and to refrain from otherwise pleasurable activities that conflict with a partner's preferences (Van Lange, Rusbult, and Drigotas, 1997; Rusbult et al., 1998). Given these factors, low commitment might predict dating infidelity; that is,

committed individuals would probably eschew involvement with another in an effort to protect the primary relationship, possibly to the detriment of their own immediate self-interest. Under this rationale, infidelity would stem largely from an erosion in commitment (Drigotas et al., 1999).

To test the claim, undergraduates in dating relationships provided data on two occasions, during the first assessment reporting overall commitment in addition to levels of satisfaction, investment, and alternative quality specifically. Data on EDI were collected at a second point, roughly two months after the first; at the second time period, respondents indicated their level of extradyadic involvement since the first point of assessment. Rather than inquiring about EDI in general, the authors restricted their measure, asking only about involvement with the person other than the primary partner to whom the respondent was most attracted.

Regression analyses were used to determine if the commitment variables, as measured at time 1, were predictive of the level of EDI reported at time 2. Consistent with the hypothesis, time 1 commitment and its constituent dimensions of satisfaction, investment, and alternative quality were each significantly predictive of a composite EDI variable. However, for physical intimacy specifically, only commitment and satisfaction were significant predictors, whereas alternative quality and investment were not. In the absence of corroborative data, it is impossible to know if the findings for physical EDI are replicable, but perhaps for unknown reasons, satisfaction and overall commitment are more closely tied than investment and alternative quality to extradyadic physical involvement. On the whole, though, commitment, at least as defined in the investment model, seems to hold promise as a determinant of EDI.

This conclusion, however, should be qualified for at least three reasons. First, in assessing EDI, the investigators only considered involvement with the person other than the primary partner to whom the respondent was most attracted. This assessment strategy is questionable given the potential for extradyadic involvement with other individuals as well. Additionally, EDI was not measured during the initial assessment. Therefore, although less committed individuals at time 1 were more inclined to report EDI at time 2, initial levels of EDI were never established. Without any knowledge of the extent to which respondents became more or less extradyadically involved over the course of the study, it is impossible to determine if commitment was significantly predictive of changes in EDI. Lastly, the effects of other potentially influential variables, such as EDI attitudes, were not included in the study. Thus, neither the unique impact of commitment nor its interactions with other factors could be evaluated for their effects on extradyadic involvement.

Despite the limitations, though, the investment model might be instrumental to a better understanding of EDI development. Within the model, a number of earlier findings can be usefully integrated, an important consideration given the lack of theoretical cohesion that is evident in many prior studies. For example, as a specific dyadic problem, sexual dissatisfaction could erode relationship satisfaction in general and possibly enhance the perceived appeal of alternative partners offering a more sexually fulfilling relationship. As a result, commitment itself might be lessened, with extradyadic behavior then becoming more likely. To further the argument, a power disparity might also undermine relationship satisfaction, with the less powerful partner perhaps feeling undervalued and the more powerful partner feeling underbenefited in the union. Under either of these scenarios, alternative partners might become more desirable, thus undermining the level of commitment

and increasing the likelihood of EDI. In this sense, commitment would mediate the effects of other relationship factors on EDI. Interestingly, Atkins (2003) evaluated the utility of both global and specific indicators of relationship satisfaction in the prediction of extradyadic involvement. He concluded that after controlling for the effects of more specific factors, global measures of satisfaction were not uniquely tied to EDI. These findings suggest that global indicators might serve as mere proxy variables for more specific relationship dynamics, which may have greater precision as predictors of extradyadic involvement (Allen et al., 2005). Nevertheless, because of its theoretical cohesion, the investment model is heuristically useful, and its validity should be examined further.

Summary

Overall, available findings converge to suggest that diminished relationship quality promotes extradyadic involvement, and this is perhaps more so the case for women than men. Global measures of distress are typically associated with EDI, as are more specific indicators such as sexual dissatisfaction and relationship inequity. However, EDI and relationship quality typically have been evaluated cross-sectionally, which is problematic for at least two reasons. First, the disclosure or discovery of a partner's EDI could severely diminish relationship quality, making it impossible to determine if relational distress preceded EDI or vice versa. Likewise, there might be mutually reciprocal influences between EDI and relationship quality. In one study, divorce proneness predicted extramarital sex, the occurrence of which then had negative implications for marital happiness (Previti & Amato, 2004). Creating another level of complexity, retrospective bias might influence reporting. Namely, in an attempt to justify an indiscretion, offending partners might retrospectively evaluate their unions as less satisfying, thereby creating a spurious association between initial

relationship quality and later extradyadic behavior. For these reasons, the abundance of cross-sectional designs precludes inferences of causality, an important consideration given the objective of explaining EDI's development. Existing studies are also marked by an apparent lack of theoretical cohesion, although this might be partially rectified with the investment model. Its utility, however, requires further evaluation, particularly since it has not yet been evaluated within the context of other predictors. Additional explanatory variables might help to explain why, for example, those less committed sometimes eschew EDI, instead terminating a current relationship before pursuing an alternative partner. On the whole then, a longitudinal research design with multiple predictors would effectively remedy important shortcomings of earlier work.

Opportunity and EDI

While the investment model largely comprises relational factors, it is also contextually dependent, particularly in the sense that alternative quality can be influenced meaningfully by factors external to the relationship. Its possible association to alternative quality suggests that EDI is in part a function of situational opportunity, a position supported by a large body of research. More specifically, a host of studies support the notion that as the opportunity to do so increases, individuals are more likely to engage in extradyadic behavior. However, despite a fairly robust association with EDI, opportunity has most often been measured indirectly through indicating factors with questionable validity. This, along with the fact that it has usually been measured concurrently with EDI, precludes a clear understanding of whether opportunity promotes extradyadic behavior.

In Treas and Giesen's (2000) investigation, opportunity was defined conceptually as the chance for undetected sex with someone other than the primary relationship partner.

Rather than measuring it directly, the authors identified factors that would reasonably promote opportunity. These included the individual ability to attract sexual partners, a job requiring personal contact with potential sex partners, an urban residence, and a social network approving of EDI. The number of sexual partners between age 18 and the first union served as a proxy for the ability to attract partners. To assess the degree of personal contact with potential partners in the workplace, respondents were asked to report on how much they touched, talked to, or spent time alone with others on the job. Urban residence was coded dichotomously on the basis of whether participants lived in a large- or medium-sized central city, and finally, approving social networks were assessed in terms of religious attendance and the extent to which respondents enjoyed spending time with a spouse's family and friends. The unique effect on EDI of each of these factors was evaluated after controlling for attitudinal and relationship variables.

Consistent with prediction, the number of previous sexual partners was positively related to EDI, as was a low degree of overlap in spouses' social networks. Furthermore, for the prior 12 months only, greater religious attendance and lower personal contact within the workplace were predictive of less EDI. On the surface then, it seems that opportunity is significantly related to extradyadic involvement, but it must be noted that, in the above study, opportunity was evaluated indirectly. Thus, the overarching conclusion of a significant relationship between opportunity and EDI is a tentative one at best. Indeed, on a number of grounds, the validity of the opportunity measures can be reasonably questioned. For example, a respondent with an extensive sexual history might not continue to attract potential sex partners after marriage. Perhaps acculturation to family life, among other factors, dramatically reduces the level at which such partners are attracted. Moreover, one might

surmise that social settings other than the workplace provide access to potential extradyadic partners. Therefore, in the absence of a more pointed measure of opportunity, its relationship to EDI is unclear, a problem that is further amplified by the concurrent measurement of the variables, which precludes any inferences relating to causality.

Despite its limitations, the methodology of Treas and Giesen (2000) is common among studies investigating the influence of opportunity on extradyadic involvement. Indeed, urban residence has often been used as a proxy for opportunity, although a consensus has not yet emerged as to whether larger communities actually promote EDI. Similar to the results of Treas and Giesen (2000), some findings support such a relationship. Traeen and Stigum (1998) measured population density on a continuum ranging from sparse towns with fewer than 200 inhabitants to large cities with more than 100,000 inhabitants. Respondents from more densely populated areas showed a greater inclination to engage in extradyadic sex, a finding corroborated elsewhere (Kontula & Haavio-Mannila, 1995).

However, support for this association is not universal. Choi et al. (1994) found no difference in the incidence of EDI over the prior 12 months when comparing urban respondents to those from a national sample, although the legitimacy of this comparison is dubious given that many from the national sample might have resided in urban areas. Moreover, in a reevaluation of the data, Allen et al. (2004) concluded that for men, urban residence may actually have been predictive of greater EDI. Therefore, the initial findings must be qualified in terms of these key points. However, the absence of a significant relationship between urban residence and extradyadic behavior has been observed elsewhere. Wiederman (1997) assessed community size on a continuum, with one extreme representing a rural county with no towns of 10,000 or more and the other denoting residence in one of the

12 largest metropolitan areas. For both men and women, community size was unrelated to both the incidence over the prior 12 months and the lifetime prevalence of EDI. Wilson (1995) also found no relation between urbanism and the incidence of EDI over the prior 12 months, concluding that an urban residence may encourage permissive sexual attitudes without promoting actual behavior.

Like urban residence, factors of employment have often served as proxy variables for opportunity. A large percentage of extramarital involvements develop with coworkers (Wiggins & Lederer, 1984; Glass, 2003), suggesting that the workplace provides access to extradyadic partners. In addition to interpersonal contact of the type assessed by Treas and Giesen (2000), jobs with a relatively high income, and those requiring travel, have shown at least modest associations with EDI. Atkins et al. (2001) noted a positive relationship between income and infidelity for respondents earning more than \$30,000 a year. To explain this pattern, they argued that higher income might facilitate infidelity in two ways, either by providing the financial means necessary for a clandestine relationship or by signifying increased status and power, qualities that might attract appealing extradyadic partners. Differential work status among spouses also predicted infidelity, although, as stated previously, this could reflect either a power imbalance in the relationship or the increased opportunity that follows ascension in status. Other findings on income, however, diverge at least slightly from those of Atkins et al. (2001). For example, there is some indication that the correlation of income and infidelity is positive for men but negative for women (Allen et al., 2004), and some have found a negligible association for both (Amato & Rogers, 1997). Moreover, Choi et al. (1994) observed the highest rate of EDI among poor urban men,

although as others note (Allen et al., in press), this may stem from oversampling on the basis of urban residence and minority status, both of which correlate with higher rates of EDI.

Similar to a higher income, extensive travel might allow for surreptitious behaviors facilitative of EDI. While not evaluated extensively, there does appear to be some association between travel and extradyadic behavior. A history of EDI is related to the number of traveling days in a year (Traeen & Stigum, 1998), although the strength of this finding is unclear, particularly since the effects of other variables, such as EDI beliefs and overall relationship quality, were not controlled. Perhaps, for unknown reasons, those with permissive sexual attitudes gravitate towards jobs requiring travel, or perhaps the selection of such employment stems from problematic aspects of the primary relationship. Despite these possibilities, others have observed a similar association between travel and EDI. Specifically, Wellings, Field, Johnson, and Wadsworth (1994) found that multiple sexual partners were more common among those whose jobs required overnight travel.

Summary

Theoretically, opportunity refers to the availability and willingness of alternative partners, along with factors promoting clandestine sexual behavior (Allen et al., 2004). Rarely, however, have these components been measured directly. Common proxy variables include population density, in addition to designated employment factors, such as income, travel, and interpersonal contact with coworkers. To an extent, each predicts the rate of EDI, which is greater among urban residents and those who travel, earn a higher income, or interact extensively with others at work. These findings suggest that susceptibility to EDI increases under circumstances exposing individuals to potential extradyadic partners who can

be pursued with minimal threat of discovery by the primary partner. This supports the more general position that opportunity promotes extradyadic behavior.

However, in no reported case has opportunity been measured directly in terms of its theoretical definition, a limitation that could account for inconsistencies in available findings as well as the generally unimpressive size of effects. On the surface, this measurement strategy seems puzzling, although Atkins et al. (2001) astutely note one possible reason for its use. With a cross-sectional design, those reporting extradyadic involvement would necessarily endorse higher levels of opportunity. Thus, without the use of proxy variables that might estimate the level of opportunity prior to involvement, the two constructs are inextricably connected, such that the direct assessment of opportunity would likely overestimate its causal affect on EDI. The combination of a longitudinal design with appropriate statistical methodology would remediate this problem, though, as EDI could be predicted from an earlier, direct measure of opportunity, after controlling for the effects of an earlier measure of EDI. This approach might clarify inconsistencies in the current literature and better estimate the true impact of opportunity on subsequent extradyadic behavior.

The available findings also demonstrate a strong tendency among researchers to define opportunity as a contextual variable. For the most part, the prevailing assumption has been that external factors, such as area of residence and atmosphere within the workplace, likely expose individuals to appealing alternative partners, thereby fostering extrarelational behavior. As detailed, this perspective has been supported empirically, at least to an extent, and it seems reasonable that some milieus would provide increased access to alternative partners. Nevertheless, an emphasis on contextual factors might overlook certain individual variables having a significant impact on opportunity. Recognition of this fact has prompted

some to consider individual factors, such as the ability to attract extradyadic partners, which might lead to greater opportunity for extradyadic behavior (Treas & Giesen, 2000). The current study adopted a similar approach to evaluate further individual-level variables that might promote or discourage level of opportunity.

Specifically, our model proposes that some individuals limit access to alternative partners by avoiding certain opportunity-enhancing interpersonal situations. The model further contends that avoidance is greater when the situations themselves are perceived as inappropriate. For example, an individual might regard flirtation with an alternative partner as inappropriate, perhaps because it signifies a breach of implicit or explicit relationship standards. As a result of this belief, the individual might avoid such flirtation, thereby limiting the opportunity for EDI and perhaps interrupting a potential trajectory toward extradyadic behavior. Notably, this idea is not without precedent. Others have suggested that nonsexual, extradyadic relationships create opportunities for extrarelational involvement (Johnson, 1970; Neubeck & Schletzer, 1969). Weis and Slosnerick (1981) examined this issue specifically, asking college students to rate the appropriateness of specific nonsexual, extradyadic behaviors. Although the ratings were not used to predict opportunity, they were correlated with attitudes towards extramarital involvement, with those approving of EMI expressing greater tolerance for the nonsexual behaviors. Perhaps intolerance of these types of behaviors causes them to be avoided, thereby limiting any exposure to nonsexual, but nevertheless, opportunity-enhancing interpersonal situations. Decreased opportunity would then discourage the onset of extradyadic activity. The current study attempted to evaluate this perspective empirically, and this objective, along with others, is reviewed next.

Aims of the Present Study

As stated earlier, the current investigation was motivated not only by the results, but also the limitations, of prior research. In terms of results, a number of general conclusions have been supported. First, available findings suggest that extradyadic involvement is more common among those with permissive attitudes. Additionally, poor relationship quality seems to predict a higher incidence of EDI, as does increased opportunity. Of importance, associations between EDI and its predictors seem fairly robust, as each has been observed consistently and over a range of methodology. However, almost invariably, data have been gathered concurrently, and as a result, the causal influence of each predictor on EDI is not well understood. Therefore, a longitudinal study would contribute substantially to the existing literature.

Although relatively consistent, the effects of attitudes, opportunity, and relationship quality have typically been of modest size. However, available results might underestimate true relational strength. In support of the position, EDI attitudes have usually been assessed through only one or a few items, many of which have inquired about the behavior of a hypothetical other rather than respondents themselves. Furthermore, potentially related variables, such as urban residence and occupational setting, have served as proxies for opportunity, which has rarely been evaluated directly. Even EDI itself has often been measured dichotomously, despite the fact that extrarelatational activity likely falls on a continuum of less and more extreme behaviors. Any of the practices described could attenuate the relationship of a predictor to EDI, and correcting them would yield a more accurate assessment of true relational strength.

Among the limitations of earlier studies, perhaps most important is the general absence of a unifying model within which to conceptualize the onset of extradyadic behavior. Of notable exception is the work of Drigotas et al. (1999), in which the emergence of EDI was organized usefully around the investment model of relationship commitment. However, the investment model seems incomplete in its explanation of extrarelatinal involvement, at least in part because it fails to account for EDI attitudes. Moreover, the model seems to equate opportunity and alternative quality, even though the two are quite possibly dissimilar. To fully account for the occurrence of EDI, a more expansive model is likely necessary.

To redress various issues that have been detailed, the current study tested a longitudinal model of dating EDI that included situational opportunity, individual beliefs, and relationship commitment as predictor variables. As formulated, the theoretical model stipulates that predictors operate jointly to influence extradyadic participation. It is assumed that EDI can only occur when opportunities exist for accessing available and willing alternative partners. As detailed earlier, opportunity itself is likely increased through engagement in certain interpersonal scenarios, such as flirting with an attractive person. Indeed, the engagement in such scenarios might initiate a trajectory toward EDI, in which more casual interactions gradually intensify, thereby creating attraction for an alternative partner along with opportunities for physical engagement. When opportunities arise, the decision of whether to pursue extradyadic relations depends upon the remaining variables in the model, namely the individual's beliefs about EDI along with the level of commitment to the primary relationship. If EDI beliefs are forbidding and/or commitment is high, individuals will unlikely involve themselves extradyadically, because the avoidance of EDI either accords with one's beliefs, allows for the maintenance of a desired relationship, or

both. However, even under these conditions EDI may still occur, particularly if the available opportunity is highly appealing. When EDI beliefs are permissive, opportunities will be pursued more readily, given that extradyadic engagement produces no discrepancy between attitudes and behavior. Similarly, less committed individuals, perhaps unconcerned with maintaining a primary relationship, will more frequently involve themselves extradyadically in response to increased opportunity. However, the effects on EDI of both commitment and beliefs are seen as interactive, such that an individual with permissive attitudes might eschew EDI if commitment is high, just as a person with highly forbidding beliefs might disavow EDI even when commitment is low.

To further address the limitations of prior studies, a number of measurement issues received consideration in the present investigation. Rather than relying on the ordinal or dichotomous measures of earlier research, we attempted to derive a continuous scale of extradyadic involvement. EDI attitudes were broadly defined with an original scale that more fully represented underlying beliefs about extradyadic participation. Furthermore, opportunity was also measured on a new scale, one arguably yielding a more valid assessment than the proxy variables used elsewhere.

Summary of Hypotheses

As proposed, the current study directly tested the following hypotheses:

- (1) Negative beliefs about EDI will predict lower levels of extradyadic involvement. Thus, as compared to individuals with permissive EDI beliefs, those expressing more negative attitudes will be less inclined to engage in extradyadic behavior.
- (2) Higher relationship commitment will predict lower levels of EDI.

(3) Beliefs and commitment will interact to influence EDI. Specifically, as beliefs become more forbidding, the impact of commitment on EDI will diminish. Likewise, as commitment increases, the influence of beliefs on EDI will decrease.

(4) Increased opportunity will predict greater EDI, meaning that as the mere opportunity to do so increases, individuals will be more inclined to become extradyadically involved.

(5) Opportunity itself will be lower among those who regard as inappropriate a variety of non-physical, extradyadic, interpersonal interactions with attractive others.

Method

In the interest of clarity, the following sections make a distinction between methods of scale construction and those associated with the full longitudinal analysis. However, scale development actually occurred as a specific component of the broader longitudinal investigation. Following a pilot test with a separate group, undergraduates in the full study completed measures on four occasions, with the first yielding all necessary data for scale development. Therefore, although the psychometric and longitudinal aspects of the study are described separately, each relied upon a common group of research participants.

Study 1 – Scale Construction

Procedure

Study 1 pilot tested and psychometrically evaluated three newly devised measures: the Extradyadic Beliefs Inventory (EBI), Extradyadic Opportunity Scale (EOS), and Extradyadic Inappropriateness Scale (EIS). The EBI and EOS were created to assess EDI beliefs and opportunity level, respectively, whereas the EIS was designed to measure attitudes about the inappropriateness of non-physical, extradyadic, interpersonal interactions with attractive others. Participants completed a pool of prospective items for each scale, along with additional measures selected to evaluate convergent and discriminant validity. Data analyses identified from each pool a subset of items constituting a valid and reliable scale. As an additional component of Study 1, participants used a brief scale to rate the

intimacy level of various dyadic physical behaviors. The ratings facilitated construction of a continuous measure of physical extradyadic involvement. Data collection occurred via the web through the Zoomerang Pro software package.

Participants

Overall, 60 participants completed the pilot test and an additional 318 enrolled in the full study, which involved both a psychometric analysis of the newly created scales and the longitudinal investigation of EDI. Data collection occurred over two academic semesters at UNC-Chapel Hill. During the first, which included pilot testing, all participants were engaged in an exclusive dating relationship in which any extradyadic physical engagement was forbidden. For the second semester, inclusion criteria were relaxed somewhat to allow participation of individuals engaged in non-exclusive dating relationships. The modification stemmed from the relatively sparse occurrence of extradyadic engagement during the first semester. Across both periods of data collection, married persons were excluded. Furthermore, to prevent nesting in the data, students could not participate if their romantic partner was doing so. Recruitment approximately balanced the number of participants across gender. No additional selection criteria were imposed.

Tables 1 through 4 provide descriptive information for those in the full study. All participants were undergraduates at UNC-Chapel Hill, and each received course credit in exchange for participation. Students averaged 19 years of age, and a majority were female and Caucasian. Upon entering the study, 89.1% categorized their primary relationship as exclusive, with duration of total time together averaging between 15 and 18 months. Despite the presence of considerable variation, the largest participant groups classified themselves as moderates both in terms of religiosity and political orientation.

Measures

Physical Involvement Scale (PIS; see Appendix A). On the PIS, participants used a 100-point scale to rate the level of physical involvement associated with the following behaviors: (a) passionate kissing; (b) sexual hugging and caressing; (c) heavy petting; (d) oral sex or other similar sexual contact; and (e) sexual intercourse. For example, an individual might have assigned a value of 90 for the physical involvement of sexual intercourse, and a value of 45 for heavy petting. As described, sexual intercourse would have involved twice the level of physical engagement as heavy petting. For each behavior, the average rating across participants contributed to the development of a continuous measure of extradyadic involvement, in which behaviors were weighted by their level of physical intimacy. Related procedures are reviewed more fully in the method section of Study 2.

Extradyadic Involvement Scale (EDIS; see Appendix B). A subset of items from the Extradyadic Experiences Questionnaire (EEQ; Allen and Baucom, 1999) measured extradyadic involvement. The items themselves asked about the frequency and occurrence of a full range of physical dyadic behaviors, including passionate kissing, sexual hugging and caressing, heavy petting, oral sex or other similar contact, and sexual intercourse. The resulting data, along with average intimacy ratings from the PIS, permitted construction of a continuous measure of EDI, with three approaches receiving consideration. (1) The first summed the dichotomous codes for each behavior, resulting in a continuous score ranging from 0 to 5. (2) A second approach weighted behaviors by their PIS intimacy levels. Clearly, some behavioral categories subsumed others. For example, an individual engaging in extradyadic sexual intercourse would necessarily participate in extradyadic kissing and sexual hugging as well. Therefore, only the most intimate type of involvement was weighted

to determine an EDIS score. (3) A final approach weighted intimacy both in terms of frequency and PIS score.

Newly Constructed Measures. The Extradynamic Beliefs Inventory, Extradynamic Opportunity Scale, and Extradynamic Inappropriateness Scale were developed to evaluate predictors included in the theoretical model. Each is described below.

Extradynamic Beliefs Inventory (EBI; see Appendix C). As compared to prior work, the present study defined EDI beliefs rather broadly. Specifically, here beliefs relate not only to the perceived rightness or wrongness of EDI, but also to its anticipated consequences. As formulated, permissive attitudes and a low expectation of negative consequences would lead to greater EDI tolerance, whereas forbidding attitudes and a high expectation of aversive consequences would characterize a more oppositional belief structure.

The EBI item pool included 37 statements measuring EDI beliefs, and for each, respondents rated their agreement on a five-point likert-type scale (1 = “strongly disagree”; 5 = “strongly agree”). Because of the emphasis on predicting physical EDI, statements exclusively focused on acts of physical intimacy. To minimize response bias, care was taken to avoid evaluative language that might have connoted either approval or disapproval of extradynamic behavior. Also, to improve validity, statements referenced the participant instead of a hypothetical other. Items measuring the perceived rightness or wrongness of physical EDI were constructed to discriminate between differing levels of opposition to extradynamic involvement. Anticipated consequences included negative events such as alienation from friends, damaged self-concept, emotional distress, and injury to the primary relationship, in addition to more positive outcomes, such as increased self-esteem and enhancement of the primary relationship.

Convergent and Discriminant Validity. Correlations between the EBI and other selected measures examined convergent and discriminant validity. Measures included a modified version of the single item assessing EMI attitudes, along with indexes of sociosexual orientation, moral traditionalism, and EDI history.

Extradyadic Opportunity Scale (EOS; see Appendix D). Opportunity refers to the availability and willingness of alternative partners, along with factors promoting secretiveness (Allen et al., 2005). The EOS item pool comprised 15 statements assessing opportunity, each rated on a likert-type scale (1 = “strongly disagree”; 5 = “strongly agree”). Consistent with the conceptual definition, high opportunity signified the availability and willingness of alternative partners, along with situational factors that might prevent discovery of EDI by the primary partner.

Convergent and Discriminant Validity. Along with a measure of extraversion, items relating to dating history, sensation seeking, physical attractiveness, and interpersonal attractiveness examined the convergent and discriminant validity of the EOS.

Extradyadic Inappropriateness Scale (EIS; see Appendix E). For the most part, opportunity has been defined contextually with little regard for individual factors that might promote or discourage it. The current model proposes that some individuals limit access to alternative partners through their avoidance of opportunity-enhancing interpersonal scenarios. Consistent with the idea, the EIS asked respondents to rate the appropriateness of their engagement in nine hypothetical scenarios (5-point likert-type scale; 1 = “not at all inappropriate”, 5 = “very inappropriate”). Rather than depicting actual extradyadic involvement, the scenarios focused on circumstances that could potentially affect opportunity and promote access to alternative partners.

Convergent and Discriminant Validity. The same group of measures applied to the EOS also evaluated EIS convergent and discriminant validity.

Single Attitudinal Item (Davis & Smith, 1994; see Appendix F). In much available survey research, EMI attitudes have been assessed through the single item, “What is your opinion about a married person having sexual relations with someone other than the marriage partner—is it always wrong, almost always wrong, wrong only sometimes, or not wrong at all?” Scores range from 0 to 3, with higher values denoting less EDI opposition. As noted, the item is at least moderately related to EMI history, with more permissive attitudes predicting greater extradyadic involvement on the part of the respondent. The EBI differed considerably from the single item, not only because it was self-referenced, but also because it ostensibly measured a broader range of attitudes and beliefs about extradyadic activity. Nevertheless, an overall score on the EBI was expected to correlate significantly with a single item modified to inquire about a dating relationship rather than marriage.

Sociosexual Orientation Inventory (Simpson & Gangestad, 1991; see Appendix G). The sociosexual orientation inventory assesses the willingness to engage in uncommitted sexual relations. Two of its items evaluated convergent and discriminant validity for the newly created scales. The first asked about the frequency of sexual fantasy, whereas the second inquired about agreement level with the statement “Sex without love is okay”. Because more permissive sexual attitudes in general would likely predict greater tolerance of extradyadic behavior, an unrestricted sociosexual orientation was expected to correlate significantly with more tolerant EDI beliefs.

Moral Traditionalism Scale (Conover & Feldman, 1985; see Appendix H). The Moral Traditionalism Scale measures support for traditional moral and social values and consists of

eight items each scored on a five-point likert-type scale (1 = strongly agree; 5 = strongly disagree). Content areas include sexual freedom, cohabitation, divorce, and traditional family ties (Robinson, Shaver, & Wrightsman, 1999). Internal consistency, convergent validity, and discriminant validity have been established elsewhere (Conover & Feldman, 1985). Morally traditional participants were expected to disapprove of EDI; thus, a positive correlation between moral traditionalism and the EBI was predicted.

Extradyadic Involvement Scale (see Appendix B). Participants also reported EDI history over the previous five years. A history of extradyadic involvement was expected to correlate at least moderately with more permissive EDI beliefs.

Dating History (see Appendix I). Treas and Giesen (2000) used number of prior sexual partners as an indicator of EDI opportunity, reasoning that a more extensive sexual history would predict greater access to extradyadic partners. For a similar reason, an extensive dating history might also predict greater EDI opportunity, as the attraction of both dating and EDI partners likely depends upon common factors. Therefore, a separate item asked for the number of dating partners within the last five years to evaluate possible correspondence to the EOS.

Physical Attractiveness Item (see Appendix J). Physical attractiveness might also increase EDI opportunity, with attractive individuals drawing greater interest from alternative partners. Therefore, to assess physical attractiveness, respondents answered the following item, “On a scale from 1 to 10, with 1 being the least physically attractive and 10 the most physically attractive, please rate how physically attractive you think you are.” Higher ratings of physical attractiveness were expected to correlate with higher scores on the EOS.

Interpersonal Attractiveness Item (see Appendix K). Because individual characteristics other than physical attractiveness might elicit attention from alternative partners, respondents also reported on their general success in attracting others. Specifically, on a 7-point scale, participants noted their agreement with the statement, “In general, I think that other people are drawn to me.” Greater agreement was expected to predict higher scores on the EOS.

NEO Personality Inventory – Extraversion Scale (Costa & McCrae, 1985). The NEO PI-R measures five domains of personality including extraversion, which is computed on the basis of 30 items yielding a *T*-score ranging from 0 to 192. The internal consistency, predictive validity, discriminant validity, and convergent validity of the NEO PI-R have been established elsewhere (Costa & McCrae, 1985). Given its constituent facets of warmth, gregariousness, assertiveness, activity, excitement-seeking, and positive emotions, extraversion was expected to correlate positively with EDI opportunity, as extroverted individuals would likely encounter and attract higher numbers of alternative partners.

Brief Sensation Seeking Scale (BSSS; Hoyle, Stephenson, Palmgreen, Lorch, & Donahew, 2002; see Appendix L). The BSSS is a self-report measure of sensation seeking, which denotes “the need for varied, novel, and complex sensations and experiences and the willingness to take physical and social risks for the sake of such experiences” (Zuckerman, 1979, p.10). In completing the BSSS, respondents used a five-point likert scale to rate their agreement with eight statements, each indexing a different type of sensation seeking behavior. The reliability and validity of the BSSS have been established elsewhere (Hoyle, Stephenson, Palmgreen, Lorch, & Donahew, 2002). The BSSS was predicted to correlate

negatively with the EIS, as sensation seekers would likely be disinclined to regard the interpersonal scenarios as inappropriate.

Additional EIS Validity Measures. Overlap was anticipated between the Extradynamic Inappropriateness Scale and the Extradynamic Beliefs Inventory, as common factors likely account for EDI beliefs and the perceived inappropriateness of specified interpersonal scenarios. Additionally, the EIS was expected to correlate negatively with EDI history and positively with both moral traditionalism and the single survey item.

Study 2 – Longitudinal Analysis

Procedure

In the longitudinal study, participants completed the Extradynamic Beliefs Inventory, Extradynamic Inappropriateness Scale, Investment Model Scale, Extradynamic Opportunity Scale, and Extradynamic Involvement Scale on four occasions, each separated by approximately three weeks and together spanning the course of approximately nine weeks. On each occasion, students reported their current relationship status. The first assessment included a background questionnaire inquiring about relationship characteristics and other demographic variables.

Surveys administration occurred over the web via a software package called Zoomerang Pro. Prior to assessment one, participants attended an orientation session familiarizing them with the study protocol, along with use of the web-based survey system. Email prompts reminded students when to complete follow-up assessments.

Participants

The same group of participants completed study 1, which involved a psychometric analysis of the newly constructed measures, and study 2, which consisted of the longitudinal

investigation of EDI. The method section for study 1 provides a full description of those taking part in the investigation.

Measures

In addition to the measures described for study 1, which included the newly created instruments and the various scales evaluating their psychometric properties, the participants completed the Investment Model Scale and a *Background and Relationship Characteristics questionnaire* described below.

Investment Model Scale (Rusbult et al., 1998; see Appendix M). The Investment Model Scale measures commitment level in addition to its three proposed bases of dependence – satisfaction level, quality of alternatives, and investment size. The subscale for each base of dependence consists of five global items along with five more specific items, but only the global items are used to compute an overall subscale score. Items include 9-point likert-type scales (0 = Do not agree at all; 4 = Agree somewhat; 8 = Agree completely), and overall subscale scores range from 0 to 40. The commitment level subscale includes seven items, such that the overall subscale score ranges from 0 to 35. The internal consistency, structural validity, convergent validity, discriminant validity, and predictive validity of the Investment Model Scale have been demonstrated elsewhere (Rusbult et al., 1998).

Background and Relationship Characteristics (see Appendix N). The background questionnaire provided information regarding demographic factors and pertinent relationship characteristics. Importantly, the questionnaire assessed changes in relationship status occurring during the course of participation.

Results

Study 1

Factor Analytic Strategy

For each of the new scales, a common factor analytic strategy evaluated the interrelationships among items. With the use of five-point likert responses, item distributions likely possessed ordered categorical rather than continuous properties, thereby precluding implementation of traditional factor techniques that utilize Pearson product moment correlations as the bases of analysis (Mislevy, 1986). As a more appropriate alternative, Mplus version 3.0 (Muthen & Muthen, 1998-2006) analyzed tetrachoric correlations among items, estimating the corresponding factor solution through the use of weighted least-squares with mean and variance adjustment. Others have demonstrated the method's appropriateness for ordered categorical data of the type observed here (Mislevy, 1986). As an additional component of the analytic strategy, promax rotation allowed for intercorrelations among factors.

A variety of criteria informed the decision of how many factors to retain. The chi-square statistic and root mean squared error of approximation served as indexes of overall model fit, and the eigenvalues, scree plot, and interpretability of a given solution provided additional information about how effectively it accounted for the observed pattern of interrelationships among items. Following identification of the most optimal factor solution, a subsequent analysis removed items with no significant loadings or with appreciable cross-

loadings. Repetition of the process yielded an interpretable factor structure with each item exhibiting a strong loading on one defining factor and weak loadings on any remaining factors. The following sections present results for the EBI, EOS, and EIS, respectively.

Factor Analysis of the Extradyadic Beliefs Inventory

Table 1 displays descriptive statistics for the original 37 items of the Extradyadic Beliefs Inventory. A preliminary EFA included all items, despite the existence of possible floor effects for statements 28 and 29. As formulated above, the factor analytic procedure ultimately supported the retention of four factors, and together they reflected interrelationships among 19 items that manifested unambiguous factor loading patterns. Table 2 presents the items themselves along with their corresponding loadings on each of the four retained factors. As listed, the first factor seemingly reflected a number of different incentives that one might garner through EDI, with a representative item reading, “It would be fun to be physically intimate with someone other than my partner.” The second factor, which comprised a total of eight items, presumably represented the moral and ethical values an individual holds with regard to EDI. As an example, one item read as follows, “If I were physically intimate with someone other than my partner, I might never forgive myself.” Regarding the third factor, items appeared to reflect the different justifications that one might give for his/her own extradyadic behavior, as illustrated by the statement, “If I were dissatisfied in my relationship, it would be acceptable for me to be physically intimate with someone else.” And lastly, a fourth factor, labeled “peers,” seemed to measure the attitudes of one’s friends toward EDI, with a representative item reading “My friends would encourage me to be physically intimate with someone other than my partner.” Each of the

four sub-scales demonstrated a high level of internal consistency (Range of coefficient alpha = .79 - .85).

	<i>M</i>	<i>SD</i>
1. Under some conditions, I might be physically intimate with someone other than my partner.	1.78	1.11
2. I were physically intimate with someone other than my partner, I would not feel guilty.	1.50	0.97
3. If I were physically intimate with someone other than my partner, I would like myself less.	3.83	1.22
4. Monogamy is not that important in a relationship.	1.39	0.70
5. If I were physically intimate with someone other than my partner, others would disapprove of me.	3.96	0.89
6. I could enhance my current relationship by being physically intimate with someone other than my partner.	1.34	0.65
7. If I were physically intimate with someone besides my partner, others would dislike me.	3.47	1.00
8. Being physically intimate with someone else wouldn't make me a bad boyfriend/girlfriend.	1.57	1.02
9. Others would forgive my for being physically intimate with someone other than my partner.	3.15	0.99
10. I would lose some important friendships if I were physically intimate with someone besides my partner.	3.23	1.22
11. It would be fun to be physically intimate with someone other than my partner.	2.31	1.27
12. Being physically intimate with someone other than my partner would cause me to think about myself in a negative way.	4.00	0.97
13. If I were physically intimate with someone other than my partner, I would be a bad person.	3.36	1.11
14. If I were physically intimate with someone other than my partner, I might never forgive myself.	3.27	1.26
15. If I were physically intimate with someone other than my partner, I might feel better about myself.	1.63	0.82
16. My ability to be monogamous is one of my best qualities.	3.67	1.03

17. I would feel a lasting sense of emotional turmoil if I were physically intimate with someone other than my partner.	3.73	1.10
18. I might never again like myself if I were physically intimate with someone besides my partner.	2.56	1.16
19. Being physically intimate with someone other than my partner might help me to become a better person.	1.52	0.71
20. How I evaluate myself doesn't depend upon whether I'm monogamous in my relationship.	2.57	1.00
21. If I were physically intimate with someone else, I would deserve to be punished.	3.25	1.10
22. If I were physically intimate with someone else, I would feel obligated to tell my partner.	3.98	1.03
23. For me, monogamy feels unnatural.	1.69	0.97
24. Being physically intimate with someone other than my partner would ruin my life.	2.57	1.00
25. If I were dissatisfied in my relationship, it would be acceptable for me to be physically intimate with someone else.	1.96	0.98
26. If I were more attracted to someone other than my partner, it would be acceptable for me to be physically intimate with that other person.	1.72	0.80
27. I might feel more attractive if I were physically intimate with someone other than my partner.	2.16	1.12
28. If I were physically intimate with someone else, it would hurt my partner.	4.77	0.57
29. If I were physically intimate with someone else, it would damage my primary relationship.	4.67	0.62
30. If I were physically intimate with someone else, it would cause my primary relationship to end.	3.96	1.03
31. My friends would encourage me to be physically intimate with someone other than my partner.	1.94	1.05
32. Most of my friends have been physically intimate with someone other than their partner at some point in their relationship.	2.57	1.12
33. My friends support monogamy in relationships.	4.02	0.88
34. If I were physically intimate with someone else, it would ruin my partner's life.	3.19	1.15
35. If I fell in love with someone other than my partner, it would be acceptable for me to be physically intimate with that other person.	2.33	1.09
36. Monogamy is not the most important part of a relationship.	2.40	1.01
37. Being physically intimate with someone else might ultimately change my life for the better.	2.09	0.98

Note. Statistics computed with all available information for each variable; *N* ranges from 307 to 309.

Table 2. Factor Structure of the Extradysadic Beliefs Inventory

Item	Factor 1 "Incentives"	Factor 2 "Values"	Factor 3 "Justifications"	Factor 4 "Peers"
My friends would encourage me to be physically intimate with someone other than my partner.	0.27	-0.04	-0.05	-0.61
Most of my friends have been physically intimate with someone other than their partner at some point in their relationship.	0.08	0.08	0.04	-0.81
My friends support monogamy in relationships.	-0.08	-0.08	0.03	0.83
If I were dissatisfied in my relationship, it would be acceptable for me to be physically intimate with someone else.	0.04	0.02	-0.94	0.01
If I were more attracted to someone other than my partner, it would be acceptable for me to be physically intimate with that other person.	0.25	-0.08	-0.60	-0.09
If I fell in love with someone other than my partner, it would be acceptable for me to be physically intimate with that other person.	0.09	-0.03	-0.75	-0.05
I could enhance my current relationship by being physically intimate with someone other than my partner.	0.68	-0.03	0.04	-0.18
It would be fun to be physically intimate with someone other than my partner.	0.70	-0.11	-0.03	-0.05
Being physically intimate with someone other than my partner might help me to become a better person.	0.75	-0.05	0.10	-0.21
I might feel more attractive if I were physically intimate with someone other than my partner.	0.76	0.03	-0.06	0.04
Being physically intimate with someone else might ultimately change my life for the better.	0.61	-0.21	-0.11	0.09

If I were physically intimate with someone besides my partner, others would dislike me.	0.26	0.65	0.08	0.27
Others would forgive me for being physically intimate with someone other than my partner.	-0.25	-0.58	0.03	-0.24
If I were physically intimate with someone other than my partner, I might never forgive myself.	-0.19	0.85	-0.04	-0.09
I would feel a lasting sense of emotional turmoil if I were physically intimate with someone other than my partner.	-0.15	0.72	0.07	0.04
I might never again like myself if I were physically intimate with someone besides my partner.	-0.07	0.85	0.04	-0.09
If I were physically intimate with someone else, I would deserve to be punished.	-0.06	0.62	0.04	-0.08
Being physically intimate with someone other than my partner would ruin my life.	-0.21	0.82	-0.05	-0.08
If I were physically intimate with someone else, it would ruin my partner's life.	-0.04	0.71	-0.08	-0.06

$N = 303$; $RMSEA = 0.07$

Factor Analysis of the Extradyadic Opportunity Scale

Table 3 provides descriptive statistics for the original 15 items of the Extradyadic Opportunity Scale. Overall, the items exhibited acceptable statistical properties, both in terms of central tendency and variance. However, two items appeared to overlap considerably with regard to content, a condition which might have induced a state of local dependence within the data. Specifically, the wording of item 9, “In my daily life, I interact with an attractive person who wants to be physically intimate with me,” closely parallels that of item 15, “In

my daily life, I socialize with an attractive person other than my partner who wants to be physically intimate with me.” Furthermore, consistent with the presence of local dependence, the two items exhibited a high correlation ($r = .86$).

Table 3. Means and standard deviations for the EOS items

	<i>M</i>	<i>SD</i>
1. If I wanted, I could easily be physically intimate with an attractive person other than my partner.	3.31	1.36
2. An attractive acquaintance is interested in me romantically.	3.36	1.11
3. An attractive person other than my partner is willing to be physically intimate with me.	3.44	1.11
4. I could be physically intimate with an attractive person without my partner knowing about it.	3.40	1.27
5. I am sometimes tempted to be physically intimate with someone other than my partner.	2.88	1.35
6. I have the opportunity to be physically intimate with someone else who is highly appealing to me.	3.09	1.20
7. If I were physically intimate with someone else, I could hide it from my partner.	2.96	1.34
8. I am very attracted to someone besides my partner.	2.49	1.28
9. In my daily life, I interact with an attractive person who wants to be physically intimate with me.	2.80	1.11
10. In my daily life, attractive persons besides my partner make romantic advances toward me.	2.84	1.11
11. I often socialize with attractive men/women other than my partner.	3.97	0.77
12. Most men/women are physically attracted to me.	3.26	0.82
13. I often talk on the phone with attractive men/women other than my partner.	2.63	1.16
14. In my daily life, I often meet attractive men/women.	3.81	0.79
15. In my daily life, I socialize with an attractive person other than my partner who wants to be physically intimate with me.	2.78	1.08

Note. Statistics computed using all available information. *N* ranges from 305 to 309.

Therefore, rather than including all of the EOS items, the preliminary EFA excluded statement 9 because of its similarity to statement 15. The resulting analysis supported a one factor solution, retaining five items from the original set. Factor loadings are displayed in Table 4. The items had a high level of internal consistency (Coefficient alpha = .80), and they seemingly reflected one’s level of immediate access to available and willing alternative partners. A representative item read as follows, “An attractive person other than my partner is willing to be physically intimate with me.”

Table 4. Factor Structure of the Extradyadic Opportunity Scale

Item	Factor 1
2. An attractive acquaintance is interested in me romantically.	0.84
3. An attractive person other than my partner is willing to be physically intimate with me.	0.88
4. I could be physically intimate with an attractive person without my partner knowing about it.	0.53
12. Most men/women are physically attracted to me.	0.58
15. In my daily life, I socialize with an attractive person other than my partner who wants to be physically intimate with me.	0.81

$N = 302$; $RMSEA = 0.03$

Factor Analysis of the Extradyadic Inappropriateness Scale

As formulated, the Extradyadic Inappropriateness Scale consisted of nine scenarios, each involving some form of social engagement with an attractive person other than the dating partner. Table 5 lists descriptive statistics for the EIS items. Inspection of the means showed no indication of floor or ceiling effects, and the standard deviations provided no evidence of restricted range on any item. A preliminary EFA included all nine of the original

scenarios, although the final solution retained only seven, which together supported extraction of a single underlying factor. Table 6 provides loadings for the retained scenarios, which themselves appear in Appendix I. The items demonstrated a high degree of internal consistency (Coefficient alpha = .83). Together, they appeared to reflect the underlying attitudes one has regarding engagement in a class of interpersonal scenarios that themselves do not constitute extradyadic involvement.

Table 5. Item means and standard deviations for EIS items

Item	<i>M</i>	<i>SD</i>
Scenario 1	3.38	1.20
Scenario 2	2.75	1.27
Scenario 3	3.89	1.11
Scenario 4	2.12	1.19
Scenario 5	2.63	1.25
Scenario 6	3.67	1.28
Scenario 7	3.75	1.16

Note. Statistics computed using all available information. *N* ranges from 307 to 309.

Table 6. Factor Structure of the Extradyadic Inappropriateness Scale

Item	Factor 1
Scenario 1	0.73
Scenario 2	0.72
Scenario 3	0.61
Scenario 4	0.65
Scenario 5	0.75
Scenario 6	0.68
Scenario 7	0.75

N = 306; *RMSEA* = 0.06

Group Comparisons by Gender and Semester of Data Collection

Subsequent analyses examined whether the underlying factor structure of each scale differed either as a function of gender or the semester of data collection. However, it should be noted that such comparisons are purely descriptive, and thus preclude any statistical inference about true invariance, or the lack thereof, across groups. From a descriptive standpoint, the scales appeared to behave similarly for both men and women and for those enrolling in the fall and spring. Two notable exceptions emerged. Namely, as a function of gender, item 21 of the EBI had largely discrepant loadings on the values dimension, with an estimate of .77 for women and .32 for men. Additionally, as indicated by an RMSEA of .13, the EIS one factor solution fit the data only marginally well for men, whereas the fit for women was excellent (RMSEA < .001). Despite potential differences across gender, the original factor solutions computed across groups ultimately served as the basis for individual sub-scale scores. Two critical justifications supported the scoring strategy. First, each of the original factor solutions displayed high interpretability. Second, dividing participants by gender created a significant reduction in sample size, possibly making factor solutions less robust.

Nomological Network

For each individual sub-scale, relationships to other established measures provided an assessment of scale validity. For the most part, correlations followed the expected patterns, as described in detail below.

Extradidic Beliefs Inventory

Almost uniformly, the EBI sub-scales displayed significant correlations with moral traditionalism, EDI history, sociosexual orientation, and the single attitudinal item. Tables 7,

8, 9, and 10 present results for values, justifications, incentives, and peers respectively. With respect to the values sub-scale, those opposing EDI endorsed higher moral traditionalism, had a lower occurrence of prior extradyadic activity, expressed a less tolerant sociosexual orientation, and provided more forbidding responses on the single attitude item. With the exception of a non-significant relationship between “incentives” and moral traditionalism, patterns opposite to those of the values dimension characterized the remaining sub-scales, a reasonable finding since on each sub-scale a higher score signified lower EDI opposition.

Table 7. Correlational patterns for the EBI values dimension

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	-0.05	-0.06	-0.05	-0.02	-0.11
Interpersonal Attractiveness	0.03	0.10	-0.03	0.08	-0.07
Moral Traditionalism	0.13*	0.13	0.14	0.16*	0.08
Sociosexual Orientation I	-0.36***	0.48***	0.36***	-0.38***	-0.32***
Sociosexual Orientation II	-0.39***	-0.46**	0.37***	-0.40***	-0.36***
Brief Sensation Seeking Scale	-0.14*	-0.07	-0.19*	-0.09	-0.22*
EDI History	-0.30***	-0.23**	0.36***	-0.36***	-0.21*
Dating History	0.03	-0.12	0.04	-0.09	0.05
Extraversion	-0.002	0.10	-0.08	0.02	-0.04
Single Attitude Item	-0.27***	0.33***	-0.22**	-0.28***	-0.26**

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 8. Correlational patterns for the EBI justifications dimension

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	0.07	0.10	0.03	0.08	0.05
Interpersonal Attractiveness	-0.14*	-0.18*	-0.12	-0.16*	-0.08
Moral Traditionalism	-0.13*	-0.06	-0.25**	-0.11	-0.17
Sociosexual Orientation I	0.48***	0.66***	0.20**	0.53***	0.38***
Sociosexual Orientation II	0.45***	0.59***	0.25***	0.50***	0.40***
Brief Sensation Seeking Scale	0.13*	0.10	0.11	0.12	0.16
EDI History	0.29***	0.31***	0.30***	0.29***	0.30**
Dating History	-0.07	0.17	-0.09	0.14	-0.12
Extraversion	-0.04	-0.05	0.04	-0.06	-0.01
Single Attitude Item	0.36***	0.46***	0.22**	0.33***	0.42***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 9. Correlational patterns for the EBI incentives dimension

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	0.03	0.12	-0.06	0.11	-0.11
Interpersonal Attractiveness	-0.09	-0.04	-0.15	-0.10	-0.07
Moral Traditionalism	-0.07	-0.07	-0.13	-0.05	-0.10
Sociosexual Orientation I	0.64***	0.68***	0.55***	0.65***	0.63***
Sociosexual Orientation II	0.54***	0.63***	0.37***	0.56***	0.51***
Brief Sensation Seeking Scale	0.20***	0.24**	0.10	0.18*	0.22*
EDI History	0.28***	0.28**	0.33***	0.30***	0.26**
Dating History	-0.05	0.21	-0.06	0.14	-0.10
Extraversion	-0.13*	-0.12	-0.07	-0.14	-0.10
Single Attitude Item	0.48***	0.47***	0.47***	0.51***	0.41***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 10. Correlational patterns for the EBI peers dimension

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	0.08	0.18	-0.03	0.15*	-0.05
Interpersonal Attractiveness	-0.02	0.02	-0.08	-0.10	0.10
Moral Traditionalism	-0.12*	-0.15	-0.17*	-0.13	-0.12
Sociosexual Orientation I	0.45***	0.49***	0.25***	0.43***	0.48***
Sociosexual Orientation II	0.42***	0.45***	0.27***	0.43***	0.40***
Brief Sensation Seeking Scale	0.19**	-0.07	0.16*	0.21**	0.15
EDI History	0.30***	0.44***	0.24**	0.26***	0.36***
Dating History	0.03	0.12	0.07	0.11	0.05
Extraversion	-0.04	0.04	-0.03	-0.03	-0.06
Single Attitude Item	0.28***	0.29***	0.23**	0.29***	0.26**

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Somewhat unexpectedly, all of the EBI dimensions evidenced a significant correlation with the Brief Sensation Seeking Scale. Specifically, those higher in sensation seeking showed less value-based disapproval of EDI, in addition to greater affiliation with EDI-tolerant peers. Furthermore, sensation seekers more frequently acknowledged various incentives and justifications for extradyadic behavior.

Importantly and as predicted, all sub-scales were statistically unrelated to a number of other variables, including physical attractiveness, dating history, and extraversion. Also, with the exception of the justifications dimension, all remaining sub-scales had a non-significant relationship with interpersonal attractiveness.

Group comparisons evaluated whether the correlational patterns differed across gender or the semester of data collection. On each sub-scale, a few notable discrepancies emerged. For instance, the values dimension showed inconsistencies in terms of its relationships to both moral traditionalism and sensation seeking. A significant correlation

existed for moral traditionalism in the spring but not the fall, whereas the opposite effect occurred with respect to sensation seeking. Additionally, sensation seeking manifested a stronger relationship to values among women than men. The same disparity existed for the peers dimension, which showed an additional inconsistency for physical attractiveness, with a significant correlation existing for those enrolling in the fall but not the spring. The incentives factor had only one notable group effect, which consisted of a significant correlation with sensation seeking for men but not women. Unlike the other three EBI dimensions, justifications behaved differently across both gender and semester in terms of its relationship to interpersonal attractiveness. Specifically, a significant correlation existed for men but not women and for participants enrolling in the fall but not the spring.

Even in light of the group differences, the correlational patterns, in their entirety, provided compelling evidence favoring both the convergent and discriminant validity of the four EBI sub-scales. For instance, even though the values dimension did not correlate significantly with moral traditionalism in the spring, it still related to sociosexual orientation, EDI history, and the single attitudinal item as predicted. Thus, a preponderance of the evidence suggested that the values sub-scale indeed reflects the underlying construct of interest. Similar arguments apply to the remaining sub-scales. The results, in conjunction with those of the factor analysis, support the use of a common EBI scoring procedure for all participants, irrespective of both gender and the semester of data collection.

Extradyadic Opportunity Scale

Similar to the EBI sub-scales, the opportunity factor exhibited a reasonable pattern of correlations with other measures. Table 11 presents results. As predicted, opportunity was generally higher among individuals rating themselves as physically or interpersonally

attractive, in addition to those high in extraversion and sensation seeking. Furthermore, opportunity showed an expected non-significant relationship to moral traditionalism.

Table 11. Correlational patterns for the EOS opportunity dimension

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	0.37***	0.43***	0.31***	0.40***	0.31***
Interpersonal Attractiveness	0.22***	0.28**	0.18*	0.24***	0.16
Moral Traditionalism	-0.05	0.08	0.24**	-0.02	-0.08
Sociosexual Orientation I	0.33***	0.35***	0.31***	0.35***	0.29**
Sociosexual Orientation II	0.31***	0.31***	0.29***	0.35***	0.24*
Brief Sensation Seeking Scale	0.31***	0.21*	0.37***	0.29***	0.35***
EDI History	0.30***	0.26**	0.35***	0.32***	0.28**
Dating History	-0.05	0.18*	-0.06	0.13	-0.09
Extraversion	0.23***	0.22*	0.28***	0.28	0.13

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

Somewhat unexpectedly, opportunity also showed a positive relationship with both sociosexual orientation and EDI history but not to dating history. Despite their inconsistency with prediction, the findings do not undermine the validity of the opportunity dimension. For example, if opportunity is both relatively stable and also associated with EDI, then a person with a history of extradyadic involvement might naturally have more exposure to alternative partners. If exposure then amplifies sexually-focused thinking, a higher level of sociosexuality might emerge as one consequence of heightened opportunity.

A number of group differences also bear mentioning. Specifically, while in the full sample dating history showed no relationship to opportunity, a significant effect for men was present. Furthermore, among women but not men, opportunity correlated positively with

moral traditionalism. Regarding semester of data collection, the relationship of extraversion to opportunity was less pronounced in the spring than in the fall. The group differences, along with the other unexpected findings described earlier, warrant attention. Nevertheless, the overall correlational pattern seemed to provide adequate evidence regarding both discriminant and convergent validity.

Extradynamic Inappropriateness Scale

In terms of its associations with other measures, the EIS scale behaved almost exactly as predicted (see Table 12). Overall, those with higher inappropriateness scores reported greater moral traditionalism, a less tolerant sociosexual orientation, a lower history of extradynamic behavior, and stronger EDI opposition as measured by the single attitudinal item. Moreover, the EIS dimension manifested non-significant correlations with extraversion and dating history, in addition to both physical and interpersonal attractiveness. Contrary to hypotheses, higher inappropriateness scores also corresponded to lower sensation seeking, although in retrospect, the finding seemed reasonable given that a sensation seeker likely embraces a variety of behaviors and would perhaps therefore have an elevated inappropriateness threshold.

	Full Sample	Men	Women	Fall	Spring
Physical Attractiveness	0.02	-0.01	0.06	0.04	0.00
Interpersonal Attractiveness	0.10	0.18*	0.04	0.14	0.02
Moral Traditionalism	0.25***	0.29***	0.24**	0.26***	0.22*
Sociosexual Orientation I	-0.53***	-0.64***	-0.46***	-0.61***	-0.38***
Sociosexual Orientation II	-0.43***	-0.54***	-0.31***	-0.48***	-0.36***
Brief Sensation Seeking Scale	-0.21***	-0.13	-0.26***	-0.18*	-0.27**
EDI History	-0.27***	-0.21*	-0.33***	-0.28***	-0.24**

Dating History	0.04	-0.09	0.04	-0.05	0.06
Extraversion	0.06	0.17	-0.08	0.08	0.02
Single Attitude Item	-0.30***	-0.36***	-0.22**	-0.34***	-0.23*

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

Two group effects emerged for the EIS factor. Namely, compared to women, men showed a lower correlation between sensation seeking and the inappropriateness ratings, along with a more pronounced effect for interpersonal attractiveness. However, while the group differences should not be overlooked, the correlational pattern as a whole provides strong evidence favoring construct validity for the EIS.

Correlations among the different sub-scales

Additional analyses explored interrelationships among the various sub-scales. Table 13 presents results. As shown, a significant bivariate correlation existed between every pair of variables. EIS inappropriateness ratings correlated positively with the EBI values dimension, and each displayed a similar pattern of relationships with the remaining predictors. Those with more oppositional EDI values or higher inappropriateness scores also reported greater commitment, higher inappropriateness ratings, lower opportunity, fewer incentives and justifications for extradyadic behavior, and less association with EDI-tolerant peers. The remaining belief dimensions, which correlated positively with one another, also exhibited a common pattern of relationships with the other predictors. Namely, higher scores on each were associated with lower inappropriateness ratings, higher tolerance of EDI, diminished commitment, and elevated opportunity.

Table 13. Interrelationships among predictors of EDI

Predictor	1	2	3	4	5	6	7
1. EIS inappropriateness	1.00						
2. EBI values	0.56	1.00					
3. EBI peers	-0.34	-0.34	1.00				
4. EBI incentives	-0.57	-0.45	0.44	1.00			
5. EBI justifications	-0.45	-0.45	0.46	0.54	1.00		
6. Opportunity	-0.31	-0.36	0.29	0.32	0.23	1.00	
7. Commitment	0.53	0.48	-0.32	-0.54	-0.41	-0.31	1.00

Note. Correlations are based on pairwise deletion. *N* ranges from 298 to 308. All correlations are significant at $p < .0001$

Results – Study 2

Data Analytic Strategy

As its principal aim, study 2 explored the relationships of EDI with three key predictors: individual beliefs, relationship commitment, and contextual opportunity. Given the availability of repeated measures on both the outcome and the predictors, an optimal statistical model would predict the level of EDI at each of the different time points. Among other benefits, such an approach would determine whether EDI level changed as a result of interindividual fluctuation in predictors, an important consideration given the broader interest in assessing causality.

Unfortunately, the data necessitated a more restricted analytic strategy. As shown in Table 14, EDI occurred fairly infrequently at times two through four, a condition that would seriously diminish power for a model of the type described above. Additionally, the proposed determinants of EDI showed little intra-individual variation, with correlations across time typically exceeding .80. Therefore, a simplified model evaluated the hypotheses of interest. Specifically, to increase range on the outcome and avoid any diminution of power, a

dichotomous score was assigned to reflect whether a person exhibited EDI during any of occasions two through four. A logistic regression then modeled the resulting binary outcome on the basis of predictor values obtained at time one. Thus, like a more analytically sophisticated approach, the logistic model appropriately tested the relationships of interest within a longitudinal framework, albeit with a somewhat lower degree of precision.

Table 14. Frequency of EDI by category

Category	Frequency/Proportion			
	Time 1	Time 2	Time 3	Time 4
Sexual hugging and caressing	9 / .03	3 / .01	1 / .004	2 / .009
Passionate kissing	16 / .05	9 / .03	9 / .04	4 / .02
Heavy petting	7 / .02	3 / .01	5 / .02	2 / .009
Oral sex	6 / .02	3 / .01	4 / .02	2 / .009
Sexual intercourse	4 / .01	4 / .01	5 / .02	4 / .02
	<i>N</i> = 309	<i>N</i> = 269	<i>N</i> = 253	<i>N</i> = 231

Missing Data

Not unexpectedly given its longitudinal design, the study included a substantial amount of missing data, with only 279 of the original 318 participants remaining after listwise deletion. Numerous sources have documented the finding that unless missingness occurs completely at random (a condition denoted as MCAR), listwise deletion can have the undesirable effect of biasing parameter estimates. For the present sample, the MCAR assumption may in fact have been an untenable one. Therefore, a series of analyses

considered alternative mechanisms for handling missing data under conditions less restrictive than MCAR.

In some cases, the distribution of missingness depends on the missing data itself, a characteristic known as MNAR (missing not at random, also referred to as non-ignorable). Alternatively, MAR (missing at random) occurs when the distribution of missingness depends on the observed data but not on the missing data. While imposing less restrictive assumptions than MAR, the MNAR condition unfortunately necessitates a higher degree of analytic complexity to avoid any problems associated with estimation bias. In the current sample, at least one conceivable mechanism could have induced a non-ignorable pattern of missingness. Namely, consider a participant who reported no EDI at assessment n but then engaged in extradyadic behavior prior to assessment $n + 1$. Moreover, assume further that the EDI itself actually caused the primary relationship to terminate prior to assessment $n + 1$. Under the scenario described, the participant would not have the opportunity to provide EDI data at assessment $n + 1$, and the missingness itself would actually depend on the outcome in question. Specifically, missingness would be more likely among those who actually engaged in some form of EDI.

Although different approaches exist for handling non-ignorable missing data, a pattern mixture model seemed most appropriate for the present case. The pattern mixture approach identifies a missingness pattern of interest – here, those who experienced a breakup during the study versus those who did not – and represents the pattern through the use of a dummy variable, which can then be entered into relevant analyses as an additional covariate. If the missingness dummy variable has a significant main effect or interacts with the

relationships of other variables to the outcome, then evidence supports the presence of non-ignorable missingness, and parameter estimates are adjusted accordingly.

Unfortunately, the pattern mixture approach provided a less than optimal solution for the current sample. A total of 64 participants experienced relationship termination during the study, but only 11 of them reported some form of EDI prior to that point. As a result, insufficient power existed for determining whether predictors differentially effected EDI among those who experienced a breakup compared to those who did not.

Unable to utilize the pattern mixture approach, additional measures explored the presence of non-ignorable missingness. Specifically, although participants did not provide EDI data subsequent to relationship termination, they did explicate the causes of termination. Among the 64 participants experiencing a breakup during the study, only four referenced their own extradyadic involvement as a cause for relationship termination, and two of the four reported EDI at an earlier assessment occasion. The results tentatively argued against the existence of a sizeable correlation between EDI and relationship termination, a condition that would militate against any concomitant bias in parameter estimation.

Although tenuous perhaps, the assumption that missingness occurred either at random or completely at random would justify the use of multiple imputation as a means of handling missing data. In the interest of thoroughness, therefore, each of the subsequently reviewed models was computed using both listwise deletion and multiple imputation. Imputation occurred via the MICE software program, a publicly accessible package that imputes values in accordance with a multinomial rather than a multivariate normal distribution. SAS version 9.0 then reproduced the actual statistical models, using PROC MIANALYZE to combine results obtained from each of five imputed data sets.

Descriptive Statistics

Table 15 provides descriptive statistics for the proposed determinants of extradyadic involvement. Based on absolute scores, the average participant displayed a moderate level of opportunity and a high level of relationship commitment. Regarding EDI beliefs, values were characterized by slight opposition to extradyadic engagement, and individuals tended not to endorse various incentives and justifications for EDI, nor did they report exposure to a peer group that approved of extradyadic behavior. Additionally, interpersonal scenarios from the Extradyadic Inappropriateness Scale were typically regarded with at least moderate disapproval. A series of *t*-tests explored the possibility of gender differences for the various predictors. Overall, men endorsed lower levels of commitment, greater affiliation with peers who tolerated EDI, and heightened recognition of the different incentives and justifications that might promote extradyadic engagement.

Table 15. Descriptive statistics of proposed EDI determinants

Variable	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Range</i>
Opportunity	302	16.28	4.03	5 - 25
Commitment	304	6.83	1.70	1 - 9
Inappropriateness	306	22.1	5.97	7 - 35
Values	305	24.87	6.61	8 - 40
Peers	308	6.50	2.55	3 - 15
Incentives	308	9.42	3.60	4 - 20
Justifications	308	6.02	2.53	3 - 15

Findings from the logistic regression

Results from study 1 supported the retention of four distinct factors from the EBI scale. Therefore, to provide a preliminary assessment of the relationship of beliefs to EDI, an initial model simultaneously examined the influence of each factor on extradyadic activity. As shown in Table 16, only the values dimension had a significant impact on EDI occurrence, indicating that subsequent analyses could reasonably exclude the three remaining belief sub-scales. Similar findings emerged under the condition of multiple imputation (see Table 17).

Table 16. Summary of logistic regression results for EBI dimensions predicting EDI

Variable	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-0.76	1.20	0.40	1	0.53	0.47
Values	-0.10	0.03	8.84	1	0.003	0.90
Peers	0.12	0.08	2.24	1	0.13	1.13
Justifications	-0.02	0.08	0.07	1	0.79	0.98
Incentives	0.07	0.06	1.41	1	0.24	1.07

N = 283

Table 17. Summary of logistic regression results for values, opportunity, gender, and initial status predicting EDI with five multiply imputed data sets

Variable	<i>B</i>	<i>S.E.</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-1.14	1.26	0.22	0.32
Values	-.10	.03	.004	0.90
Peers	.15	.09	.08	1.16

Justifications	-.02	.08	.83	0.98
Incentives	.08	.06	.17	1.08

N = 318

The theoretical model predicted that in addition to a person’s beliefs, levels of commitment and opportunity would also have appreciable effects on the occurrence of extradyadic behavior. Therefore, a logistic regression simultaneously evaluated the relationship of each variable to the dichotomous EDI outcome. Table 18 presents relevant findings. Overall, the model fit the data reasonably well, accounting for an appreciable level of variance and providing substantial improvement over the baseline function ($R^2 = 0.18$; $\chi^2 = 30.79$; $df = 3$; $p < .001$).

Table 18. Summary of logistic regression results for commitment, opportunity, and values predicting EDI

Variable	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-2.01	1.41	2.03	1	0.15	0.13
EBI Values	-0.10	0.03	8.18	1	0.004	0.90
Opportunity	0.16	0.05	9.43	1	0.002	1.17
Commitment	-0.03	0.11	0.09	1	0.78	0.97

N = 275

Individually, opportunity and the EBI values dimension both manifested significant effects in the expected direction. Namely, higher opportunity predicted a greater likelihood of EDI, whereas more forbidding values showed the opposite pattern. Each predictor had a large effect, with a one standard deviation gain in opportunity increasing the odds of EDI by

approximately 90% and a one standard deviation increase in values decreasing the odds by approximately 48%. Inconsistent with hypotheses, commitment level did not significantly predict EDI. However, closer inspection of the commitment variable showed its range to be restricted ($M = 6.83$; $SD = 1.70$; possible scores range from 0 to 9), a characteristic that might account for the unexpected finding. As shown in Table 19, multiple imputation produced a highly comparable pattern of effects.

Table 19. Summary of logistic regression results for values, opportunity, and initial status predicting EDI with five multiply imputed data sets

Variable	<i>B</i>	<i>S.E.</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-2.17	1.53	.16	0.11
EBI "Values"	-.09	.03	.005	0.91
Opportunity	.18	.06	.003	1.20
Commitment	-.04	.13	.75	0.96

$N = 318$

Despite their statistical significance, the preceding model evaluated the effects of opportunity and values in the absence of the time 1 EDI measure. To control for initial EDI status, a subsequent model included a dichotomous indicator of whether or not an individual reported EDI on the first occasion of assessment. The model retained opportunity and values as predictors, but excluded commitment given its negligible importance in the earlier analysis. Table 20 presents findings. As before, the predictors led to improved fit over the baseline model ($R^2 = 0.23$; $\chi^2 = 39.03$; $df = 3$; $p < .001$).

Table 20. Summary of logistic regression results for values, opportunity, and initial status predicting EDI

Variable	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-2.18	1.31	2.78	1	0.10	0.11
EDI at time = 1	1.35	0.46	8.49	1	0.004	3.86
EBI "Values"	-0.09	0.03	6.95	1	0.008	0.91
Opportunity	0.13	0.05	5.64	1	0.02	1.14

N = 279

Regarding the individual effects, initial EDI status influenced the outcome considerably, with involvement at time 1 increasing the odds of subsequent engagement by approximately 287%. Although the effect was large, it might have been somewhat inflated in the event that extradyadic relationships from time 1 carried over to time 2. Importantly, even with the inclusion of initial status, both opportunity and values continued to show significant relationships to extradyadic involvement. Specifically, a one standard deviation gain in opportunity enhanced the odds of EDI by roughly 69%, whereas a corresponding gain in values decreased the odds by approximately 45%. Both effects conformed to prediction. As compared to the condition of listwise deletion, multiple imputation produced a comparable pattern of findings (see Table 21).

Table 21. Summary of logistic regression results for values, opportunity, and initial status predicting EDI with five multiply imputed data sets

Variable	<i>B</i>	<i>S.E.</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-2.66	1.39	.06	0.07
EDI at time = 1	1.62	.50	.003	5.05
EBI "Values"	-.08	.03	0.02	0.92
Opportunity	0.15	.06	0.02	1.16

N = 318

Influences of gender and semester of data collection

Given that men typically engage in EDI more often than women, gender was incorporated into the preceding model as an additional covariate. Along with its main effect, interactions tested whether gender impacted the relationships of other variables to extradyadic involvement. None of the interactions achieved significance, indicating that in terms of EDI and the remaining variables in the model, men and women experienced a similar pattern of influence. After removal of the interaction effects, a restricted model evaluated the combined effects of initial status, values, opportunity, and gender. Table 22 displays relevant findings. Overall, the model accounted for EDI reasonably well ($R^2 = 0.26$; $\chi^2 = 45.45$; $df = 4$; $p < .001$), improving fit not only beyond the baseline model but also the nested model that excluded the effect of gender.

Table 22. Summary of logistic regression results for values, opportunity, gender, and initial status predicting EDI

Variable	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-1.37	1.38	0.98	1	0.32	0.25
Gender	-1.04	0.43	5.75	1	0.02	0.35
EDI at time = 1	1.62	0.50	10.63	1	0.001	5.05
EBI "Values"	-0.08	0.03	5.35	1	0.02	0.92
Opportunity	0.15	0.06	6.72	1	0.01	1.16

N = 279

Individually, each of the predictors exhibited a significant association with EDI. In particular, both gender and initial status had sizable effects, with a surprising 65% increase in odds for females versus males and a more expected 406% increment for time 1 EDI participants as opposed to non-participants. Opportunity also enhanced the likelihood of EDI, with a one standard deviation increment to the predictor augmenting the odds by approximately 83%, whereas a corresponding gain in values diminished the odds by around 41%. Thus, aside from the impact of gender, the remaining individual effects conformed to prediction. As displayed in Table 23, multiple imputation yielded a highly comparable pattern of results.

Table 23. Summary of logistic regression results for values, opportunity, gender, and initial status predicting EDI with five multiply imputed data sets

Variable	<i>B</i>	<i>S.E.</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	-1.67	1.35	0.22	0.19
Gender	-0.85	0.43	0.05	0.43
EDI at time = 1	1.63	0.56	.006	5.10
EBI "Values"	-0.07	0.03	0.02	0.93
Opportunity	0.15	0.06	0.008	1.16

N = 318

A similar procedure to that used for gender examined whether the model depended on semester of data collection, an important consideration given the use of somewhat different inclusion criteria in the fall and spring. The main effect of semester failed to achieve significance, as did its interactions with other predictors. Thus, with respect to EDI and its hypothesized determinants, a similar pattern of relationships seemed to exist across semester.

Each of the preceding models predicted the dichotomous occurrence of EDI. However, the coding scheme actually classified extradyadic behavior along five categories of differing levels of involvement. Given that EDI occurred relatively infrequently in the sample, insufficient power existed for modeling each category separately. Nevertheless, alternative coding strategies might have provided insight about which variables best accounted for EDI severity. A final model used one such coding strategy, representing EDI in terms of three categories: 1) no EDI reported; 2) EDI in the form of either sexual hugging, passionate kissing, or heavy petting; and 3) EDI in the form of oral sex or sexual intercourse.

However, a preliminary model comparing only categories two and three indicated they could in fact be combined without any detriment to model fit. The result suggested that predictors had similar effects regardless of EDI severity, although the employed coding scheme likely reduced power markedly.

Effects of the Extradynamic Inappropriateness Scale

According to the theoretical model, opportunity stems, at least in part, from an individual's beliefs about the appropriateness of social engagement with possible EDI partners. To an extent, the correlation between opportunity and the EIS score supported such a relationship, with higher inappropriateness ratings predicting lower levels of opportunity. Unexpectedly, however, the EIS actually displayed even larger correlations with the four EBI sub-scales. Thus, at least for the contemporaneous measures taken at time one, perceptions of inappropriateness were more closely linked to beliefs than to opportunity. Therefore, rather than incorporating it as a unique predictor of opportunity, an additional logistic model simply included the EIS score as an additional predictor along with values, opportunity, and initial status.

Overall, the model performed reasonably well, although neither values nor EIS score effectively predicted EDI occurrence. Interestingly, once the model excluded the values dimension, the EIS score did show a significant relationship to the outcome, with a one-unit gain in the predictor decreasing the odds of EDI by roughly 9%. Given the results, along with those from the preceding models, it appears that the EIS and values dimensions accounted for overlapping variance in extradynamic behavior. Therefore, a composite score, computed as the sum of standardized values on each predictor, aggregated their effects into one variable ($M = 7.49$; $SD = 1.78$). A logistic model then evaluated the composite index for its relationship to

EDI occurrence. Table 24 presents results. As anticipated, the composite variable significantly influenced extradyadic involvement, with a one standard deviation gain in the predictor corresponding to a 49% reduction in the odds of EDI. By comparison, a one standard deviation increase in the values dimension alone reduced the odds of EDI by only 41%. Regarding the composite score, multiple imputation yielded a highly similar pattern of results (see Table 25).

Table 24. Summary of logistic regression results for composite index, opportunity, gender, and initial status predicting EDI

Variable	<i>B</i>	<i>S.E.</i>	<i>Wald</i>	<i>df</i>	<i>p-value</i>	<i>Exp(B)</i>
Intercept	0.35	1.49	0.05	1	0.82	0.70
EDI at time = 1	1.40	0.51	7.62	1	0.006	4.06
Gender	1.07	0.43	6.14	1	0.01	0.34
Composite index	0.38	0.13	8.54	1	0.004	0.68
Opportunity	0.15	0.06	6.31	1	0.01	1.16

N = 279

Table 25. Summary of logistic regression results for values, opportunity, gender, and initial status predicting EDI with five multiply imputed data sets

Variable	<i>B</i>	<i>S.E.</i>	<i>Sig</i>	<i>Exp(B)</i>
Intercept	-.87	1.54	.57	0.42
EDI at time=0	1.61	.53	.004	5.00
Opportunity	.16	.06	.01	1.17
Composite score	-.38	.12	.002	0.68
Incentives	-.81	.44	.17	0.07

N = 318

Discussion

Despite a wealth of prior research on the topic, the determinants of EDI have not been well understood historically, and significant questions remain concerning why some individuals become extradyadically involved whereas others do not. The current study attempted to further explicate EDI's underlying causes, with a specific focus on three predictors demonstrating some utility in earlier research - namely, contextual opportunity, relationship commitment, and individual beliefs. Overall, prior evidence suggests greater EDI among those with lower commitment, greater opportunity, and more tolerant attitudes (Allen et al., 2005). However, perhaps because of the methodological limitations of earlier studies, each predictor has operated in a somewhat inconsistent fashion, and none has unambiguously shown a causal influence on extradyadic participation. As methodological enhancements, the current study used sound measurement principles to evaluate the effect of each predictor longitudinally within the context of a unified theoretical model. To a large extent, the results showed high correspondence with the original hypotheses.

Initial measures of opportunity and values successfully predicted the later development of extradyadic behavior. Specifically, as beliefs became less forbidding and exposure to alternative partners increased, extradyadic engagement occurred more frequently. Importantly, the effects remained even after controlling for initial EDI status. Based on the published literature, no other study has demonstrated the pattern of longitudinal

influence seen here, and it represents a cogent piece of evidence supporting a causal relationship between predictors and outcome. The effects themselves were of somewhat modest size, although their magnitude may have been blunted by low power.

Similar to opportunity and values, ratings from the Extradyadic Inappropriateness Scale (EIS) also displayed a significant relationship to EDI, which occurred less as discomfort with hypothetical social scenarios increased. Inappropriateness ratings and EDI values appeared to account for overlapping variance in extradyadic behavior, and the two were usefully merged into a composite score. The finding, along with other correlational data, suggested that rather than acting as a determinant of opportunity, EIS ratings may simply reflect an additional component of EDI beliefs. Indeed, although EIS ratings correlated significantly with opportunity, their relationships with the four dimensions of the Extradyadic Beliefs Inventory (EBI) were even stronger. The pattern of results suggests that among its other defining qualities, EDI opposition could manifest itself in a lower threshold for the types of extradyadic, interpersonal behaviors that one deems acceptable.

Contrary to prediction, commitment had no discernable influence on extradyadic engagement. However, because recruitment focused largely on those involved in exclusive relationships, commitment itself manifested a highly restricted range, a characteristic that may explain the absence of any relationship with EDI. This interpretation receives additional support from the finding that even without controlling for initial EDI status, commitment still had no effect on extradyadic participation, a result counter to that observed in earlier work (Drigotas et al., 1999). Interestingly, though, the current model did account for EDI in highly committed dating relationships, which may bear some resemblance to marriages, a possibility that might be explored through future research. Additional work might also seek a more

definitive conclusion regarding whether, and if so how, commitment actually influences extradyadic engagement.

A similar pattern of non-significance characterized the remaining components of EDI beliefs. Along with the values dimension, the extradyadic beliefs inventory comprised three additional sub-scales – one relating to EDI justifications, another to EDI incentives, and a third to peer's attitudes about EDI. Contrary to the hypotheses, none of the three predicted extradyadic involvement, although, as with commitment, each of the non-significant effects may simply have been a byproduct of restricted range.

In addition to variables of primary interest, the model included gender and initial EDI status as covariates. Compared to other predictors, initial status by far had the most dramatic impact on future EDI. Indeed, extradyadic participation at time 1 increased the odds of later involvement by almost 300%, a finding that suggests a high continuity of behavior for EDI, at least among college students over a somewhat brief time period. However, the results may overstate the effect, particularly if extradyadic relationships initiated prior to time 1 sometimes continued into later assessment periods. From available data, the frequency of such continuation is unknown.

Like initial status, gender also had a fairly pronounced effect on EDI, although, somewhat surprisingly, women showed greater extradyadic involvement than men. The finding directly contradicts a rather substantial body of evidence supporting a higher rate of extradyadic engagement among men. Notably, however, much of that evidence was drawn from married individuals, who may or may not resemble their unmarried counterparts with respect to gender and the incidence of EDI.

Interestingly, in their analysis with a college sample, Drigotas et al. (1999) similarly observed a higher rate of extradyadic participation among women than men. Although the finding requires replication, the gender difference observed for married persons may not characterize those in dating relationships. Perhaps while dating, women “try out” various partners in an effort to find the most suitable mate, and thereby exhibit greater extradyadic behavior. Alternatively, it could be that college women encounter evolving sexual norms that are more permissive of extradyadic participation. As an additional explanation, the finding may simply reflect factors specific to the university campus, where in the present case a disproportionate number of undergraduates were women. Perhaps as the result of heightened competition, women had to pursue dating partners more aggressively, a condition that might promote female engagement in EDI. At this point, however, explanations are purely speculative.

Along with the gender difference in EDI incidence, the current study explored whether men and women exhibited a similar pattern of influence regarding EDI development. In other words, do relevant predictors, such as opportunity and beliefs, have the same impact on extradyadic participation as a function of gender? Results from the current study provided no evidence of moderation by gender, although existing interactions may not have been detected because of insufficient power.

Indeed, only 44 of 318 participants actually reported some form of EDI during the course of the study. The infrequency of extradyadic engagement not only limited the capacity to test for moderation, it also precluded the use of more sophisticated analytic procedures that might have, for instance, modeled trajectories of EDI severity or allowed predictors to change as a function of time. Furthermore, insufficient power may also have prevented

detection of non-ignorable missingness, leaving open the possibility that results apply only to a unique subset of the original population. While few participants identified their own EDI as a cause for relationship termination, analyses failed to demonstrate the absence of an informative mechanism of missingness unambiguously. Together, the implications of low power support the use of even larger samples in the future, along with a possible expansion in the overall period of assessment.

Even with somewhat limited power, the overall model performed relatively well, although it only managed to account for 26% of the variance in EDI. Although a variety of factors could have diminished fit, the theoretical model may actually omit important predictors. For example, although EDI episodes occurred under a variety of circumstances, they often followed exposure to potentially high-risk behaviors. For example, although not formally assessed in the data analysis, a number of respondents appeared to become extradyadically engaged after consuming alcohol, as indicated by their responses to an open-ended question that inquired about the circumstances surrounding EDI. Avoidance of high-risk behaviors likely depends on several factors including an appropriately high level of self-regulation, which some individuals almost certainly fail to exhibit. If a lack of self-regulating behavior increases the occurrence of high-risk activities, it might also promote extradyadic engagement and thus demand inclusion in the theoretical model. Also of potential importance, the model makes no allowance for a person's psychological well-being, even though a modest number of studies have documented a relationship between individual psychological distress and extradyadic participation (Atkins, 2003; Beach, Jouriles, & O'Leary, 1985). Thus, including factors of psychological health conceivably could have increased the prediction of extradyadic engagement. Without question, additional

determinants of EDI must be explicated through further research. However, once identified, their ultimate inclusion in the theoretical model could provide a valued enhancement.

The high level of stability observed in participants' values and opportunity for EDI might also yield insight about sources of model misfit. Contrary to prediction, both exhibited little variability across time. While an individual's beliefs may change minimally over a nine-week period, opportunity might reasonably be expected to show at least some within-person fluctuation over the same duration. However, current findings provided no evidence of such change. In accounting for the result, one obvious explanation is that, in actuality, the level of opportunity remains fairly constant for a given person over such a time period. Alternatively, opportunity likely increases on a momentary basis, and in so doing departs temporarily from its normal baseline level. Such a change might occur for an individual who attends a party or visits a bar, for example. While the elevation might dramatically increase susceptibility to EDI, it could also go undetected with assessments occurring only once every three weeks. If such instances do occur, the observed correspondence between opportunity level and EDI would diminish, causing the model to perform less optimally as a function of the frequency of measurement. Given this possibility, future research might benefit from evaluating opportunity level on a more frequent basis.

Additional research could also identify factors that determine an individual's values and opportunity level. Similar to the possible gender difference in frequency of EDI, individual differences in opportunity and values likely arise from a host of variables requiring further explication. In the current study, opportunity correlated significantly with a number of individual characteristics, such as extraversion, sensation seeking, and self-reported physical attractiveness. Although not yet tested, perhaps opportunity level actually

changes along with these and other person-specific attributes. As noted earlier, prior studies have often used contextual factors, such as area of residence and amount of travel, to explain the differential availability of EDI partners. However, based upon results obtained here, individual characteristics also warrant investigation as possible determinants of opportunity. The current findings are consistent with the notion that opportunity is not merely an environmental variable that impinges upon the individual, but rather that characteristics of the individual might well contribute to the development of opportunity. Thus, statements from individuals engaging in EDI that “I just found myself in the situation” might be a simplistic explanation of how that person entered into a high risk scenario.

EDI values might similarly reflect person-specific qualities. For instance, conscientiousness might engender greater opposition to extradyadic engagement, just as indifference for the rights of others might reduce such opposition. Contextual variables, such as peer attitudes and cultural norms, could also influence one’s values about EDI. If, as current results suggest, opportunity and values actually impact the occurrence of extradyadic engagement, then knowledge of their determinants might usefully inform methods of EDI prevention.

While critical in dating relationships, prevention may hold even greater importance in the context of marriage. As of yet, however, the current methodology has not been applied to a married sample, which may indeed behave differently from the dating group used here. Assuming that results do indeed generalize across relationship type, then a few broadly applicable recommendations for EDI prevention might naturally follow. Regarding opportunity, a behaviorally-oriented strategy might limit access to potential EDI partners and situations promoting extradyadic engagement. While specific recommendations might differ

across individuals, the strategy might, for example, discourage heavy alcohol consumption under high-risk circumstances or caution against excessive flirtation outside the primary relationship. Whereas the relationship of such behaviors to increased opportunity might be evident to most, there are many other ways that individuals create opportunities slowly and in more subtle and perhaps unintended ways (e.g., being available to listen when a colleague is in distress about his or her marriage and thus providing emotional support and the potential development of intimacy at a time of vulnerability for that person). Avoiding these and similar situations could improve behavioral regulation, possibly disrupting a trajectory that might culminate in extradyadic participation. A cognitively-based approach might also have importance, especially given the possible influence of EDI values. While a therapeutic intervention should not indiscriminately promote a specific set of beliefs, some individuals might grossly underestimate the implications of extradyadic involvement. If so, the modification of existing standards and assumptions might engender more forbidding EDI beliefs, ultimately curtailing involvement beyond the primary relationship.

In addition to assisting those who have previously engaged in EDI, the prevention strategies might have utility in premarital counseling. Available programs could reasonably include preventive interventions focusing on values and opportunity. For example, couples could be asked to assess their patterns of daily activities and clarify when high risk situations might develop, along with strategies to minimize such situations or how they will react when such situations do occur. From a values perspective, couples could be asked to discuss their standards and beliefs about EDI as well as their standards for behaviors with other potential partners (e.g., what are acceptable ways to express physical affection to persons other than

one's mate; what topics of conversations with other people are acceptable and unacceptable, etc.?)

On a closely related note, results from the current study could have broader implications for mate selection in general. Understandably, many individuals wish to avoid relationships with partners who will become involved extradyadically. Although far from definitive, the results indicate that some persons have a greater predisposition to EDI and may be less well suited to long-term, monogamous relationships. Among the various factors considered, prior EDI history might represent the best indicator of future involvement, although an individual's values and opportunity level also have obvious significance. Eventually, after proper consideration of other key variables, available evidence might facilitate the selection of relationship partners who pose a minimal EDI threat. As a result, for many individuals, refined mate selection could lessen future psychological distress.

Like many of the other issues discussed, the potential value of improved mate selection partially rests on whether current findings generalize to marital relationships. Interestingly, longitudinal analysis with a married sample could pose unique challenges, largely because of the relatively low annual incidence of extramarital participation. Out of necessity, data collection might have to occur rather frequently over a period of years, both to ensure adequate power and to capture within-person variability in predictors such as opportunity. Even with a fairly modest rate of divorce, informative missingness might produce additional complications. Moreover, married participants might not feel comfortable disclosing infidelity via web-based surveys of the type used here. If not, data collection might demand more costly and time-intensive methods, such as face to face interviews or survey administration in a highly regulated and secure environment. Regardless of the specific

design employed, use of a married sample would likely necessitate a considerable investment of resources. However, such an endeavor could yield sizeable benefits and greatly expand the current knowledge base regarding extradyadic participation.

APPENDIX A: PHYSICAL INVOLVEMENT SCALE

Instructions: Listed below are different types of physically intimate behaviors. You might think some of the behaviors are more or less intimate than others. We would like you to rate the intimacy of each behavior using the following scale. Think of numbers ranging from 0 to 100, where 0 represents a complete lack of physical intimacy and 100 represents the highest level of physical intimacy. Choose and record a number from 0 to 100 for each behavior to rate its level of physical intimacy. For example, if you think a given behavior involves no physical intimacy at all, you would record a 0 next to that behavior.

1. _____ Sexual intercourse
2. _____ Sexual hugging and caressing
3. _____ Passionate kissing
4. _____ Oral sex or other similar sexual contact
5. _____ Heavy petting

APPENDIX B: EXTRADYADIC INVOLVEMENT SCALE (EIS)

Instructions for Time 1 – Part 1

Please use the following scale to indicate whether, within the last three weeks, you have experienced any of the following behaviors with **other people while you were in an exclusive relationship with your current partner**. That is, **at the same time** you were involved in an exclusive relationship with your partner, did you engage in any of the following sexual or romantic behaviors with someone else?

Instructions for Time 1 – Part 2

Now think about the last five years. Please use the following scale to indicate whether, within the last five years, you have experienced any of the following behaviors with **other people while you were in an exclusive dating relationship**. That is, **at the same time** you were involved in an exclusive relationship with anyone, did you engage in any of the following sexual or romantic behaviors with someone else?

Instructions for Times 2-4

Please use the following scale to indicate whether, since the last time you participated in this study (over the last three weeks approximately), you have experienced any of the following behaviors with **other people while you were in an exclusive relationship with your current partner**. That is, **at the same time** you were involved in an exclusive relationship with your partner, did you engage in any of the following sexual or romantic behaviors with someone else?

Check all that apply:	Occurred? (yes/no)	How many times?	With how many different people other than your primary partner?
------------------------------	-------------------------------	----------------------------	--

- Passionate kissing
- Sexual hugging and caressing
- Heavy petting
- Oral sex or other similar sexual contact
- Sexual intercourse

APPENDIX C: EXTRADYADIC BELIEFS INVENTORY (EBI)

Instructions: Please respond to the items below using the scale provided.

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1	2	3	4	5

1. Under some conditions, I might be physically intimate with someone other than my partner.
2. I were physically intimate with someone other than my partner, I would not feel guilty.
3. If I were physically intimate with someone other than my partner, I would like myself less.
4. Monogamy is not that important in a relationship.
5. If I were physically intimate with someone other than my partner, others would disapprove of me.
6. I could enhance my current relationship by being physically intimate with someone other than my partner.
7. If I were physically intimate with someone besides my partner, others would dislike me.
8. Being physically intimate with someone else wouldn't make me a bad boyfriend/girlfriend.
9. Others would forgive me for being physically intimate with someone other than my partner.
10. I would lose some important friendships if I were physically intimate with someone besides my partner.
11. It would be fun to be physically intimate with someone other than my partner.
12. Being physically intimate with someone other than my partner would cause me to think about myself in a negative way.
13. If I were physically intimate with someone other than my partner, I would be a bad person.
14. If I were physically intimate with someone other than my partner, I might never forgive myself.
15. If I were physically intimate with someone other than my partner, I might feel better about myself.

16. My ability to be monogamous is one of my best qualities.
 17. I would feel a lasting sense of emotional turmoil if I were physically intimate with someone other than my partner.
 18. I might never again like myself if I were physically intimate with someone besides my partner.
 19. Being physically intimate with someone other than my partner might help me to become a better person.
 20. How I evaluate myself doesn't depend upon whether I'm monogamous in my relationship.
 21. If I were physically intimate with someone else, I would deserve to be punished.
 22. If I were physically intimate with someone else, I would feel obligated to tell my partner.
 23. For me, monogamy feels unnatural.
 24. Being physically intimate with someone other than my partner would ruin my life.
 25. If I were dissatisfied in my relationship, it would be acceptable for me to be physically intimate with someone else.
 26. If I were more attracted to someone other than my partner, it would be acceptable for me to be physically intimate with that other person.
 27. I might feel more attractive if I were physically intimate with someone other than my partner.
 28. If I were physically intimate with someone else, it would hurt my partner.
 29. If I were physically intimate with someone else, it would damage my primary relationship.
 30. If I were physically intimate with someone else, it would cause my primary relationship to end.
 31. My friends would encourage me to be physically intimate with someone other than my partner.
 32. Most of my friends have been physically intimate with someone other than their partner at some point in their relationship.
 33. My friends support monogamy in relationships.
 34. If I were physically intimate with someone else, it would ruin my partner's life.
 35. If I fell in love with someone other than my partner, it would be acceptable for me to be physically intimate with that other person.
 36. Monogamy is not the most important part of a relationship.
 37. Being physically intimate with someone else might ultimately change my life for the better.
-

APPENDIX D: EXTRADYADIC OPPORTUNITY SCALE (EOS)

Instructions: Please respond to each question below by circling the most appropriate number.

1. If I wanted, I could easily be physically intimate with an attractive person other than my partner.
 2. An attractive acquaintance is interested in me romantically.
 3. An attractive person other than my partner is willing to be physically intimate with me.
 4. I could be physically intimate with an attractive person without my partner knowing about it.
 5. I am sometimes tempted to be physically intimate with someone other than my partner.
 6. I have the opportunity to be physically intimate with someone else who is highly appealing to me.
 7. If I were physically intimate with someone else, I could hide it from my partner.
 8. I am very attracted to someone besides my partner.
 9. In my daily life, I interact with an attractive person who wants to be physically intimate with me.
 10. In my daily life, attractive persons besides my partner make romantic advances toward me.
 11. I often socialize with attractive men/women other than my partner.
 12. Most men/women are physically attracted to me.
 13. I often talk on the phone with attractive men/women other than my partner.
 14. In my daily life, I often meet attractive men/women.
 15. In my daily life, I socialize with an attractive person other than my partner who wants to be physically intimate with me.
-

APPENDIX E: EXTRADYADIC INAPPROPRIATENESS SCALE (EIS)

Instructions: Below are a number of scenarios, each of which is followed by a question. After reading a scenario, please respond to the question by circling the most appropriate number.

Scenario 1

One night, you go to a party to meet some friends. Your girlfriend has other plans, so she can't go with you. Once you arrive at the party, you happen to notice a woman who you find very attractive. After a while, you find yourself talking to her. It becomes fairly clear that she is flirting with you and you respond by flirting with her. The flirtation eventually develops a sexual overtone.

Do you feel like you have behaved inappropriately in this situation?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 2

Once a week you have lunch with a close friend. You have always been very attracted to her. Each time you talk, your conversation becomes very personal in nature. You share with her information about your current life that feels very private to you. The information is so private, in fact, that you would not feel comfortable sharing it with your girlfriend.

Do you feel like you are behaving inappropriately here?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 3

You have been working on a project with a woman whom you find very attractive. One day while the two of you are working, it occurs to you that you might tell her that you are attracted to her. You go ahead and tell her. She responds by saying she finds you attractive as well.

Do you feel like you have behaved inappropriately in this situation?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 4

Your girlfriend has a friend whom you find very attractive. The two of them are supposed to attend a concert together. Unexpectedly, however, something comes up and your girlfriend can't go. Because her friend doesn't want to go to the concert alone, her friend asks you to go with her. You decide to attend the concert with her.

Do you feel like you have behaved inappropriately in this situation?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 5

You are close friends with a woman who is very attractive to you. Over time, you find that you have developed a crush on her. You don't tell her about your feelings. However, you do continue spending time with her as you did before.

Do you feel like you have behaved inappropriately in this situation?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 6

You belong to a campus organization and are asked to attend a national conference. Another student who you are very attracted to also is going. The two of you reserve separate rooms in the same hotel. To your surprise, however, when you arrive at the hotel, you learn that only

one room is available. The room has one king size bed. The two of you decide to stay in the room together and to sleep in the same bed.

Do you feel like you have behaved inappropriately in this situation?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 7

You have a close friend whom you find very attractive. You are so attracted to her, in fact, that you begin to fantasize about being physically intimate with her. Over time, you fantasize about her more and more. Eventually, you have thoughts of being physically intimate with her almost on a daily basis.

Do you feel like you are behaving inappropriately here?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 8

There is a very attractive woman whom you have noticed on several different occasions. Because you find her attractive, you decide that you would like to get to know her. The next time you see her, you approach the woman and introduce yourself. The two of you talk for about 10 or 15 minutes.

Do you feel like you are behaving inappropriately here?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

Scenario 9

Recently, you met a woman whom you find very attractive. Because of your attraction to her, you enjoy spending time with this woman. In fact, you begin to seek out opportunities to socialize with her.

Do you feel like you are behaving inappropriately here?

1	2	3	4	5
No, I've done nothing inappropriate		Neutral		Yes, my behavior is very inappropriate

APPENDIX F: SINGLE ATTITUDINAL ITEM

Instructions: Please respond to the following question by circling the most appropriate response.

What is your opinion about someone in an exclusive dating relationship having sexual relations with someone other than the dating partner—is it always wrong, almost always wrong, wrong only sometimes, or not wrong at all?” (Circle the most appropriate response below.)

- A. Always wrong
- B. Almost always wrong
- C. Wrong only sometimes
- D. Not wrong at all

APPENDIX G: SOCIOSEXUAL ORIENTATION INVENTORY

Please answer all of the following questions honestly. For the questions dealing with behavior, write your answers in the blank spaces provided. For the questions dealing with thoughts and attitudes, circle the appropriate number on the scales provided.

- 1. With how many different partners have you had sex (sexual intercourse) with in the past year? _____
- 2. How many different partners do you foresee yourself having sex with during the next five years? (Please give a specific, realistic estimate). _____
- 3. With how many different partners have you had sex on one and only one occasion? _____
- 4. How often do you fantasize about having sex with someone other than your current dating partner? (Circle one).
 - 1. never
 - 2. once every two or three months
 - 3. once a month
 - 4. once every two weeks
 - 5. once a week
 - 6. a few times each week
 - 7. nearly every day
 - 8. at least once a day

12. Sex without love is OK.

1	2	3	4	5	6	7	8	9
I								I
strongly								strongly
disagree								agree

APPENDIX H: MORAL TRADITIONALISM SCALE

Instructions: Please respond to each item below using the scale provided.

1. We should be more tolerant of people who choose to live according to their own moral standards, even if they are different from our own.

1	2	3	4	5
STRONGLY AGREE				STRONGLY DISAGREE

2. There is too much sexual freedom and loose living today.
3. Changes in lifestyles, such as divorce and men and women living together without being married, are signs of increasing moral decay.
4. The newer lifestyles are contributing to the breakdown of our society.
5. The world is always changing, and we should accommodate our view of moral behavior to those changes.
6. There will always be some people who think and act differently, and there is nothing wrong with that.
7. Society should be more accepting of people whose appearance and values are very different from most.
8. This country would be better off if there were more emphasis on traditional family ties.

APPENDIX I: SEXUAL AND DATING HISTORY

Please list the number of dating partners you have had in the last five years. _____

Please list the number of sexual partners you have had in the last five years. _____

APPENDIX L: BRIEF SENSATION SEEKING SCALE

Instructions: Please respond to each statement below by circling the most appropriate number.

1. I would like to explore strange places.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

2. I get restless when I spend too much time at home.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

3. I would like to do frightening things.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

4. I like wild parties

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

5. I would like to take off on a trip with no pre-planned routes or timetables.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

6. I prefer friends who are excitingly unpredictable.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

7. I would like to try bungee jumping.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

8. I would love to have new and exciting experiences, even if they are illegal.

1	2	3	4	5
Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

APPENDIX M: INVESTMENT MODEL SCALE

Satisfaction Level Facet and Global Items

1) Please indicate the degree to which you agree with each of the following statements regarding your current relationship (circle an answer for each item).

- | | | | | |
|--|--------------------|----------------|------------------|------------------|
| a) My partner fulfills my needs for intimacy (sharing personal thoughts, secrets, etc.) | Don't Agree At All | Agree Slightly | Agree Moderately | Agree Completely |
| b) My partner fulfills my needs for companionship (doing things together, enjoying each other's company, etc.) | Don't Agree At All | Agree Slightly | Agree Moderately | Agree Completely |
| c) My partner fulfills my sexual needs (holding hands, kissing, etc.) | Don't Agree At All | Agree Slightly | Agree Moderately | Agree Completely |
| d) My partner fulfills my needs for security (feeling trusting, comfortable in a stable relationship, etc.) | Don't Agree At All | Agree Slightly | Agree Moderately | Agree Completely |
| e) My partner fulfills my needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) | Don't Agree At All | Agree Slightly | Agree Moderately | Agree Completely |

2) I feel satisfied with our relationship. (please circle a number)

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

3) My relationship is much better than others' relationships.

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

4) My relationship is close to ideal.

0	1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---	---

e) My needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) could be fulfilled in alternative relationships

	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely
--	--------------------------	-------------------	---------------------	---------------------

2) The people other than my partner with whom I might become involved are very appealing. (please circle a number)

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

3) My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.).

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

4) If I weren't dating my partner, I would do fine – I would find another appealing person to date.

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

5) My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.).

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

6) My needs for intimacy, companionship, etc. could easily be fulfilled in an alternative relationship.

0	1	2	3	4	5	6	7	8
Do Not Agree At All			Agree Somewhat				Agree Completely	

Investment Size Facet and Global Items

1) Please indicate the degree to which you agree with each of the following statements regarding your current relationship (circle an answer for each item).

a) I have invested a great deal of time in our relationship	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely
b) I have told my partner many private things about myself (I disclose secrets to him/her)	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely
c) My partner and I have an intellectual life together that would be difficult to replace	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely
d) My sense of personal identity (who I am) is linked to my partner and our relationship	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely
e) My partner and I share many memories	Don't Agree At All	Agree Slightly	Agree Moderately	Agree Completely

2) I have put a great deal into our relationship that I would lose if the relationship were to end. (please circle a number)

0 1 2 3 4 5 6 7 8
 Do Not Agree Agree
 At All Somewhat Completely

3) Many aspects of my life have become linked to my partner (recreational activities, etc.), and I would lose all of this if we were to break up.

0 1 2 3 4 5 6 7 8
 Do Not Agree Agree
 At All Somewhat Completely

4) I feel very involved in our relationship – like I have put a great deal into it.

0 1 2 3 4 5 6 7 8

- | | At All | | Somewhat | | Completely | | | | |
|----|---|---|----------|----------|------------|---|------------|---|---|
| 5. | I feel very attached to our relationship – very strongly linked to my partner. | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Do Not Agree | | | Agree | | | Agree | | |
| | At All | | | Somewhat | | | Completely | | |
| 6. | I want our relationship to last forever. | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Do Not Agree | | | Agree | | | Agree | | |
| | At All | | | Somewhat | | | Completely | | |
| 7. | I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now). | | | | | | | | |
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | Do Not Agree | | | Agree | | | Agree | | |
| | At All | | | Somewhat | | | Completely | | |

APPENDIX N: BACKGROUND AND RELATIONSHIP CHARACTERISTICS

Demographics

1. Date of Birth: ____ / ____ / ____
(MO) (DY) (YR)

2. What is your gender? [Mark one.]

 Female

 Male

3. What is your ethnicity? [Mark one.]

 African American/Black (non-Hispanic)

 Asian/Pacific Islander

 Caucasian/White (non-Hispanic)

 Hispanic/Latino

 Multiracial

 Other

4. To what extent do you consider yourself to be a religious person? [Mark one.]

Relationship Status

6. Think about when you and your partner agreed to be exclusive. If you have done so more than once in your current relationship, think about the most recent time you and your partner agreed to be exclusive. How long ago was that? [Mark one.]

 Less than 3 months

 3-6 months

 6-9 months

 9-12 months

 1 yr – 1 yr, 3 months

 1 yr, 3 months – 1 yr, 6 months

 1 yr, 6 months – 1 yr, 9 months

 1 yr, 9 months – 2 yrs

 More than 2 years

7. Altogether, how long have you and your current partner been dating? [Mark one.]

- Not at all religious
 - Slightly religious
 - Moderately religious
 - Very religious
 - Extremely religious
5. When it comes to politics, how do you usually think about yourself?
- Extremely liberal
 - Liberal
 - Moderate or middle of the road
 - Conservative
 - Extremely conservative
 - Haven't thought about it much
- Less than 3 months
 - 3-6 months
 - 6-9 months
 - 9-12 months
 - 1 yr – 1 yr, 3 months
 - 1 yr, 3 months – 1 yr, 6 months
 - 1 yr, 6 months – 1 yr, 9 months
 - 1 yr, 9 months – 2 yrs
 - More than 2 years

Current Relationship Status

When you first participated in this study, you were involved in an exclusive dating relationship. We would like to know if your relationship status has since changed.

1. Are you still dating the same person exclusively, meaning the two of you have agreed not to date or become romantically involved with someone else? [**Mark one.**]

Yes

No

If NO:

What is the current status of your romantic relationship?

References

- Allen, E. S., Atkins, D. C., Baucom, D. H., Snyder, D. K., Gordon, K. C., & Glass, S. P. (2005). Intrapersonal, interpersonal, and contextual factors in engaging in and responding to extramarital involvement. *Clinical Psychology: Science and Practice, 12*, 101-130.
- Allen, E. S., & Baucom, D. B. (2004). Adult attachment and patterns of extradyadic involvement. *Family Process, 43*, 467-488.
- Amato, P. R., & Rogers, S. J. (1997). A longitudinal study of marital problems and subsequent divorce. *Journal of Marriage and the Family, 59*, 612-624.
- Atkins, D. C. (2003). *Infidelity and marital therapy: Initial findings from a randomized clinical trial*. Unpublished doctoral dissertation, University of Washington.
- Atkins, D. C., Baucom, D. H., & Jacobson, N. S. (2001). Understanding infidelity: Correlates in a national random sample. *Journal of Family Psychology, 15*, 735-749.
- Beach, S. R., Jouriles, E. N., & O'Leary, K. D. (1985). Extramarital sex: Impact on depression and commitment in couples seeking marital therapy. *Journal of Sex and Marital Therapy, 11*, 99-108.
- Bell, R. R., Turner, S., & Rosen, L. (1975). A multivariate analysis of female extramarital coitus. *Journal of Marriage and the Family, 37*, 375-384.
- Blumstein, P., & Schwartz, P. (1983). *American couples*. New York: William and Morrow Company, Inc.
- Brown, E. M. (1991). *Patterns of infidelity and their treatment*. New York: Brunner/Mazel.
- Buss, D. M., & Shackelford, T. K. (1997). Susceptibility to infidelity in the first year of marriage. *Journal of Research in Personality, 31*, 193-221.
- Buunk, B. P. (1980). Extramarital sex in the Netherlands. *Alternative Lifestyles, 3*, 11-39.
- Buunk, B. P., & Bakker, A. B. (1995). Extradyadic sex: The role of descriptive and injunctive norms. *The Journal of Sex Research, 32*, 313-318.
- Choi, K., Catania, J. A., & Dolcini, M. M. (1994). Extramarital sex and HIV risk behavior among US adults: Results from the national AIDS behavioral survey. *American Journal of Public Health, 84*, 2003-2007.

- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Davis, J. A., & Smith, T. W. (1994). *General social surveys, 1972-1994: Cumulative codebook*. Chicago: National Opinion Research Center.
- Drigotas, S. M., Safstrom, C. A., & Gentilia, T. (1999). An investment model prediction of dating infidelity. *Journal of Personality and Social Psychology*, *77*, 509-524.
- Edwards, J. N., & Booth, A. (1976). Sexual behavior in and out of marriage: An assessment of correlates. *Journal of Marriage and the Family*, *38*, 73-81.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Forste, R., & Tanfer, K. (1996). Sexual exclusivity among dating, cohabiting, and married women. *Journal of Marriage and the Family*, *58*, 33-47.
- Glass, S. P. (2003). Not "just friends": Protect your relationship from infidelity and heal the trauma of betrayal. New York: Free Press.
- Glass, S. P., & Wright, T. L. (1977). The relationship of extramarital sex, length of marriage, and sex differences on marital satisfaction and romanticism: Athanasiou's data reanalyzed. *Journal of Marriage and the Family*, *39*, 691-703.
- Glass, S. P., & Wright, T. L. (1985). Sex differences in type of extramarital involvement and marital dissatisfaction. *Sex Roles*, *12*, 1101-1120.
- Glass, S. P., & Wright, T. L. (1992). Justifications for extramarital relationships: The associations between attitudes, behaviors, and gender. *The Journal of Sex Research*, *29*(3), 361-387.
- Greeley, A. (1994). Marital infidelity. *Society*, *31*, 9-13.
- Hansen (1987), G. L. (1987). Extradyadic relationships during courtship. *Journal of Sex Research*, *23*(3), 382-390.
- Holmes, J. G. (1981). The exchange process in close relationships: Microbehavior and macromotives. In M. J. Lerner & S. C. Lerner (Eds.), *the justice motive in social behavior* (pp. 187-220). London: Sage.
- Hussong, A. M., Hicks, R. E., Levy, S. A., Curran, P. J. (2001). Specifying the relations between affect and heavy alcohol use among young adults. *Journal of Abnormal Psychology*, *110*(3), 449-461.

- Johnson, R. E. (1970). Some correlates of extramarital coitus. *Journal of Marriage and the Family*, 32, 449-456.
- Johnson, D. J., & Rusbult, C. E. (1989). Resisting temptation: Devaluation of alternative partners as a means of maintaining commitment in close relationships. *Journal of Personality and Social Psychology*, 57, 967-980.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.
- Loehlin, J. C. (1992). *Latent variable models: An introduction to factor, path, and structural analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Mills, J. (1999). Improving the 1957 version of dissonance theory. In Eddie Harmon-Jones and Judson Mills (Eds.) *Cognitive dissonance: Progress on a pivotal theory in social psychology* (pp. 25-42). Washington, DC: American Psychological Association.
- Mislevy, R. (1986). Recent developments in the factor analysis of categorical variables. *Journal of Educational Statistics*, 11, 3-31.
- Muthen, L. K., & Muthen, B. O. (1998-2006). *Mplus User's Guide*. Fourth Edition. Los Angeles, CA: Muthen and Muthen.
- Neubeck, G., & Schletzer, V. M. (1969). A study of extramarital relationships. In G. Neubeck (Ed.), *Extramarital relations* (pp. 146-151). Englewood Cliffs, NJ: Prentice-Hall.
- Previti, D., & Amato, P. R. (2004). Is infidelity a cause or a consequence of poor marital quality? *Journal of Social and Personal Relationships*, 21, 217-230.
- Pittman, F. (1989). *Private lies*. New York: Norton.
- Prins, K. S., Buunk, B. P., & VanYperen, N. W. (1993). Equity, normative disapproval, and extramarital relationships. *Journal of Social and Personal Relationships*, 10, 39-53.
- Reibstein, J., & Martin, R. (1993). *Sexual arrangements*. New York: Charles Scribner and Sons.
- Robinson, J. P., Shaver, P. R., and Wrightsman, L. S. (1999). *Measures of social psychological attitudes: Vol. 2*. San Diego: Academic Press, Inc.
- Roscoe, B., Cavanaugh, L. E., & Kennedy, D. R. (1988). Dating infidelity: Behaviors, reasons and consequences. *Adolescence*, 23, 34-43.
- Rusbult, C. E., Bissonnette, V. I., Arriaga, X. B., & Cox, C. L. (1998). Accommodation processes during the early years of marriage. In T. N. Bradbury (Ed.), *The*

- developmental course of marital dysfunction* (pp. 74-113). New York: Cambridge University Press.
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The investment model: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*, 357-391.
- Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60*, 53-78.
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvement. *Journal of Personality and Social Psychology, 45*, 101-117.
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology, 16*, 172-186.
- SAS Institute. (2000). *SAS/STAT user's guide: Vol. 8*. Cary, NC: Author.
- Saunders, J. M., & Edwards, J. N. (1984). Extramarital sexuality: A predictive model of permissive attitudes. *Journal of Marriage and the Family, 46*, 825-835.
- Seal, D. W., Agostinelli, G., & Hannett, C. A. (1994). Extradyadic romantic involvement: Moderating effects of sociosexuality and gender. *Sex Roles, 31(1)*, 1-22.
- Simpson, J. A., Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology, 60*, 870-883.
- Simpson, J. A., Gangestad, S. W., and Lerma, M. (1990). Perception of physical attractiveness: Mechanisms involved in the maintenance of romantic relationships. *Journal of Personality and Social Psychology, 59*, 1192-1201.
- Spanier, G. B., & Margolis, R. L. (1983). Marital separation and extramarital sexual behavior. *The Journal of Sex Research, 19*, 23-48.
- Thompson, A. P. (1983). Extramarital sex: A review of the literature. *The Journal of Sex Research, 19*, 1-22.
- Thompson, A. P. (1984). Emotional and sexual components of extramarital relations. *Journal of Marriage and the Family, 10*, 35-42.
- Traeen, B., & Stigum, H. (1998). Parallel sexual relationships in the Norwegian context. *Journal of Community and Applied Social Psychology, 8*, 41-56.

- Treas, J., Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Marriage and the Family*, 62, 48-60.
- Van Lange, P. A., Rusbult, C. E., and Drigotas, S. M. (1997). Willingness to sacrifice in close relationships. *Journal of Personality and Social Psychology*, 72, 1373-1395.
- Waite, L. J., & Joyner, K. (2001). Emotional satisfaction and physical pleasure in sexual unions: Time horizon, sexual behavior, and sexual exclusivity. *Journal of Marriage and the Family*, 63, 247-264.
- Walster, E., Traupmann, J., & Walster, G. W. (1978). Equity and extramarital sexuality. *Archives of Sexual Behavior*, 7, 127-142.
- Wiederman, M. W. (1997). Extramarital sex: Prevalence and correlates in a national survey. *The Journal of Sex Research*, 34, 167-174.
- Wiederman, M. W., & Hurd, C. (1999). Extradyadic involvement during dating. *Journal of Social and Personal Relationships*, 16(2), 265-274.
- Weis, D. L. and Solsnerick, M. (1981). Attitudes toward sexual and nonsexual extramarital involvements among a sample of college students. *Journal of Marriage and the Family*, 43, 349-358.
- Wellings, K., Field, J., Johnson, A., & Wadsworth, J. (1994). *Sexual behavior in Britain*. London: Penguin Books.
- Wiggins, J. D., & Lederer, D. A. (1984). Differential antecedents of infidelity in marriage. *American Mental Health Counselors Association Journal*, 6, 152-161.
- Wilson, T. C. (1995). Urbanism and unconventionality: The case of sexual behavior. *Social Science Quarterly*, 76, 346-363.
- Zuckerman, M. (1979). *Sensation seeking: beyond the optimal level of arousal*. Hillsdale, NJ: Erlbaum.