

**Differentiation as a Predictor of
Extramarital Involvement**

Christopher M. Habben

Dissertation submitted to the Faculty of
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Human Development
Marriage and Family Therapy Program

Michael J. Sporakowski, Chair

Howard O. Protinsky

Scott W. Johnson

Anne M. Prouty

Rick L. Peterson

April 28, 2000
Blacksburg, Virginia

Keywords: Differentiation of Self, Extramarital Involvement

Copyright, 2000 Christopher M. Habben

DIFFERENTIATION AS A PREDICTOR OF EXTRAMARITAL INVOLVEMENT

by

Christopher M. Habben

Committee Chair: Michael J. Sporkowski

Human Development

Marriage and Family Therapy Program

(Abstract)

The purpose of the present study was to examine differentiation of self (Bowen, 1985) as a predictor of involvement in specific extramarital behaviors. Data were collected from 125 graduates of a comprehensive state university in southeastern United States. The sample was primarily caucasian, college educated, married, politically moderate to slightly conservative, equally divided by gender and ranged in age from 25 to 87 years ($M =$ age 43). Differentiation of self was operationalized and measured by the *Differentiation of Self Inventory* (Skowron & Friedlander, 1998).

Logistical regression analyses regressed involvement in specific extramarital behaviors upon the level of differentiation of self as measured by the *Differentiation of Self Inventory*. The level of differentiation did not significantly predict the likelihood of involvement in any specific extramarital behavior. Among females, however, differentiation was positively but not significantly associated with the likelihood of involvement in most of the specific extramarital behaviors examined by the study. For females, differentiation did significantly predict the likelihood of having an experience kissing some one other than a spouse while married.

ACKNOWLEDGEMENTS

I am deeply grateful to my wife who has made countless sacrifices to enable me to pursue my graduate education. The completion of my graduate training is as much a testament of her dedication as it is mine.

I am additionally grateful the faculty of the Marriage and Family Program at Virginia Tech. I sincerely appreciate the training, support, encouragement, and kindness each of you has extended to me...and especially your flexibility.

Thank you Elizabeth Skowron for permission to use her *Differentiation of Self Inventory*.

Thank you to all the staff at the Alumni Association office at Virginia Tech for their permission to contact alumni of Virginia Tech.

I am grateful to my parents for their endless encouragement and to my brother who has been a model of academic perseverance.

I have been blessed to attend Virginia Tech with wonderful colleagues. Thank you Steve, Linda, Jessamy and John for what you have taught me.

Jennifer and Maria, it was a fantastic experience teaching with you.

Thank you to the late Donald Winnicott. I have only read your work but you have taught me the importance of being "good enough".

DEDICATION

*To our daughter, Maggie, whose timing is impeccable and
to my wife, Amy, who made this all possible.*

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
LIST OF TABLES	vii
CHAPTER I. INTRODUCTION	
Overview and Purpose of the Study	1
Rationale for the Study	1
Theoretical/Conceptual Framework of the Study	4
Research Questions and Hypotheses	13
Terms	14
Significance of the Study	16
CHAPTER II. REVIEW OF THE LITERATURE	18
Overview	18
Sociological Variables	18
Predictor Variables of Extramarital Involvement	27
Summary and Conclusion	38
CHAPTER III METHODOLOGY	40
Overview	40
Population and Sample	40
Instrumentation	41
Data Collection Procedures	45
Data Analysis	47

CHAPTER IV RESULTS AND DISCUSSION	50
Overview	50
Response to Survey	50
Characteristics of Respondents	51
Instrument Validity and Reliability	60
Hypothesis Testing	64
CHAPTER V. CONCLUSION AND RECOMMENDATIONS	69
Summary of Results	69
Limitations of the Study	70
Theoretical Implications	72
Implications for Research	75
Conclusion	76
REFERENCES	77
APPENDIX A - Introductory Letter	88
APPENDIX B - Informed Consent	89
APPENDIX C – Survey	91
APPENDIX D – Differentiation of Self Instrument	95
APPENDIX E – DSI Scoring Procedures	96
APPENDIX F -Initial Confirmatory Factor Analysis (Four scale model)	97
APPENDIX G - Confirmatory Factor Analysis (Two scale model)	98
APPENDIX H – Factor Loadings	99
VITA	100

LIST OF TABLES

Table #	Page
1. Typologies of Extramarital Involvement	38
2. Marital Status of Respondents and Comparison to NHSLs National Sample	52
3. Ethnicity of Respondent Sample	53
4. Religious Affiliation of Respondent Sample	53
5. Means, Standard Deviations, and Ranges of Independent and Demographic Variables	54
6. Mean Response to Justification of Extramarital Involvement Questions	56
7. Mean Response to Acceptance of Extramarital Scenarios Questions	57
8. Mean Age of First Experience with Sexual Behaviors and Number of Different Partners for Sexual Experience Previous to Marriage	57
9. Frequency of Stating Yes for Extramarital Involvement	58
10. Cronbach Alpha Reliability Estimates for DSI and DSI Subscales	60
11. Correlation Matrix for Initial Confirmatory Factor Analysis	61
12. Correlation Matrix for Revised Confirmatory Factor Analysis	63
13. Univariate Logistic Regression Results with Differentiation of Self as Predictor	64
14. Correlation Matrix for Potential Predictor Variables	67
15. Univariate Logistic Regression Results with Differentiation of Self as Predictor	68

CHAPTER I

INTRODUCTION

Overview and Purpose of the Study

The purpose of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. The research findings addressed the ability of differentiation of self to predict extramarital involvement and briefly considered alternative predictors of extramarital involvement.

While conceptual models considering extramarital involvement include the construct of differentiation of self, no known studies exist considering the relationship of differentiation and extramarital involvement. The findings were interpreted and explained from an integrated theoretical model incorporating Bowenian, object relations and systems perspectives.

Rationale for the Study

Cross-cultural research indicates conjugal relationships to be as close to universal as anything among human behavior (Betzig, 1989). In Western cultures as well as others, sexuality is a central element in the marital relationship (Kelly, 1995). The symbolic significance of sexuality to marital couples endows sex with intensely strong emotional meaning (Humphrey, 1982). Sexual interaction and emotional attachments with individuals outside of the marital relationship challenge the stability of a marital relationship. In the United States and across cultures, extramarital involvement is a leading factor in conjugal dissolution (Benokraitis, 1993; Betzig, 1982).

Particularly in Western culture, the romantic belief in the "happily ever after" myth of marital relationship is alive and well (Parrott & Parrott, 1995). Across cultures, at least some degree of mutual exclusivity regarding sexual practice is present in conjugal relationships

(Davenport, 1987). In American society, most individuals disapprove of extramarital relationships (Glass, 2000). Across the human experience, the expectation of sexual exclusivity, however, is not always equitable for both genders. In particular, for many females, the experience of a marital relationship can be inequitable, oppressive and even abusive as the degree of sexual exclusivity and sexual privilege afforded by a culture often varies between partners based upon their gender. In the United States, even relatively healthy marriages, are not immune from developing extramarital experience (Pittman & Wagers, 1995). Without addressing the larger systemic problem, the symptom of an extramarital involvement within the marital system can prove fatal to the continuation of the marriage.

While extramarital involvements themselves may not directly cause marital dissolution, the discovery of an extramarital relationship by the non-involved spouse may quickly catalyze a decision toward marital dissolution. Not surprisingly, the report of an extramarital involvement is a common experience for marital therapists. Members of the American Association of Marriage and Family Therapists report that 46% of all clients seek assistance because of an extramarital involvement (Humphrey, 1987). Glass and Wright (1988) similarly suggest that at least 25% of couples in marital therapy report extramarital involvement as present in their relationship at the outset of marital therapy and approximately another 30% reveal extramarital behavior later in marital treatment. Therapists cite physical abuse as the only issue more damaging to a relationship than extramarital involvement (Wishman, Dixon & Johnson, 1997).

Despite the prevalence of extramarital involvement and its influence upon marital relationships, few systemic models considering extramarital involvement exist in the marital and family literature (Marett, 1990; Moultrup, 1990). Glass (2000, p. 5) concedes there is "a dearth of empirical studies and clinical literature intended for therapists" regarding extramarital

involvement. The personal beliefs of researchers, therapists and clients along with a social taboo enveloping matters like sexuality tend to hinder sexual research and the development of models interpreting extramarital involvement. Consequently, existing efforts in extramarital involvement research have been primarily descriptive in nature. Research exploring extramarital activity is difficult, complex and without simple resolution.

Despite the scarcity of systemic models, they do exist. David Moultrup (1990), for example, offers an approach to conceptualizing infidelity by proposing an integrative relationship between four dynamic dimensions. The cornerstone to Moultrup's model is the construct of differentiation. Other theorists (Schnarch, 1991; Hendrix, 1988) directly and indirectly build their concepts of marital interaction upon the notion of differentiation. Nonetheless, emotional and intrapsychic variables influencing a propensity toward extramarital involvement have been neglected in the existent extramarital literature. An empirical study assessing the relationship between differentiation of self and participation in extramarital activity enriches efforts to understand the etiology of extramarital involvement, supports model development, and provides insight for alternative models.

While the long term efficacy of couple's therapy in general has proven relatively dim (Atkinson, 1999), clinicians frequently endeavor to assist couples to process the impact of infidelity upon the marital system and the individual members of the system. However, to build effective models of both prevention and of treatment, greater understanding of the etiology of infidelity is needed and the influence of differentiation has yet to be tested as a predictor of extramarital involvement.

Regardless of what factor or factors influence the dearth of comprehensive models explaining extramarital sexual behavior, the shortage still exists. Given its necessity for

species propagation, its influence on family life and its ties to emotion, human sexual behavior may be one of the most critical of all human endeavors (Smith, 1991). Further, the impact of extramarital involvement upon marital stability, family dynamics and individual sense of belonging makes the personal investment in improving the understanding infidelity quite high (Brown, 1991). Demonstrating differentiation to be a significant variable in predicting extramarital involvement lends credibility to germinating models of infidelity such as those articulated by Moultrup (1990) and others (Hendrix, 1988; Schnarch, 1991). Further, if differentiation proves a significant variable in the marital ecology spawning extramarital involvement, clinical treatment and prevention efforts endeavoring to foster enhanced differentiation are implicitly supported.

The following study hypothesized differentiation of self to be negatively associated with extramarital involvement such that as the level of differentiation increases, the likelihood of participation in extramarital activity correspondingly decreases.

Theoretical/Conceptual Framework of the Study

An amalgam of Bowenian and Object Relations theory provided the theoretical framework for this investigation of differentiation as a predictor of extramarital involvement.

Bowenian Theory

The emotional system of an organism, be it an ant colony or a family, marks the central element of Bowenian theory (Papero, 1995). The emotional system responds in a repetitive and a predictive manner (Piercy, Sprenkle, & Wetschler, 1996) and functions as the organism's instinctive guidance system (Papero, 1995). The behaviors of animals are biologically determined by an emotional system but human behavior involves not only an emotional system, but an intellectual system and a mediating feeling system as well (Papero, 1995). Anxiety

stimulates an individual's emotional system overriding the intellectual system and generates an autonomic response (Goldenberg & Goldenberg, 2000).

Differentiation of self is a cornerstone to Bowenian theory (Bowen, 1985) and proves a comprehensive construct with a multiplicity of definition (Moultrup, 1990). Fundamentally, differentiation of self refers to the degree of fusion between the intellectual and emotive systems (Bowen, 1985). The level of differentiation indicates the degree to which one can choose to be guided by intellect or emotion (Skowron & Friedlander, 1999) as the situation appropriately demands (Piercy, Sprenkle & Wetschler, 1996).

Differentiation also addresses the notion of definition of self (Moultrup, 1990). More differentiated persons maintain their sense of self and adhere to their personal convictions when pressured to do otherwise (Skowron & Friedlander, 1999). Additionally, differentiation marks the ability to balance intimacy and autonomy, connectedness and independence (Moultrup, 1990; Skowron & Friedlander, 1999). Bowen (1985) described differentiation as an indicator of the level of core-self. Core self indicates the portion of the self which is relatively unchanging except from within. Pseudo-self is the element of the self altered and changed to accommodate others.

David Schnarch (1991) draws upon Bowen's construct of differentiation in relationship to intimacy in relationships. Schnarch (1991, p. 121) defines intimacy as the "recursive process of open self-confrontation and disclosure of core aspects of the self in the presence of a partner." Relationships eventually expose blind spots and hidden elements of the self, which potentially introduces anxiety. Schnarch suggests two levels of intimacy distinguished by the degree of differentiation. Level-1 intimacy reflects an intimacy akin to the symbiotic relationship between mother and infant. Level-1 or other-validated intimacy, expects reciprocity from disclosures of the self. Level-2 intimacy, or self-validated intimacy, however, reflects an intimacy accepting

existential separateness and lacks the demand for reciprocity (Schnarch, 1991). A higher level of differentiation is required to persevere when validation of self-disclosure is not returned by one's partner.

Schnarch (1991, p. 363) connects intimacy and extramarital involvement with the observation, "the occurrence of affairs and nonoccurrence of intimacy are two of the most common complaints presented to therapists." Drawing upon the work of anthropologist, Helen Fisher (1992), Schnarch suggests the process of evolution and natural selection has led humans to instinctively bond, particularly for the purpose of propagation. Consequently, human nature is instinctively drawn toward serial monogamy. Long term monogamy introduces tension, anxiety and conflict as a basic nature for sexual variety conflicts with desire for sexual exclusivity. Schnarch (1991) suggests differentiation provides the solution to the conflict as differentiation supports a shift from the limbic to the neocortical systems, dampens reflexive emotionality, modulates tension and frustration, fosters non-reactivity and aids the ability to tolerate pain for growth.

Object Relations Theory

Object Relations theory is a psychoanalytic theory of personality development concerning the development of the self in relationship to others (Slipp, 1991). Object relations theory focuses upon the internalization of interpersonal relationships. Object relations theory assumes a human need from birth for bonding, attachment and relationships with others (Slipp, 1991) and considers the infant's experience with the parental objects as primary determinants for adult personality formation (Goldenberg & Goldenberg, 2000). Infants typically experience the need-attending parental figure as good. However, unable to replicate the symbiotic relationship of the womb, the infant inevitably experiences frustration with the parental object's inability to

meet all of the infant's desires. Dependent upon the parental figure(s) yet unable to control them, the infant manages the inevitable frustration through the development of psychic "introjects" via a process of splitting the parental figure into good and bad objects. The internal representation of a parent as a bad object is pushed into the unconscious mind. As a second psychic defense, a process of projective identification involves projecting an image of the bad object onto another person who then functions as a container for that image (Slipp, 1991).

The honeymoon phase of marriage introduces an adult to a devoted and committed relationship unconsciously reminiscent of primary attachments with parental objects. Individuals begin to project bad-object introjects onto their partner and subsequently expect their partner to function as a container for this projection. Soon, each partner begins to approximate the internalized model projected from the partner. From this mutual process of projection and introjection, "the husband and wife connect according to unconscious complementarity of object relations (Scharff, 1995, p. 171) as the "repressed parts of the self seek expression directly in relation to an accepting spouse or indirectly through uninhibited aspects of the spouse (Scharff, 1995, p. 170)." Couples become fused relationally as each is loved for the gratification they afford for repressed parts rather than for who they are as a separate self (Scharff, 1995). Personal and couple development evolves from minimizing the mutual grip each demands for their sense of self through greater personal autonomy (Scharff, 1995).

Hendrix (1988) introduces very similar ideas using much less clinical language in his presentation of *Imago* theory. Hendrix (1988, p. 10) suggests the "old brain" or human brain stem and limbic system, operates with a foggy awareness of the external world without a sense for linear time and searches for a mate with characteristics approximating parental caretakers in an effort to bring healing to childhood wounds. Hendrix (1988) contends children experience a

level of disappointment regarding unmet needs. Hendrix identifies the development of a "lost self", a "false self" and a "disowned self" in response to social experiences. The lost self marks the parts of the self repressed due to societal demands, the false self fills the void created by the lost self and the disowned self marks the negative parts of the false self which were met with disapproval and denied. As adults, individuals select partners who bear a composite image of their caretakers and who compensate for parts of the self cutoff during childhood. The relationship begins with an unconscious hope the partner will function as a surrogate parent and make up for childhood disappointments. The plan inevitably fails after the romantic period of perceived wholeness and unity fades away. Partners are then perceived as intentionally ignoring the needs of the other. In the subsequent hurt, "old movies" of childhood are projected upon the partner. Like an infant, individuals seek to minimize the subsequent power struggle by invoking enough toxicity that the pseudo-parent will finally come to the rescue. Making the unconscious conscious introduces a level of anxiety as each partner is challenged to experience painful parts of the self.

While Hendrix does not use differentiation of self in his theoretical conceptualization, he notes the reparative and healing experience open to each partner if they learn to tolerate the anxiety created by making the unconscious more conscious. Partners may prove more capable of responding in a manner to the painfully familiar situation in a manner the parental object was unable to do. While not identified by Hendrix, the notion of differentiation is implied. Individuals with a higher capacity to tolerate the anxiety created as the relational dyad makes the unconscious patterns more conscience, may better realize the goal of a what Hendrix (1988) considers a "conscious marriage". Further, fusion is diminished with a heightened sense of Self

and power struggles are eased by increased awareness and understanding of the partner's experience.

Contrarily, individuals with a low capacity to tolerate the relational anxiety may respond with familiar defensive strategies. Power and control strategies may be employed to maintain distance from the anxiety. Distractions, including extramarital involvement, minimize the need to confront emerging emotional challenges (Hendrix, 1988). An extramarital relationship diminishes the anxiety through triangulation with another person. From an object relations perspective, a third player also fosters "splitting" as the non-involved spouse is projected with the bad introjects and the extramarital partner is projected with good-objects.

Recent brain research supports the theoretical stance of object relations and imago theory. Atkinson (1999) describes a recent discovery of a neural shortcut in brain circuitry apparently reserved for emotional emergencies, which bypasses the neocortex and routes information directly to the amygdala, the emergency center of the limbic system. Much like Hendrix's notion of the "old brain", the amygdala houses primitive feelings and assesses the situation for danger based upon the perceived similarity to past events (Atkinson, 1999). Emotional eruptions follow the amygdala's perception of danger when even crudely similar elements from past experience evoke emotional memory. Atkinson (1999) reports assisting clients to use their rational brain to soothe the primordial limbic system. When clients are better suited to soothe their limbic system they increase their ability to interact with their partner in a more vulnerable manner (Atkinson, 1999). The ability to soothe emotive anxiety again corresponds with the concept of differentiation.

Hendrix is also not alone in his observation of a temporary romantic period, which idealizes the partner and increases a temporary biological euphoria. Lawson (1988) describes a

myth of romance undergirding a belief that marriage should provide fulfillment for the self. Streaun (1980) suggests romantic love is actually antithetical to marriage and adolescent in nature blinding partners to the characteristics of the other. Similarly, Vaughn (1998) contends the romantic idealization of love and marriage unrealistically assumes the ability to find a perfect partner. The power of romanticism challenges the conscious owning of a moment of choice in the relationship (Kell, 1992). Biologically, the comforting rush of PEA hormones during the romantic phase introduces a seductive euphoria and temporarily strengthens the developing pair-bond (Fisher, 1992).

Goldenberg and Goldenberg (2000, p. 126) effectively summarize the object relations perspective stating "people continue to respond to others largely on the basis of their resemblance to internalize objects from the past, rather than how these others may truly behave." Goldenberg and Goldenberg (2000, p. 126) conclude, "it becomes necessary to explore and repair those faulty unconscious object relationships internalized since infancy ." Arguably, a healthy level of differentiation makes the task of exploration and repair of unconscious object relationships more manageable as painfully familiar experiences replicate themselves in the marital context. Facing the marital dynamics which reflect past disappointments may lead to personal as well as relationship development. However, extramarital involvement, provides a means to escape the disappointment reflected in marital relationship.

Integration Model

Moultrup (1990) contends extramarital affairs are undeniably systemic in nature. Moultrup proposes a framework of four dimensions of an emotional system. Moultrup envisions each dimension reflecting a different dimension of the same system. The first dimension concerns the interaction of basic elements of self and the family such as differentiation, structure,

power, communication and behavior. The second dynamic dimension of Moultrup's model involves elements of time and the family such as multigenerational patterns and development in the family life cycle. The third dimension includes elements of individual dynamics such as cognition, perception, and affect. The final dimension in Moultrup's evolving model includes elements considering the social context of the system.

Moultrup (1990) contends each element of the system is present at every moment although some will be more pertinent than others. Moultrup makes no assumption regarding how the various elements of the system relate to one another but acknowledges each dimension influences extramarital behavior. True to general system theory, perturbing one dimension of the system is bound to disrupt the homeostasis of the system. Nodal events, for example, in the family development dimension informed by the social context the fourth dimension may impact affective and cognitive processes. The permutations of possibilities are innumerable. Linear and predictive relationships as proposed by the present study are generally incompatible with system theory given the recursive nature of system thinking. However, investigating the direct relationship of differentiation with extramarital involvement indicates to some degree the overall influence differentiation contributes to the system.

Other models endeavoring to explain extramarital involvement are welcome under the umbrella of system theory. For example, Meyering & Epling-McWherter (1986) proposed a decision-making model. Meyering and Epling-McWherter (1986) suggested a precondition stage blending opportunity with permissive attitudes leading to a perception stage of the situation assessing the payoffs and risks of extramarital behavior. Decisions are understood as a conscious and unconscious cost-benefit analysis. This decision making incorporates various dimensions of the larger systemic framework proposed by Moultrup.

As a second example, seeking to provide a model explaining extramarital involvement by clergy, Thoburn & Balswick (1993) offer a model of necessary causes and sufficient causes. Necessary causes include unresolved childhood issues such as distant or addictive parents, low self-esteem and a lack of marital intimacy and sexual satisfaction. Sufficient causes include a lack of safeguards within the ministerial role (Thoburn and Balswick, 1993). Again, the framework proposed by Moultrup offers a conceptual frame to build various models for consideration.

What has been absent from theoretical development is a feminist critique. It is important to note many of the theorists, researchers and authors regarding human sexuality have predominantly been male. Luepnitz (1988, p. 10) notes studies repeatedly demonstrate marriage as an institution, better serves the health and stability of men than women by stating "normal' family life is *not* equally normal for all its members." Consequently, the voices of female researchers are particularly important in the ongoing discourse regarding human sexual behavior.

Caroline Dryden (1999) undertook an analysis of gender in marriages and concluded gender inequality remains in many contemporary marriages. Many women, for example, continue to lack the opportunity to challenge inequities experienced in their marriage due to a continued financial dependency inherent in marital relationships. Schwartz (1994) notes that equity in marriages is complicated by social and psychological forces leading both men and women toward traditional arrangements. Years of hierarchy by males makes the traditional arrangement feel natural (Schwartz, 1994). Schwartz notes both genders face anxiety in mapping new territorial maps. Dryden (1999) noted a pattern of subtle control. Husbands maintained a position of power by becoming somewhat distant thereby increasing the level of insecurity and uncertainty in their partner. Change toward equity in power requires a level of

significant courage. Schwartz notes several costs to establishing a "peer marriage" such as challenges to identity and readjustment of career aspirations. Schwartz, however, contends the context of a peer marriage may actually function as a cure to extramarital involvement. The overlap with Schnarch's notion of self-validated intimacy is apparent. Greater equity in marriages requires an enhanced sense of self and a greater capacity toward self-validated intimacy. A healthy level of differentiation, in turn, has been a trademark of a self-validating intimacy.

Differentiation is a cornerstone to Moultrup's framework as well as other theoretical models and to that end, was the focus of the present study.

Research Questions and Hypotheses

The central focus of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. Involvement in extramarital activity was hypothesized to be negatively associated with differentiation of self. Specific hypotheses examined by the current study at a significance level of ($\alpha = .05$) included:

H₁: Involvement in intercourse with a non-spouse while married is significantly predicted by a measure of differentiation of self.

H₂: Performing oral sex upon a non-spouse while married is significantly predicted by a measure of differentiation of self.

H₃: Receiving oral sex from a non-spouse while married is significantly predicted by a measure of differentiation of self.

H₄: Involvement in sexual play including breast or genital stimulation with a non-spouse while married is significantly predicted by a measure of differentiation of self.

H₅: Passionately kissing a non-spouse while married is significantly predicted by a measure of differentiation of self.

H₆: Kissing a non-spouse while married is significantly predicted by a measure of differentiation of self.

- H₇: Having a deep romantic attachment with a non-spouse while married is significantly predicted by a measure of differentiation of self.
- H₈: Having romantic feelings for a non-spouse while married is significantly predicted by a measure of differentiation of self.
- H₉: Casually flirting with a non-spouse while married is significantly predicted by a measure of differentiation of self.

Although the central task of the present study involved investigating differentiation of self as a predictor of involvement in specific extramarital behaviors, additional research questions were identified and included:

1. Does the ability of differentiation of self to predict the likelihood of having had at least one experience with a specific extramarital behavior differ by gender?
2. How prevalent is having at a least one experience with a specific extramarital behavior?
3. Do alternative attitudinal, behavioral, demographic or relational variables predict involvement in at least one experience with specific extramarital behavior?

Terms

Overview

The fundamental task of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. A secondary research task of the study considered alternative attitudinal, behavioral, demographic and relational variables as predictors of extramarital involvement.

Extramarital Involvement

In a review of literature considering extramarital involvement, Thompson (1983) suggests three components are necessary in defining extramarital activity; behavior, relationship and sanction. Various terms offer distinct degrees of behavioral involvement. Thompson (1983) recommends the term *extramarital involvement* to imply behavior from flirtation to coitus with

individuals other than one's spouse. Glass and Wright (1988) advocate the importance of including emotional as well as behavioral involvement in the concept of *extramarital involvement*. To address even more refined behavior, Thompson (1983) suggests identifying the specific extramarital behavior such as *extramarital coitus* or *extramarital flirting*.

Relationship constitutes the second element of a clear definition of extramarital involvement. Thompson recognized individuals breach assumptions of sexual exclusivity not only in married couples, but also in non-married relationships such as non-married couples living together. Thompson (1983) prefers the term *extradyadic* when considering non-married as well as married individuals. *Extradyadic* is a broad enough term to include committed relationships in the gay and lesbian population.

Finally, consensuality is a third important element in defining extramarital involvement. Some couples in open marriages consensually agree for their partners to be involved in emotional or sexual relationships with other people. While many couples may commit to marriage without ever discussing their expectations regarding extramarital involvement, *non-consensual* relationships involve the perceived expectation of sexual exclusivity between marital partners.

Considering the three critical elements pertinent in specifying the behavior under consideration, the present study considered extramarital involvements rather than extradyadic. Extramarital involvement was determined to refer to participation in emotional or sexual experiences with some one other than a spouse while married and without the consent of the spouse regardless of intensity, frequency or duration of the experience.

Finding terms for different players in marital and extramarital relationships that are relatively neutral in their implied meaning can prove a vexing task. *Philanders*, *cheaters*,

adulterers, infidels and other names are regularly employed terms for participants in non-monogamous behavior. Referring to married men or women who engage in extramarital behavior as the *involved spouse* minimizes any coloring. Considering the spouses of extramaritally involved men and women as the *non-involved spouse* similarly minimizes insinuation. Finally, the term *partner* offers a relatively non-pejorative term for the third player in extramarital dynamics outside the marital union.

Differentiation of Self

Differentiation of self is a multi-faceted construct of Bowenian theory. Kerr and Bowen (1988, p. 145) described the essence of differentiation to mean the "ability to be in emotional contact with others yet still autonomous in one's emotional functioning." Bowen (1985, p. 362) denoted differentiation as the "degree of fusion between emotional and intellectual functioning." More differentiated individuals are better able to remain calm in the presence of another's emotionality, to experience intimacy with and independence from others and to maintain autonomy in intimate relationships (Skowron & Friedlander, 1998).

Significance of the Study

Abramson (1990) has identified three critical tasks for scientists and researchers of human sexuality. Specifically, Abramson addressed the need to observe and measure human sexual behavior, to discover and identify mechanisms underlying human sexual expression and to develop working models for the prediction of human sexuality.

The present study has endeavored to assist in the efforts of all three goals. First, the study has attempted to measure the prevalence of specific extramarital behaviors and experiences. Second, the study has attempted to identify a specific potential mechanism (differentiation)

toward extramarital activity. Third, findings of the study will contribute to the on-going efforts to develop working models to predict extramarital activity.

In addition to contributing to the goals of sexual research put forth by Abramson, the study made additional contributions. First, the study examined an intrapsychic construct, which has been largely ignored in extramarital research. Second, much of the extramarital research has been piecemeal (Treas & Giesen, 2000) in nature due to the costs and complexity of meaningful large scale research. The study will contribute to the larger body of understanding regarding extramarital involvement. Third, instrumentation utilized to measure differentiation among respondents is relatively new. Efforts in the study to assess the validity and reliability of the instrument aid efforts to enhance measures of differentiation.

CHAPTER 2

LITERATURE REVIEW

Overview

Different voices have claimed expertise in surveying the landscape of human sexuality including social scientists, psychologists, therapists, physicians, biologists, religious leaders, politicians and agents of the media (Gagnon & Parker, 1995). Given the significant breadth and scope of sexual behavior within the human experience, sexuality has been interpreted from a multiplicity of viewpoints and conceptual understandings (Geer & O'Donohue, 1987). Despite the diversity of investigators, the primary emphasis of extramarital literature has been upon descriptive data and empirical studies comparing and contrasting involved and non-involved participants in extramarital behavior. Research has concentrated upon how prevalent extramarital sex has been, the different contexts of extramarital activity and the potential variables predicting extramarital involvement.

Sociological Variables

Prevalence

Alfred Kinsey was an early pioneer in the endeavor to measure the incidence rates of specific sexual behaviors including extramarital involvement. Kinsey, Pomeroy and Martin (1948) conducted one of the first nationally comprehensive studies of sexual behavior and reported their findings in the landmark text, *Sexual Behavior and the Human Male*. Kinsey and his associates obtained, through a detailed interview process, sexual histories of 6,300 men across the nation. As a zoologist trained in taxonomy, Kinsey and his associates endeavored to conduct a population analysis to “help in the understanding of particular individuals by showing their relation to the remainder of the group” (Kinsey, Pomeroy & Martin, 1948, p. 20). The

convenience sample was drawn from cooperating colleges, medical and psychiatric groups, social or civic groups and penal or correctional institutions. Samples were predominantly white men from the Midwest region of the country. Close to 50% of the males in Kinsey's data acknowledged extramarital intercourse with a non-spouse female (Kinsey, Pomeroy & Martin, 1948). When considering socio-demographic variables, extramarital rates were higher among younger men compared to older men, more common among lower socio-economic backgrounds and lower among religious and rural populations (Kinsey, Pomeroy & Martin, 1948; Parkinson, 1991).

In 1953, Kinsey, Pomeroy, Martin & Gebhard published a second study, *Sexual Behavior in the Human Female*. In this second study, Kinsey and his associates conducted similar research as noted in their first volume but focused upon female sexual behavior. Regarding incidence of extramarital intercourse, Kinsey found 26% of the sample to have acknowledged extramarital coitus (Kinsey, Pomeroy, Martin, & Gebhard, 1948) compared to the 1948 report for male involvement of 50%.

During the 1970's, magazines became a new venue to "resurvey the territory mapped out in 1948 and 1953 [by Kinsey]" (Hunt, 1974, p.15). Athanasiou, Shaver & Tavis (1970) collected 20,000 responses from a survey of 101 questions included in the magazine, *Psychology Today*. The sample of *Psychology Today* readers was young, well educated, relatively wealthy, politically liberal and predominantly agnostic or atheistic in religious beliefs (Athanasiou, Shaver & Tavis, 1970). Of the 8400 married males and females responding to the survey, 40% of the males and 36% of the females acknowledged involvement in extramarital *intercourse* and men reported higher numbers of extramarital partners compared to women (Athanasiou, Shaver & Tavis, 1970).

Other magazines conducted or subsidized surveys following the Athanasiou study. In a survey commissioned by the *Playboy Foundation*, Hunt (1974) endeavored to partially replicate the efforts of Kinsey and his associates. Using random selection in 24 cities, The *Playboy Foundation* solicited participants by telephone to participate in a panel discussion on trends in American sexual behavior. Participants were asked to complete an extensive questionnaire modeled after the work of Kinsey and his research team. The *Playboy* study obtained valid questionnaires from 982 males and 1044 females over age 18 years old and found 41% of males and 18% of female subjects acknowledging experience with extramarital *intercourse* (Hunt, 1974).

In 1974, editors of *Redbook* magazine published a survey designed by sociologist Robert Bell concerning female sexuality and received 100,000 responses (Levin, 1975). Of all the married females responding the survey, 29% acknowledged having "sexual relations with a man other than [their] your husband" (Travis, 1975, p.165). Proportionally, 40% of all respondents over 40 years old affirmed participation in extramarital *sexual relations* (Travis, 1975).

Attempting to move away from strictly quantitative methods of assessing sexual practice, Hite (1976) conducted a national survey asking women to respond to questionnaires that allowed for essay type responses to various inquiries. Results of Hite's initial study led to the publication of *The Hite Report* (1976) detailing results of 3019 respondents from 100,000 questionnaires administered through *National Organization of Women* chapters, women's centers, church groups and magazines such as *Oui*, *Village Voice*, *Mademoiselle*, *Brides* and *Ms*. This report on female sexual behavior did not statistically report, however, the incidence of extramarital behavior. Nonetheless, similar to the efforts made by Kinsey and his associates, Hite followed her initial work with a second study focusing upon male sexuality. Hite again employed a more

qualitative flavor to survey research. Of 119,000 questionnaires distributed through clubs, church organizations, sports groups etc., 7,239 responses were received. Of the responding married men, 66% acknowledged participating in *extramarital sex* (Hite, 1981).

Editors of *Cosmopolitan* magazine developed a questionnaire for their readers and received a response of 106,000 completed surveys. Findings from the *Cosmo* survey concluded that 54% of 3032 married women conceded "having an affair outside marriage" (Wolfe, 1981).

Studies commissioned by popular magazines have been severely criticized for their methodology and the validity of their conclusions have been equally challenged (Greeley, Michael & Smith, 1990; Laumann et al., 1994; Leigh, Temple, & Trocki, 1993; Michael et al., 1994; Parkinson, 1991). The methodology of the magazine studies may well demand a cautious interpretation of their results. However, their efforts reintroduced the possibility for legitimate sexual research to the American culture and they provide the only significant data of sexual activity in the two decades following Kinsey.

Particularly when addressing charged topics such as sexuality and extramarital involvements, response to surveys must be viewed with some caution as participants may be resistant to reveal their authentic experiences. In efforts to minimize such bias, Johnson (1970a) developed a technique of asking participants to first respond to hypothetical questions regarding extramarital sexuality before replying to queries of their own behavior. Johnson (1970a) argued this method allowed subjects to rationalize their own behavior by first rationalizing a hypothetical situation. In a sample of 100 middle aged couples launching their children, Johnson (1970a) found only 20% of men and 10% of women to have experience with *extramarital coitus*. Johnson's subject pool reflected a well educated, middle class, mid-life population limiting the

representativeness of the sample. However, with the improved methodology, the study revealed a lower incidence of extramarital sex than reported in previous studies.

Maykovich (1976) compared extramarital behaviors among Japanese and American cultures. Maykovich (1976) reported 32% of the American sample experienced *extramarital sexual relations* at least once compared with 27% of the Japanese sample.

In a study seeking to uncover predictor variables of extramarital coitus in females, Bell, Stanley and Turner (1975) collected 2262 questionnaires. The researchers solicited assistance from 65 professionals from the National Council on Family Relations and the American Sociological Association by asking them to provide a survey instrument to married women of various ages and educational backgrounds. Bell, Stanley and Turner (1975) reported 26% of their sample to have had at least one *extramarital coital experience*.

Other studies considered male sexual behavior. Yablonsky (1979) and a team of over 100 sociology students administered a questionnaire to 771 married men across the country. The survey information supplemented in-depth interviews regarding extramarital sex. Yablonsky (1979) and his team reported 47% of their sample of married men acknowledging participation in *extramarital sex*.

Blumstein and Schwartz (1983) employed the practice of combining interviews with extensive surveys on a national scale. Blumstein and Schwartz (1983) used media coverage of their study as well as traditional sociological methods of canvassing various social, political, religious and service groups to gather their sample. Blumstein and Schwartz (1983) made 22,000 questionnaires available for potential participants and received 12,000 completed instruments by both members of a dyad that had lived together, been sexually active and considered themselves a couple. From the volunteered responses, 300 couples were selected to be interviewed who lived

within one hour of a research base in New York, San Francisco or Seattle (Blumstein & Schwartz, 1983). Extramarital sexual behavior was one small component of this extensive study of American couples. Of married couples in their sample, Blumstein and Schwartz (1983) found 26% of husbands and 21% of wives acknowledging at least one instance of *non-monogamy* since beginning the relationship.

The impetus for accurate assessment of sexual behavior was heightened in the 1980's by an increase in reports of sexually transmitted disease and AIDS related deaths. Researchers and scholars were interested in learning if sexually transmitted diseases had led to behavior change in sexual activity (Janus & Janus, 1993). Using a sampling plan endeavoring to select a sample paralleling United States census information, Janus and Janus (1993) distributed 4550 pilot tested questionnaires of which 2765 (61%) usable instruments were returned. Janus and Janus (1993) supplemented their quantitative efforts with 125 in-depth interviews. In response to queries about *extramarital sexual relationships*, Janus and Janus (1993) found 35% of married men and 26% of married women acknowledged such involvement. In addition, Janus and Janus (1993) found 56% of now divorced men and 59% of now divorced women had extramarital involvements while they were married. The gender variance pervasive in other descriptive studies was present in the married sample yet noticeably absent for the now-divorced group. Spanier and Margolis (1983) noted a similar gender pattern on a smaller scale by interviewing 205 individuals selected through divorce court records. Spanier and Margolis (1983) found that 39% of males and 38% of females participated in *extramarital coitus* while they were still married.

Greeley, Michael and Smith (1990) utilized a national sample of 1500 adults selected as an addendum to the 1988 General Social Survey produced by the National Opinion Research

Center. Defining monogamy as "no more than one sexual partner during the past year" (Greeley, Michael & Smith, 1990, p. 36), the researchers found 14% of sexually active women and 22% of sexually active men were *non-monogamous*.

Using the same addendum to the General Social Survey, Smith (1991) found that 2.1% of men and .8% of women had been with a sexual partner other than their spouse in the year before the survey. In a separate study drawing upon a household probability survey of 2058 adults, a few married males reported having sex partners other than their spouse in the last 30 days (1.8%), past year (4.4%) and past five years (8.5%) (Leigh, Temple & Trocki, 1993). Similarly, a minimal number of married females reported having sex partners other than their spouse in the last 30 days (.6%), past year (2.9%) and past five years (4.3%) (Leigh, Temple & Trocki, 1993). Drawing upon the National Survey of Men aged 20-39 years old (n=3321), Billy, Tanfer, Grady and Klepinger (1993) found 4% of married men had more than one partner during the previous year.

Frustrated by the use of convenience sampling rather than probability sampling, Laumann, Gagnon, Michael & Michaels (1994) undertook a project developing the *National Health and Social Life Survey*. Initially funded by government resources, private financial support maintained the project when government funding was removed. At a cost of nearly \$450 per participant, the Laumann et al. (1994) team of 220 interviewers conducted 3432 interviews and administered questionnaires to a nationally random sample. Laumann et al. (1994, p. 215) found 25% of men and 15% of women affirmed they had "had sex with some one other than [their] your husband or wife while you [they] were married". Analyzing the same data, Michael, Gagnon, Laumann & Kolata (1994) reported 96% of married individuals had 0 or 1 partner in the 12 months prior to survey while the remaining 4-5% had 2 or more partners.

In summary, a variety of studies since Kinsey et al. (1948, 1953) have considered the prevalence of extramarital behavior in American society. Data regarding extramarital behavior was often nested within a larger investigation of sexual behavior. The diversity of inquiries led to equally diverse findings. Estimates of male extramarital behavior range from 35% to 75% and estimates for female behavior range from 20% to 69%. Several factors may explain the variance. First, since Kinsey's pioneering work, the sexual practices of American culture has been influenced by the sexual revolution as well as by an epidemic of sexually transmitted diseases.

Second, methodological challenges face many efforts to assess sexual behavior. Despite large numbers of respondents, media based research has been highly criticized for extremely low response rates and a consequent volunteer bias in convenience samples. Greeley (1994, p.9) rebukes the admittedly well intentioned reports made by Kinsey (1948, 1953), Hunt (1974), Hite (1981), Wolfe (1981) and Janus & Janus (1993) stating, "these reports are to responsible social science what alchemy is to chemistry, phrenology to physiology, astrology to astronomy and magic to medicine." Further, the selection bias of many early research projects led to many samples composed largely of liberal individuals who distort their behavior (Sprenkle & Weis, 1976). Despite the shortcomings, these projects provide the only data regarding extramarital activity during the two decades to follow Kinsey. Additionally, sexual research has predominantly been conducted by male researchers. Efforts by researchers such as Hite, opened the door to alternative methodologies and provided a female voice in the meaning making process regarding sexual behavior and sex research.

Third, the definition of extramarital behavior varied from study to study. Despite variety in defining extramarital involvement, males were consistently reported as more involved in extramarital behavior. Thompson (1984), however, found much higher and more equitable

levels of incidence by including cohabiting couples and by expanding the definition of extramarital coitus to extramarital involvement. In a sample of 223 females and 155 males drawn from a phone directory, Thompson (1984) found males to report 45.8% extramarital involvement and females to report 42.2% extramarital involvement.

The tendency to consider the threshold of extramarital involvement as coitus is reflective of a male bias in defining sexuality (Glass & Wright, 1992, 1985) which tended to excluded emotional involvement and privilege coitus as the primary determinant of extramarital involvement. Emotional involvement evidenced by flirtation and sexual chemistry and masked in secrecy has indicated an intensive sharing of one with another (Glass & Wright, 1988). Lawson (1988, p.37) reported 40% of her 579 volunteer participants confirmed having a relationship they considered to be adultery despite fact they "never made love". Glass and Wright (1985) discovered male extramarital relationships to be more sexual and female relationships to be more emotional. Expanding the definition of extramarital behavior to include emotional involvement with some one other than one's spouse may balance the noted gender variance.

Fourth, many of the surveys were unable to express a lifetime incidence rate (Thompson, 1983). Young participants in the surveys and investigations who have remained monogamous may later involve themselves in extramarital activity. Reporting extramarital activity by age cohort may more clearly illuminate the meaning of reported incidence rates.

Assessing the prevalence of extramarital activity is a dubious task but obtaining reliable estimates is imperative to fostering accurate information regarding sexual activity. Current research drawing upon more national probability samples suggests marital fidelity is currently a standard for many in American culture (Greeley, 1994).

Predictor Variables of Extramarital Behavior

Attitude

While incidence rates of extramarital behavior varied among numerous studies of sexual behavior, the discrepancy between attitudes about extramarital activity and actual behavior is a consistent finding in the literature (Meyering & Epling-McWherter, 1986). Reported attitudes about extramarital involvement prove a poor predictor of extramarital practices because consistently, studies found far more people acknowledging extramarital activity than approving of it (Glass & Wright, 1992; Thompson, 1983). Maykovich (1976) compared attitudes and behaviors of 200 American and Japanese women and found no statistical difference in extramarital behavior but did note a statistical difference in attitude. The Japanese culture was less permissive of extramarital involvement compared to more liberal American culture. However, actual behavior was similar between cultures suggesting that in particularly restrictive cultures, reported attitudes about sexuality do not match behavior.

Although attitudes toward premarital sexual behavior has become much less restrictive, support for marital sexual exclusivity has remained fairly constant (Wiederman & Allgeier, 1987). Singh, Walton & Williams (1976) found 75% of respondents to the 1974 National Opinion Research Center data to report extramarital sex as "wrong". Reviewing attitudes in the 1970's, Glenn & Weaver (1979) found a general restrictiveness in attitudes toward premarital, extramarital, and homosexual behavior but also found an increasing permissiveness toward premarital sex, particularly among younger populations. Nearly a decade later, Lieberman (1988) found college students to be more accepting of extra-premarital sex than extramarital sex. Similarly, Sheppard, Nelson & Andreoli-Mathie (1995) more recently found infidelity in dating relationships to be more accepted by college students than marital infidelity.

While most continue to disapprove of extramarital coitus, no such consensus is evident regarding non-sexual extramarital activity (Weis & Felton, 1987; Weis & Slosnerick, 1981). Recent evidence indicates a perception that single individuals may find love and intimacy in extramarital relationships if only temporarily (Sprecher, Regan & McKinney, 1998). When marital satisfaction is absent from a relationship, extramarital activity is perceived as more justified (Taylor, 1986).

In summary, permissiveness regarding premarital sexual activity appears to have increased over time. A non-permissive stance toward extramarital activity, however, seems to be the norm. Reports of non-permissive attitudes may reflect a tendency of respondents to report attitudes they believe might be more socially acceptable.

Gender

Relative to other demographic variables, evidence indicates gender has been predictive of extramarital coital behavior. Males tend to be more inclined than females to be more accepting, anticipatory, engaging and justifying of extramarital activity (Buss & Shackelford, 1997; Buunk & Bakker, 1995; Greeley, 1994; Johnson, 1970(b); Pestrak, Martin & Martin, 1985, Meyering & Epling-McWherter, 1986; Sheppard, Nelson & Andreoli-Mathie, 1995). Evidence also suggests, however, the disparity in inclination toward extramarital behavior has been shrinking (Buunk, 1995) as more recent studies find less variance between the genders in reports of involvement in extramarital activity.

While the differences between the sexes regarding the inclination toward extramarital behavior may be diminishing, evidence indicates the motivation, justification and experience of extramarital activity remains somewhat dichotomous. Glass and Wright (1985) contend physical or sexual motives guide male extramarital experience while emotional motives guide female

experiences. Reiss, Anderson and Sponaugle (1980) similarly contend male extramarital relationships tend to be pleasure motivated compared to more affection oriented female partnerships. Johnson (1970b) found husbands who participated in extramarital intercourse, had a lower degree of sexual satisfaction in their marriage than husbands refraining from extramarital sex yet this association was absent among wives. When considering justification of extramarital behavior, men approve of sexual reasons for extramarital activity while females tend to be more accepting of emotional justifications (Glass & Wright, 1992). When considering infidelity of their marital partner, men exhibit greater psychological and physiological distress conjecturing their mate's sexual non-monogamy while women reflect greater distress conceiving of their spouse's extramarital emotional involvement (Schackelford & Buss, 1997). The emotional component of female extramarital involvement is more likely to lead to a new committed relationship (Blumstein & Schwartz, 1993; Sprecher, Regan, & McKinney, 1998). The emotional-sexual dichotomy is evident even before marriage. College men are more likely to be involved physically in extra-premarital relationships while female extra-premarital involvement tends to be more emotionally oriented (Sheppard, Nelson & Andreoli-Mathie, 1995).

Levant (1997) contends male sexuality is often nonrelational thereby minimizing the need for intimacy or connection with their partners. Consequently many men possess a mild form of alexithymia, or a lack of words for emotion (Levant, 1997). Similarly, Gottman (1994) contends men physiologically have a more difficult time tolerating emotional upset. Whether socially determined, genetically informed or a combination of both, the experience of sexual behavior and the inclination and motivation for extramarital involvement appears to be motivated by gender.

Despite the large number of studies categorizing sexual practices and preferences by gender, some caution is required in interpreting the apparent disparity between the genders. First, if men are consistently depicted as having more extramarital sex, it is logical to then wonder with whom these men are having extramarital sex. It should follow that if men are having extramarital sex, they are having extramarital sex with women or other men. Perhaps, females are less apt to acknowledge to investigators they have been involved in an extramarital relationship because they have more to lose given the inequality that persists in many marriages. If men are having more extramarital sex than women, then it follows that many women are sexually active with a number of men. Prostitution and commercial sex may explain the variance in experience across genders. Perhaps women report emotional involvement over sexual desire because sexual scripts dictate that it is "unnatural" for women to be as motivated by sex as men. Perhaps men and women define what constitutes an extramarital event differently than men. And, perhaps, men and women are "wired" differently and/or socialized differently. Regardless, some caution is required in interpreting the results of gender oriented studies.

Marriage Characteristics

Though marital satisfaction is among the most investigated predictors of extramarital relationships (Buss & Schackelford, 1997), empirical evidence considering the association of marital satisfaction with extramarital involvement is mixed (Glass & Wright, 1988). Neubeck and Schletzer (1962) found no significant association of marital satisfaction with extramarital intercourse. In a study of 2,262 married women, Bell, Turner & Rosen (1975) found participants rating their marriage as fair, poor or very poor also reported higher rates of extramarital coitus and more predictively than demographic variables such as age, education and religious background. Bell, Turner and Rosen (1975), however, further noted many women who rated

their marriage positively also participated in extramarital coitus. Johnson (1970b) found husbands with extramarital coital experience had a lower degree of sexual satisfaction and marital adjustment compared to husbands without such experience. Edwards & Booth (1976) concluded when marital satisfaction is perceived as low, extramarital sex is more likely to occur. Blumstein and Schwartz (1983) found no difference in sexual frequency between monogamous and non-monogamous groups. Glass & Wright (1985) found participants who combined emotional and sexual extramarital involvement reported the greatest marital dissatisfaction compared to the dissatisfaction levels of extramarital participants in either sexual-type or emotional-type extramarital relationships.

The proclivity of marital satisfaction to indicate extramarital involvement may be mediated by other variables. Reviewing extramarital literature, Thompson (1983) contends evidence suggests marital variables offer a strong relationship to extramarital sexual activity especially when combined with variables such as personal alienation. Glass & Wright (1985) found marital dissatisfaction to be correlated with extramarital activity but found the association predominantly stronger for women. Reiss, Anderson & Sponaugle (1980) postulated a path model of determinants of extramarital permissiveness explaining 17% of variance. Saunders and Edwards (1984) exchanged demographic variables with marital satisfaction and dyadic independence variables thus improving the Reiss, Anderson & Sponaugle (1980) model to explain 34% of variance for females but only 16% of males. Consequently, the evidence tends to suggest marital satisfaction more likely influences the climate toward extramarital involvement for women than men. For many women, the marital arrangement remains a place of gender inequality in that marriage often has more benefits to offer men than women (Dryden, 1999). In

an oppressive and unequal environment, it is logical to assume women would report a higher degree of marital dissatisfaction than men.

Social Background and Demographic Attributes

Compared to the observable gender differences in extramarital activity, most demographic and social background variables such as age, religion, and political orientation prove poor predictors of extramarital activity (Bell, Turner, & Rosen, 1975; Buss & Shackelford, 1997; Edwards & Booth, 1976; Glass & Wright, 1992; Singh, Walton, & Williams, 1976; Spanier & Margolis, 1983; Thompson, 1983). Some studies have demonstrated some association between premarital sexual permissiveness and a liberal oriented lifestyle with extramarital permissiveness or activity (Bell, Rosen & Turner, 75; Singh, Walton & Williams, 1976). Those with numerous partners prior to marriage anticipate a variety of partners after marriage (Bukstel, Roeder, Kilmann, Laughlin, & Sotile, 1978; Buunk & Bakker, 1995). In addition to personal factors, the influence of a social group has also been shown to influence extramarital behavior. Buunk & Bakker (1995) found individuals participating in extramarital behavior report their friends are more likely to do the same.

While marital satisfaction, permissiveness and behavior prior to marriage may create a conducive environment for extramarital behavior, opportunity provides a catalyst for the realization of extramarital involvement. Assuming a personal level of readiness for extramarital activity, more opportunities for extramarital involvement increases the likelihood of its occurrence (Blumstein & Schwartz, 1983). Johnson (1970b, p. 455) found "opportunity for EMI [extramarital involvement] is quite crucial in the analysis of extramarital sexuality". Clergy with a psychological proclivity and a personal readiness for extramarital involvement increase their likelihood of realizing such behavior with increased circumstantial opportunity for involvement

(Thoburn & Balswick, 1993). Greeley (1994) has proposed the increasing number of women in the workforce compared to previous decades implies an increase in sexual opportunity (Greeley, 1994). Women, however, have always participated in the workforce. Perhaps, the significant difference of contemporary society has been the increase of women in positions of paid employment. Consequently, women experience more personal power through greater financial independence.

Education level may also increase the likelihood for extramarital opportunity. Reiss, Anderson and Sponaugle (1980) found a direct association between education and extramarital permissiveness. Michael et al. (1994) found more educated people had more partners over their life time. Halper (1988) found 88% of men in high income and professional positions had an extramarital relationship. Individuals with higher income and education likely have greater control of their time and thereby increase their opportunity for extramarital involvement particularly for those with other social proclivities and influences toward extramarital involvement. Halper's findings, however, also point to an issue of power. Men with high income, unaccounted time and social status wield power and may express power through involvement in more extramarital relationships.

While demographic variables in general are relatively poor independent predictors of extramarital involvement, they appear to point indirectly to issues of personal power which may be related to the likelihood of extramarital involvement.

Physiological Factors

Despite the enormous variety in sexual expression across cultures, the neurophysiology and mechanics of sexual intercourse are biologically determined and essentially universal within the human experience (DeLamater, 1987). Research by anthropologists, sociobiologists and

evolutionary psychologists has endeavored to demonstrate the importance of the physiological component of sexuality in the interpretation of extramarital sexuality. Their research frequently considers the naturalness or unnaturalness of monogamous human sexual behavior.

Symons (1987) argues the natural selection process of evolution leads to differences in the nature of male and female sexuality. Males seek sexual diversity to increase reproductive success yet strive to maintain sexual fidelity to ensure reproductive success is not diminished by an alternative male (Symons, 1987). Alternatively, females risk losing the attention of their partner to another female which minimizes the male's investment in her and their offspring (Symons, 1987). Some zoologists suggest, however, multiple partners for females has an evolutionary adaptive advantage as the highest quality sperm is involved with conception (Mason, 1991). Females have been found to be most active extramaritally just prior to ovulation which is their most fertile period (Mason, 1991). Buss (1995) summarizes findings demonstrating the tendency for males to seek variety while expecting fidelity. Specifically, Buss (1995) reports men tend to seek 18 partners in a lifetime compared to women who prefer 4 to 5; 75% of men and 0% of women approached by an attractive stranger in a study, consented to sex; and physiologically, men are more upset by sexual infidelity while women are more upset by emotional infidelity.

From the perspective of evolutionary psychology, males seek, through natural selection, to increase paternity in their offspring, while females seek reliable resources (Buss, 1997). Fisher (1992, p. 154) theorizes human pair-bonds "originally evolved to last only long enough to raise a single dependent child through infancy, the first four years, unless a second child was conceived." Consequently lust, romantic attraction and attachment ensued. Fisher contends a sex drive motivates a search for a partner, attraction refines attention toward mating and attachment

allows partners to tolerate one another to rear their child (Black, 1998). Phenylethylamine (PEA), a hormone creating an "in love" experience, has been found to increase when desirable mates are near, consequently providing individuals with a natural high for days and even years (Staheli, 1997). After PEA levels return to normal, the endorphin oxytocin enhancing attachment and security by reducing pain and fear (Staheli, 1997). Consequently, the hormonal process serves species preservation by enabling pair-bonds to foster the protection of progeny.

PEA and oxytocin are not the only hormones or chemical agents associated with sexual behavior. Booth & Dabbs (1993) found men with high levels of testosterone were more likely to have experienced marital difficulty and to have participated in extramarital activity with at least three people other than a spouse. Evidence suggests early physical maturity among adolescent boys along with other variables leads to early onset of sexual intercourse in adolescents (Capaldi, 1996). Given the association of premarital activity with future extramarital involvement (Bell, Rosen & Turner, 75; Bukstel, Roeder, Kilmann, Laughlin, & Sotile, 1978; Buunk & Bakker, 1995; Singh, Walton & Williams, 1976), testosterone levels, from a purely physiological point of view, may directly and indirectly influence extramarital involvement by increasing a biological drive for such behavior. Such conclusions, however, may prove somewhat precarious as it implies human behavior is a function of biological urges and minimizes the role of personal responsibility.

Small (1995) contends culture mediates our biological impulse. From a biological and evolutionary stance, temporary sexually exclusive pair bonds serve the propagation of the human species by ensuring parental nurturance for offspring (Fisher, 1992; Small, 1995; Symons, 1987). Many researchers of human sexuality (Atwater, 1982; Boylan, 1971; Hunt, 1969; Kinsey et al., 1953; Leigh, 1985; Fisher, 1992; Magar, 1972; Small, 1995; Symons, 1987; Vaughn, 1998) have

argued lifelong sexual exclusivity is an unnatural state and an unrealistic expectation for the human species. Whether to embrace the human affinity for sexual variety or to assuage the biological impulses for diversity is without consensus. Considering life-long sexual exclusivity as unnatural challenges the *naturalness* of marriage itself and depicts marriage as an oppression to natural human expression. Perhaps the commitment to an unnatural union expressed in part by sexual exclusivity is what makes marriage a potential place for safety, trust, connection, intimacy, etc. Biology is undoubtedly relevant to an understanding of human sexual endeavor. However, biological differences between the genders does not obligate our society to perpetuate sexual inequality nor exclusively inform sexual meaning to human psyche and culture (Weeks, 1985).

Psychological Characteristics

In a review of extant extramarital literature, Thompson (1983) indicated personal readiness characteristics, primarily opportunity and personality variables reflect the strongest relationship to extramarital sex compared to marital, gender and social background variables. However, a paucity of research exists examining personality factors (Buss & Shackelford, 1997) or internal dynamics (Strean, 1980). Buss and Shackelford (1997) found narcissism, low conscientiousness and high psychoticism to be strong predictors of anticipated extramarital sexuality.

Other psychological and relational factors demonstrate influence toward extramarital behavior. Neubeck and Schletzer (1969, p.149) investigated strength of conscience, a measure of the "similarity of the subject to a group of persons whose main difficulty lies in their absence of deep emotional response, their inability to profit from experience, and the disregard of social mores." Neubeck and Schletzer (1969) found an association of low strength of conscience to

extramarital sexual involvement. Whitehurst (1969) found individuals involved in extramarital relationships to have higher reports of alienation experienced as powerlessness, meaninglessness and social isolation. Low levels of self-esteem and worthiness are associated with extrarelatonal behaviors (Sheppard, Nelson, & Andreoli-Mathie, 1995; Thoburn & Balswick, 1994).

Brown (1991) suggests extramarital relationships are less related to sexuality and more related to managing fear, anger, disappointment and emptiness. The romantic myth (Strean, 1980; Lawson, 1988; Vaughn, 1998) idealizing love and marriage distracts developmental psychosocial tasks (Strean, 1980) and temporarily protects the self from criticism and rejection until the romance fades. When the comfort of romance fades, an individual may face the emerging awareness of self or move to find a new partner to experience the romantic phase again.

Types of Extramarital Relationships

Extramarital involvement varies tremendously. Lampe (1987) proposed at least seven behavioral dimensions of extramarital relationships which may vary in expression. Specifically, Lampe identified the nature of the sexual behavior, the level of consummation, the awareness of the partner's marital status, the affective involvement, the volitional willingness to participate, the level of secrecy and the frequency of the activity. Efforts by researchers, clinicians and authors to categorize extramarital involvement has led to a plethora of extramarital typologies. Table 1 lists a variety of typologies of extramarital involvement. A popular means of categorizing extramarital involvement has been by the level of emotional and sexual involvement (Atwood & Seifer, 1997; Glass & Wright, 1992; Staheli, 1997; Thompson, 1984). Others have been categorized by motivation, knowledge of spouse, and relationship length.

Table 1

<u>Typologies of Extramarital Involvement</u>		
<u>Author</u>	<u>Typologies</u>	<u>Typology Characteristics/Example</u>
Atwood & Seifer, 1997	1. Sexual but not emotional	1. primarily sexual, one night, prostitution
Glass & Wright, 1992	2. Sexual and emotional	2. more relational intensity
Staheli, 1997	3. Emotional but not sexual	3. primarily emotional, little sexual activity
Thompson, 1984		
Brown, 1991	1. Conflict Avoidant	1. involved spouse discovered to indicate problem
	2. Intimacy Avoidant	2. romantic fantasy prevents real intimacy
	3. Sexual Addictions	3. fill emotional neediness with conquests for love
	4. Empty Nest addictions	4. married to gain security but marriage feels empty
	5. Out the door addictions	5. diminishes recrimination for ending marriage
Cuber, 1969	1. Type I	1. compensation for frustration in marriage
	2. Type II	2. compensation for absent spouse (ill, work, military)
	3. Type III	3. disregard for commitment
Lawson, 1988	1. Parallel	1. relation known by spouse but tacitly condoned
	2. Traditional	2. relationship not known by spouse
	3. Recreational	3. open marriage, swinging
Leigh, 1985	1. Hit and run	1. one night stands
	2. Commercial sex	2. use of prostitution
	3. Secondary relationship	3. long term relationship with another person
Lusterman, 1997	1. Sexual identity affairs	1. affairs to minimize conflicted sexual identity
	2. Sexual addiction	2. compulsive need to engage in sexual activity
	3. Exploratory affairs	3. more deliberately motivated
	4. Tripod affairs	4. for those electing to stay in unhappy marriage
	5. Retaliatory affairs	5. affair as an act of retaliation
	6. Exit affairs	6. participants have already decided to leave marriage
Pittman, 1989	1. Accidental encounter	1. relationships which "just happened"
	2. Habitual philandering	2. intentionally seeking outside relationships
	3. Romantic affairs	3. removes the involved to a place of fantasy
	4. Marital arrangements	4. open marriage, illness etc

Summary and Conclusion

Literature regarding extramarital involvement has been primarily descriptive in nature, endeavoring to determine the prevalence of extramarital involvement and to categorize types of involvement. The task of simply considering the prevalence of extramarital activity is complicated by methodological challenges and a lack of consistent definition of what even constitutes extramarital involvement.

With increasing technologies, more controlled methodologies have been employed in more recent studies. More contemporary investigations demonstrate a mild level of extramarital involvement relative to findings made by early pioneers in sexual research such as Kinsey and his associates.

Research efforts have considered various variables predicting the likelihood of extramarital activity. These variables, however, have been primarily demographic or sociological in nature. Admittedly more difficult to measure, more research is needed to consider various intrapsychic and cognitive process variables.

Model development is complicated by great diversity in research findings. Future models will need to incorporate finding from sociological, psychological and physiological perspectives.

It is additionally important to note, much of the research conducted to understand extramarital involvement has been done by males. Although the double standards evident in Kinsey's era have diminished somewhat with the accomplishments of feminism, the marital relationship arguably remains inequitable in many instances. Need remains for research informed by a greater understanding of the female voice in the marital context.

CHAPTER III

METHODOLOGY

Overview

For the present study, involvement with specific extramarital behavior was hypothesized to be negatively associated with differentiation of self. The study utilized a survey research design (Fowler, 1993; Nelson, 1996) employing a mailed questionnaire (See Appendix C for questionnaire) to gather data regarding measures of differentiation and specific extramarital involvement. Surveys were mailed to randomly selected alumni of Virginia Polytechnic Institute and State University. The survey included the Differentiation of Self Inventory (Skowron & Friedlander, 1998) (see Appendix D for inventory). Additional components of the survey were constructed from questionnaires previously used by researchers (Johnson, 1970(a); Laumann et al., 1994; Yarab, Sensibaugh & Allgeier, 1998). Data from returned surveys were recorded and analyzed using *SPSS Graduate Pack 9.0 for Windows* computer software. Logistic regression procedures were applied to the response data to test the hypotheses. When no predictive relationship was found to exist for the respondent sample between differentiation of self and extramarital involvement, logistic regression procedures were applied to alternative predictor variables including attitudinal, demographic, relational and behavioral variables.

Population and Sample

A probability sample was drawn from the 1998 Virginia Tech Alumni Directory with the permission of the Virginia Tech Alumni Association. The Virginia Tech alumni population was selected primarily because of its availability to the investigator as a graduate student at Virginia Tech. Given the personal nature of the topic under investigation, it was assumed an improved response rate might be realized by addressing participants with a modest level of connection with

the investigator. Sample participants were selected from the Virginia Tech Alumni Directory by using random sampling procedures.

A level of heterogeneity is sacrificed by utilizing the Virginia Tech Alumni population. As graduates of a comprehensive university, the research sample by default, represents higher education levels than the general national population. Given the cost of higher education, it is reasonable to assume the research population reflects at least a modestly higher socioeconomic level relative to the general population. While Virginia Tech alumni are scattered world-wide, a sizeable portion live in the eastern section of the United States.

Anticipating the use of confirmatory factor analysis to assess the construct validity of the instrument measuring differentiation of self, a response rate yielding at least 150 responses was preferred. Assuming a relatively low yield given the nature of the topic, 700 names were initially identified to be mailed the survey. Assuming a number of surveys would be returned due to incorrect addresses, a backup list of an additional 200 names was selected to replace surveys returned with incorrect addresses.

Instrumentation

Dependent Variable

As noted earlier, there is little agreement regarding what behaviors specifically constitute extramarital involvement. Consequently, the nine separate hypotheses represent different acts of extramarital involvement. Yarab, Sensibaugh, and Allgeier (1998, p. 45) identified behaviors "which men and women define as unfaithful acts in context of committed dating relationships." While the research of Yarab, Sensibaugh and Allgeier considered dating relationships, the behaviors they identified provided a list of specific behaviors as potential examples of extradyadic involvement. Specifically, six sexual behaviors, two indicators of romantic attraction

and one example of flirting identified by Yarab, Sensibaugh and Allgeier were utilized as measures of involvement for specific extramarital behaviors. Survey respondents were asked to indicate "yes" or "no" if they had experienced any of the sexual or romantic behaviors with some one other than their spouse while they were married. Respondents who have never married were asked to indicate "yes" or "no" if they experienced any of the identified behaviors with some one who was married to some one else at the time. The specific behaviors match the proposed hypotheses of the study and include: casually flirting, having romantic feelings, having a deep romantic attachment, kissing, passionately kissing, engaging in sexual play (breast or genital petting), performing oral sex, receiving oral sex and having engaged in sexual intercourse. Each of the nine dependent variables, thus is a dichotomous categorical variable identifying the presence or absence of involvement for each behavior. The number of different partners for each event was also assessed.

Independent Variable

The level of differentiation of self constitutes the independent variable for each hypothesis. Despite the wide acceptance of Bowen's construct of *differentiation of self* by practicing clinicians, instrument development to measure differentiation has been sparse at best (Haber, 1993). Skowron and Friedlander (1998), however, have developed the *Differentiation of Self Inventory* (DSI) which was utilized in this study. The 43-item assessment contains four subscales including Emotional Reactivity, I-Position, Emotional Cutoff and Fusion With Others. The 11 items of the Emotional Reactivity subscales assess the degree of emotional flooding, lability and hypersensitivity in response to environmental stimuli. The 11 item I-Position subscale assesses the ability to adhere to personal convictions when pressured to do otherwise and reflects a clearly defined sense of Self. The 12-point Emotional Cutoff subscale reflects

feeling threatened by intimacy and experiencing excessive vulnerability in relationships with others. The 9 item Fusion with Others subscale reflects over-involvement with others and includes triangulation and a tendency to over-identify with parents.

Each item has a 6 point Likert response from 1 and 6, 1 reflecting "not at all true of me" and 6 reflecting "very true of me". The DSI full scale score (see Appendix E) is determined by reverse scoring specific items, then by summing the scores and finally by dividing by the number of items. Final scores range between 1 and 6. Higher scores reflect greater differentiation. Scores for subscales are computed in the same manner. Cronbach alpha scores estimated internal consistency for the full scale and subscales (DSI $\alpha = .88$, Emotional Reactivity $\alpha = .84$, I-Position $\alpha = .83$, Emotional Cutoff $\alpha = .82$, and Fusion With Others $\alpha = .74$).

Confirmatory factor analysis was conducted by Skowron and Friedlander (1998) to assess the four structure model of the DSI. For each of the subscales, single items of the DSI were randomly summed into meta items to create three indicators for each subscale or factor. This was accomplished by randomly dividing scale items into three groups, summing the items for each group and dividing by the number of items to create an estimator for each factor. Goodness of fit and adjusted goodness of fit indices along with root mean squared of the residual scores all indicated a well fitting model and thus supported the four factor structure of the DSI.

Additional Independent and Demographic Variables

Other variables were included in the development of the survey. Johnson (1970a), for example, noted obtaining reliable reports of sexual activity proves to be a difficult task. Johnson (1970a), however, demonstrated that utilizing projective and fantasized indices before queries about extramarital involvement is likely to enhance the reliability of reports of extramarital activity. To that end, the initial questions of the survey utilized projective and fantasized

questions developed by Johnson (1970a). Specifically, eight reasons were listed identifying reasons people have used to justify sexual involvement. Respondents were asked to rate between 1 (completely unjustified) and 5 (completely justified) the extent to which the reasons justified involvement in extramarital relationships. Secondly, a brief scenario was described asking respondents to imagine their spouse and the spouse of a close friend of the opposite sex was out of town. Respondents were asked to rate between 1 (totally rejecting) and 5 (totally accepting) how rejecting or accepting they would be of participating in certain behaviors ranging from spending an evening with each other to becoming sexually involved. While the central intent of the above questions was to methodologically prepare participants to more accurately respond to questions of sexual involvement, the two series of questions offer a crude scale of justification of extramarital behavior and a scale of acceptance of extramarital behavior by simply summing the scores of each series of questions.

Demographic information regarding gender, age, marital status, income, education, ethnicity, religious affiliation, and political orientation was collected in the second section of the questionnaire. Demographic questions were extracted from survey instruments of previous studies (Bell, Turner, Rosen, 1975; Blumstein & Schwartz, 1983; Janus & Janus, 1993; Michael et al., 1994). The categorical ethnicity variable reflected categorization used by the United States Census Bureau. The age of the respondent was determined mathematically. Respondents were asked to report their date of birth. Age was determined by subtracting the reported birthdate from May 1, 2000.

Earlier involvement in sexual activity and a greater number of partners before marriage has been associated (Bell, Rosen & Turner, 75; Bukstel, Roeder, Kilmann, Laughlin, & Sotile, 1978; Buunk & Bakker, 1995; Singh, Walton & Williams, 1976) with greater propensity toward

extramarital involvement. The ages respondents first participated in passionate kissing, sexual play, oral sex and intercourse were collected along with the number of partners for each event as potential predictors of extramarital involvement.

Marital history variables such as the number of marriages, length of marriage(s), age at each marriage and the outcome (divorce or widow) of ended marriages were collected by a brief marital history chart developed by Blumstein and Schwartz (1983). For each marriage, the marriage date was requested as well as the date of divorce or partner death. Length of each marriage was computed by subtracting the divorce or partner death date from the marriage date. The age at each marriage variable was computed by subtracting the birthdate variable from marriage date.

Some couples openly discuss their expectations regarding extramarital involvement and others do not. Some couples elect to have an open marriage arrangement and others do not. A single question asked clients to identify if they have discussed expectations about extramarital activity with their spouse or not and if the couple tolerates some extramarital activity or not.

Two variables addressed opportunity for extramarital involvement. Respondents were asked to report between 1 (strongly disagree) and 5 (strongly agree) if their daily activities made it possible to conceal extramarital involvement and if their daily activities exposed them to opportunities for extramarital involvement.

Data Collection Procedures

Utilizing random sampling procedures, a sample of 700 Virginia Tech alumni was selected from the 1998 Virginia Tech Alumni Directory. Four of the original 700 names were immediately replaced with names from the back-up list because of an international address. It was determined that surveys sent to international destinations would complicate mailing

procedures. Further, a questionnaire regarding sexuality may be less well received in non-western cultures and might even endanger recipients. A fifth name was additionally replaced because the address identified the recipient as a resident of a nursing home. Names and addresses of the randomly selected alumni were recorded in a *Microsoft Excel '98* computer file. The selected names were then merged with an introductory form letter (see appendix A for introductory letter) introducing the potential respondent to the project and asking for their participation. An informed consent form detailing the purpose, procedures, confidentiality, anonymity, risks and benefits of the project along with the freedom to withdraw was included in the initial mailing (see Appendix B for informed consent form). To protect participant anonymity, two return envelopes were provided to the participants. One smaller, No. 9, business sized envelope, was provided for participants to enclose and seal their consent form. The No. 9 sized envelope was then returned with the completed questionnaire and opened separately so that no association could be made between the informed consent document and the questionnaire. The introductory letter, the survey instrument, a stamped response envelope, a No. 9 envelope and the informed consent document were mailed to the 700 randomly selected alumni of Virginia Tech University.

Data from the returned instruments was entered into *SPSS Graduate Pack 9.0* statistical software program. Twelve cases had failed to complete a particular item of the DSI instrument. Given the measure of differentiation is based upon a sum of items, missing values were replaced by determining the mean response of all respondents for that item and replacing the blank value with the determined mean. Five additional cases had two responses for one item followed shortly thereafter by a blank item. It was assumed the respondent fell "off track" in circling

responses to the appropriate item. These cases were left blank and considered as missing data in analyses.

Data Analysis

To assess the characteristics of the respondent sample, descriptive analyses considering frequencies and means for responses were conducted upon dependent, independent and demographic variables.

After considering descriptive analyses of the data, reliability and validity testing was conducted for the DSI instrument. Cronbach alpha's were determined for the DSI full scale and the DSI subscales to address reliability of the DSI. Confirmatory factor analysis was then conducted using *Lisrel 8.3 Student Version* computer software to evaluate the construct validity of the four factor model of the DSI.

Confirmatory factor analysis procedures utilized by Skowron and Friedlander (1998) in assessing validity were replicated. In the present study, for each of the four DSI subscales, 3 to 4 single items were summed into meta-items to create 3 indicators per subscale and 12 total indicators. The procedure for summing individual subscale items into meta-items involved summing the 3 or 4 specific items and dividing by the number of items per indicator. Correlations for the meta indicators were then determined. Correlations were then entered into a Lisrel 8.3 software system to assess goodness of fit indices.

Results of the confirmatory factor analysis, however, indicated an improper solution with a negative estimate for a particular indicator and another estimate greater than one. A principal-components factor analysis of the DSI was then conducted using an orthogonal rotation identifying factors with eigenvalues greater than 3.0 and factor loading greater than .40. Two factors emerged from this factoral analysis rather than four. Thirteen items of the DSI with

loadings less than .40 were then eliminated and a DSI score was recalculated using the remaining 30 items.

A confirmatory factor analysis was then repeated as above using, however, a more parsimonious two factor model. Desired fit indices assessing goodness of fit include the goodness of fit index $> .90$, the adjusted goodness of fit index $> .80$ and root mean squared of the residuals $< .10$. The more parsimonious, 2 factor model fit extremely well. With fewer parameters, the model is less susceptible to improper solutions. The correlation between the revised and the old DSI full score was extremely high (.97). Therefore, the original DSI full score was trusted because it a) correlated extremely well with the well fitting two factor model and b) had been previously validated by the authors of the instrument using confirmatory factor analysis.

Univariate Logistic Regression was utilized to test the stated hypotheses. Logistic regression is one of the principal tools of analysis for non-linear relationships involving one or more continuous predictor variables and a dichotomous outcome variable (Cizek & Fitzgerald, 1999). Beta coefficients in logistic regression represent the change in log odds of the dependent variable occurring with a one unit change in the predictor variable (Cizek & Fitzgerald, 1999). The exponentiated Beta coefficient is a bit easier to interpret. An $\text{Exp}(B)$ equal to 1 indicates no change in the odds of the dependent variable occurring with change in the predictor variable. Values of $\text{Exp}(B)$ greater than one indicate increased odds of the dependent variable occurring and values of $\text{Exp}(B)$ less than one indicates a decrease in the odds of the dependent variable occurring (Cizek & Fitzgerald, 1999). Each hypothesis was systematically tested with differentiation as the independent variable and the extramarital behavior as the dependent variable. This process was then repeated for each gender in the sample. When differentiation

failed to predict extramarital behavior, alternative predictors from other independent variables were tested. Potential predictor variables were determined by examining the correlation of other independent variables available in the project with the occurrence of extramarital intercourse variable.

CHAPTER IV

RESULTS AND DISCUSSION

Overview

The purpose of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. To draw trusted conclusions about the relationship of differentiation and extramarital involvement, the validity and reliability of the measure of differentiation was first evaluated before undertaking regression analyses. To accurately assess the generalizability of the results, it is equally important to have a sense of how well the sample population represents the population as a whole.

Response to Survey

An initial mailing of 700 surveys was mailed to randomly selected alumni of Virginia Polytechnic Institute and State University. A total of 85 (12.14%) surveys were directly returned with incorrect or outdated addresses. For each survey returned by the United States Postal Service with an incorrect address, a new survey was sent to another Virginia Tech Alumni from a back-up list. Of the 700 surveys which reached alumni, 125 (17.86%) usable surveys were returned. An additional 14 (2%) surveys or empty envelopes were returned by recipients declining to participate. The total 19.86% response rate represents a modest return at best. While there is no standard for a minimum response rate (Fowler, 1993), a 60-80% return rate is preferred to minimize error and increase statistical power (Nelson, 1996). Response rates below 20% tend to reflect a very strong self-selection bias (Fowler, 1993). Fowler (1993) has suggested that respondents of survey research typically respond because of a particular interest in the subject matter. In the present study 78 (62.4%) of the respondents accepted an invitation to

receive the results of the study. This indicates a strong interest in the research subject by respondents.

The low response rate creates an additional problem. Some statistical procedures such as confirmatory factor analysis rely upon a sufficiently large sample. Like the response rate, however, there is no agreed upon minimum. Some have suggested 200 cases as a minimum, while others suggest 5 to 10 cases per estimated parameter (Crowley & Fan, 1997). While the response rate of the present study does create concerns, a limited response rate is anticipated from survey research querying participants about their involvement in extramarital activity. For the present study, no follow-up mailings nor contact was made to non-responding alumni because of a desire to not pressure or offend alumni.

Characteristics of Respondents

Demographics

Gender, age, marital status, ethnicity, income, education, political affiliation and religious affiliation variables offer descriptive demographic information regarding the responding sample. Laumann, Gagnon, Michael & Michaels (1994) conducted the National Health and Social Life Survey. Although expensive, the NHSLS study achieved an 80% response rate utilizing probability sampling procedures to sample the non-institutionalized adult US population between 18 and 59 years old. Because some questions from the NHSLS study were utilized for the present study, comparisons may be drawn between the respondents of the present study and the NHSLS study. Such comparisons indicate how well the sample from the present study reflect national norms on certain demographic variables and point toward the generalizability of the results.

Table 2 reflects the marital status of respondents of the present study and the NHSLs study. The present study of Virginia Tech alumni represents a much higher currently married

Table 2

<u>Marital Status of Respondents and Comparison to NHSLs National Sample</u>		
Category	Virginia Tech Sample	NHSLs Sample
Never Married	12.8% (n=16)	28.2%
Married, First Marriage	65.6% (n=82)	
Remarried, Second or >	12.8% (n=16)	
Married but Separated	.8% (n=1)	2.3%
<i>(Married or Remarried)</i>	79.2% (n=99)	53.3%
Single, Divorced	4% (n=5)	13.9%
Single, Widowed	4% (n=5)	2.3%
Total N	125	3140

Note: Source for NHSLs Sample: (Laumann, Gagnon, Michael & Michaels, 1994, Appendix B).

population than the NHSLs study. However, the present study selected college alumni from a two year old directory. Therefore, the lowest age of any respondent is likely to be approximately 23 years. Alternatively, the NHSLs study drew its sample from individuals 18-59 years old. Since the Virginia Tech samples is on average slightly older than the NHSLs study, it is reasonable to expect a higher percentage of married individuals in the Virginia Tech sample. The NHSLs sample also depicted a much higher divorced population than the Virginia Tech sample. This may further indicate a self-selection bias among respondents of the present study. Divorced individuals of the present study may have been more likely to have experienced extramarital involvement and elected not to respond.

Table 3 depicts the ethnicity of the respondent sample in comparison to the NHSLs study. The Virginia Tech sample represents a much higher proportion of white respondents compared to national sample. Ethnic diversity among the Virginia Tech alumni was unknown for this study. However, recent (Fall, 1998) on-campus enrollment reflects a Virginia Tech population that is 82.4% white, 4.1% Black, 5.8% Asian or Pacific Islander and 1.8% Hispanic

Table 3

<u>Ethnicity of Respondent Sample</u>		
Category	Virginia Tech Sample	NHSLs Sample
White, Caucasian	92.8% (n=116)	76.5%
Spanish, Hispanic, Latino-Puerto Rican	.8% (n=1)	
Spanish, Hispanic, Latino-Cuban	.8% (n=1)	
Spanish, Hispanic, Latino-Mexican American, Chicano	1.6% (n=2)	
<i>(Spanish, Hispanic, Latino Total)</i>	<i>3.2% (n=4)</i>	7.5%
Black, African American, Negro	1.6% (n=2)	12.7%
Asian Indian	.8% (n=1)	
Filipino	.8% (n=1)	
Other	.8% (n=1)	
<i>(Asian Indian, Filipino, & Other)</i>	<i>2.4% (n=1)</i>	3.3%
Total N	125	3159

Note: Source for NHSLs Sample: (Laumann, Gagnon, Michael & Michaels, 1994, Appendix B).

which more closely resembles the Virginia Tech sample of the present study. None-the-less, the sample remains over representative of a white population.

Table 4

<u>Religious Affiliation of Respondent Sample</u>		
Category	Virginia Tech Sample	NHSLs Sample
Protestant-Baptist	9.6% (n=12)	
Protestant-Episcopalian	4.8% (n=06)	
Protestant-Lutheran	2.4% (n=03)	
Protestant-Methodist	18.4% (n=23)	
Protestant-Non-Denominational	8.8% (n=11)	
Protestant-Other Christian	5.6% (n=07)	
Protestant-Presbyterian	11.2% (n=14)	
<i>Total Protestant</i>	<i>60.8% (n=76)</i>	57.8%
Roman Catholic	18.4% (n=23)	27.0%
Jewish	1.6% (n=02)	1.7%
Hindu, Muslim, and other Eastern Religion	1.6% (n=02)	
Greek Orthodox	2.4% (n=03)	
Other	2.4% (n=03)	
<i>Total Other</i>	<i>6.4% (n=08)</i>	2.5%
None	12.8% (n=16)	11.0%
Total N	125	3153

Note: Source for NHSLs Sample: (Laumann, Gagnon, Michael & Michaels, 1994, Appendix B).

Table 4 reports the religious affiliation of respondents in comparison to the NHSLs national study. Religious affiliation among the Virginia Tech sample closely matches the

national sample of the NHLS study with the exception of a slightly lower representation of Roman Catholics.

The means, standard deviations and operationalization of additional independent and demographic variables appear in Table 5. Gender is evenly distributed among the respondents. Regarding educational level, a sample drawn from a pool of university alumni will by default reflect a population with a higher level of education than the national population. The average education level of the current study reflects a propensity toward some graduate training. Comparatively, the NHLS study found 62.2% of respondents reporting a high school equivalency as their highest academic level. Virginia Tech respondents reflect a moderate to slightly conservative political orientation.

Table 5

<u>Means, Standard Deviations and Ranges of Independent and Demographic Variables</u>	
Gender	<i>(1=Male, 2=Female)</i> Mean = 1.50, SD = .50, n = 125, range: 1-2
Age	<i>(Difference in years between reported birth-date and May 1, 2000)</i> Mean = 42.70, SD = 13.53, n = 125, range: 25.32-86.66
Income	<i>("What is your approximate Annual Family Income?")</i> Mean = \$82,712, SD=\$41,378, n=125, range: \$15,000-\$250,000
Education	<i>("Please circle the highest grade you completed in school")</i> Mean=18.19, SD=2.07, n=125, range: 16-23
Political Orientation	<i>(1=Very Conservative, 3=Moderate, 5=Very Liberal)</i> Mean=2.77, SD=.856, n=124, range: 1-5
Age At First Marriage	<i>(Difference in years between reported birth-date and reported first marriage date)</i> Mean=25.70, SD=3.82, n=108, range: 18.5-35.5
Differentiation of Self	<i>(1=low differentiation, 6=high differentiation)</i> Mean=3.87, SD=.45, n=120, range: 2.47-4.81
Opportunity to conceal EMI if desired	<i>("If desired, my daily activities would make it convenient for me to conceal extramarital activities...") (1=strongly disagree, 5=strongly disagree)</i> Mean=3.15, SD=1.46, range: 1-5
Opportunity for EMI if desired	<i>("If desired, my daily activities expose me to an ample number of people with whom I might experience EMI") (1=strongly disagree, 5=strongly agree)</i> Mean=2.87, SD=1.37, range: 1-5

Approximately half of the Virginia Tech respondents are between 25 and 40 years of age while the remaining half of the respondents range in age from 40 to over 80. The mean age at first marriage for respondents is about 26 years which is slightly above the mean age of first

partnerships noted in the NHSL data (Laumann, Gagnon, Michael & Michaels, 1994, p. 207). Respondents appear to have moderate opportunity in the routine of their lives for extramarital involvement if they desired to do so.

Measures of *Differentiation of Self* indicate respondents are collectively above average in their demonstration of differentiation. Kurtosis (.458, $n=120$) and skewness (-.540, $n=120$) measures indicate a normal distribution of differentiation of self.

In sum, descriptive indices suggest a respondent population non-representative of the national population particularly regarding education influenced variables such as total education, ethnicity and age at first marriage. The differentiation of self variable was relatively normally distributed. However, scores indicate a leaning toward a higher than average level of differentiation

Opinion of Extramarital Involvement

Two series of questions addressed the respondent's opinion regarding the justification of extramarital involvement and their acceptance of specific extramarital behaviors. Table 6 reflects the mean response to questions addressing justification for extramarital involvement. The demonstrated mean responses to the examples indicate that the respondents in general tend to perceive extramarital involvement as completely unjustified or somewhat unjustified.

The disapproval of extramarital activity among respondents is consistent. Respondents were later asked to describe the understanding they have developed with their partner about sexual activity outside the marriage. Of those who were ever married, 92.7% reported they had either discussed it with their partner or privately assumed that under no circumstance is sex outside the marriage "all right". In general, respondents tend to take a dim view of extramarital activity.

Table 6

<u>Mean response to Justification of Extramarital Involvement Questions</u>		
<u>Explanation for Extramarital Involvement</u>	<u>Mean</u>	<u>St. Dev.</u>
Spouse views sex with contempt	2.10 (n=124)	1.32
Spouse unable to have sex due to physical limitation	1.82 (n=123)	1.21
Spouse is continually unaffectionate	1.91 (n=124)	1.23
Spouse believes sex exclusively for childbearing	1.94 (n=124)	1.38
Extended separation due to prison, military, job etc	1.29 (n=124)	.68
Spouse incapable of satisfying sexually	1.47 (n=124)	.923
Spouse is having an affair with someone else	1.82 (n=123)	1.27
Spouse is excessively overweight	1.34 (n=134)	.81
<i>Sum of responses</i>	13.65 (n=122)	7.2

Note: (1=completely unjustified, 2=somewhat unjustified, 4=partially justified, 5=completely justified;
Sum 8=completely unjustified, 40=completely justified)

Table 7 describes the mean response of how accepting each respondent would be about personally participating in various behaviors with another married person while their spouses were away. The response sample was mixed between rejecting and accepting with wider deviation among modest involvement scenarios, particularly when the behavior involved public attention. Going to a public event with another's spouse, for example, was slightly more accepted than spending an evening alone together in one another's living room. When the hypothetical events depicted activities secluded from public witness, they were less accepted by respondents. As the scenarios become more involved and more secluded, respondents became much less accepting and with less variation among respondents. An overall measure indicates a tendency of the response sample to lean toward being somewhat to completely rejecting of all proposed behaviors. Further, the more secluded and sexually involved the scenario becomes, the less accepting respondents become of the behavior.

Table 7

<u>Mean response to Acceptance of Extramarital Involvement Scenarios Questions</u>		
Scenario	Mean	St. Dev.
Spending an evening with him [her] in his [her] living room	3.20 (n=124)	1.51
Going to the movies or to the theatre together	3.40 (n=124)	1.54
Going out to dinner with him [her] at a secluded place	2.37 (n=124)	1.46
Dancing with him [her] to the stereo	1.80 (n=124)	1.23
Spending a couple days at a secluded cabin with him[her] where no one will find out	1.20 (n=124)	.66
Necking or sexual petting with him [her]	1.10 (n=124)	.48
Becoming sexually involved with him [her]	1.07 (n=124)	.42
Sum of above questions	14.15 (n=124)	5.69

Note: (1=totally rejecting, 2=somewhat rejecting, 4=somewhat accepting, 5=totally accepting;
Sum 7=totally rejecting, 35=totally accepting)

While previous research has demonstrated that beliefs about extramarital involvement do not always match practice, descriptive evidence suggests a propensity for the response sample to perceive extramarital involvement as unacceptable, to find explanations for extramarital behavior at least somewhat unjustified and to be at least somewhat rejecting of personally participating in scenarios secluding them with another married person.

Sexual experience

Because sexual experience may inform beliefs about sexuality as much as beliefs may inform experience, descriptive information regarding the sexual experience of the response sample offers further understanding of the respondent sample. Table 8 reports the mean age at

Table 8

<u>Mean Age of First Experience with Sexual Behaviors and Number of Different Partners for Sexual Experiences Previous to Marriage</u>				
Event	Age		Number of Partners	
	Mean	Stan. Dev.	Mean	Stan. Dev.
Passionate Kissing ("French kissing")	15.3 (n=122)	2.54	12.70 (n=122)	16.24
Sexual Play (breast or genital petting)	16.4 (n=121)	2.87	8.13 (n=122)	10.123
Performed Oral Sex	19.48 (n=103)	4.14	3.11 (n=119)	5.50
Received Oral Sex	19.80 (n=106)	4.48	3.39 (n=119)	5.745
Engaged in Sexual Intercourse	19.10 (n=111)	3.15	4.51 (n=124)	7.19

which specific sexual events were first experienced and the average number of different partners respondents had previous to a first marriage. The mean age of first sexual intercourse is about one year higher than that reported by the national NHSLS sample. In the NHSLS study, education level was negatively associated with having intercourse before 18 year old (Laumann, Gagnon, Michael & Michaels, 1994) and may explain the higher age for first experience with sexual intercourse compared to national norms.

Table 9 addresses the issues of research question 2 regarding the prevalence of

Table 9

Frequency of Stating Yes for Extramarital Involvement

Event	Total Respondents			Males			Females		
	YES	%	<i>n</i>	YES	%	<i>n</i>	YES	%	<i>n</i>
Casually flirted with	89	72.4%	123	46	74.2%	62	43	70.5%	61
Had romantic feelings for	63	52.1%	121	36	60.0%	60	27	44.3%	61
Had a deep romantic attachment with	16	13.3%	120	6	10.2%	59	10	16.4%	61
Kissed (e.g., kiss on the lips)	40	33.1%	121	23	38.3%	60	17	27.9%	61
Passionately Kissed ("French Kissing")	21	17.4%	121	11	18.3%	60	10	16.4%	61
Engaged in sexual play (breast, genital)	22	18.2%	121	13	21.7%	60	9	14.8%	61
Performed Oral Sex upon	15	12.4%	121	8	13.3%	60	7	11.5%	61
Received Oral Sex from	18	14.9%	121	10	16.7%	60	8	13.1%	61
Engaged in Sexual Intercourse	19	15.7%	121	12	20.0%	60	7	11.5%	61

extramarital activity among the respondent sample. Incidence of extramarital involvement, however, must be interpreted with caution. Approximately 16% of respondents acknowledged experiencing sexual intercourse at least one time with some one other than their spouse. This measure indicates cumulative life time experience. About 12% of those who acknowledged extramarital intercourse are under 40 years of age while the remaining 82% acknowledging extramarital coitus are over 40 years old. This observation implies that younger respondents *may* in time have intercourse with some one other than their spouse.

Glass and Wright (1992, 1985) have contended gender differences exist in measuring extramarital involvement by suggesting the extramarital experiences of women tend to be emotional in nature while the experiences of men are more physically oriented. Table 9 reports

16% more men than women reported having romantic feelings for someone other than their spouse but a few more women than men reported having a "deep romantic attraction" for someone other than their spouse. In addition, more men than women reported involvement in extramarital intercourse. These relationships hint that while men have romantic feelings, they may be more apt to seek physical intercourse as an expression of their romanticism outside of the marital boundary than an emotional connection.

The above finding may be additionally interpreted through a feminist frame. It is theorized that gender inequality continues to exist in marriages as men benefit from marriage more than women (Dryden, 1999). Men may avoid emotional involvement in their extramarital activities because they have no intention of leaving the benefits of the marital context.

Nearly 75% of respondents acknowledged casually flirting with individuals other than their spouse while they were married and about half the respondents acknowledged having romantic feelings for someone other than their spouse. Anthropologists and evolutionary psychologists have theorized humanity has an impulse toward multiple pair bonds. Table 9 may support the idea of an intrinsic impulse toward experiencing relationships with individuals outside of the marriage. More explicit sexual behaviors were far less common, however, implying mitigating forces impede any existing impulse for extradyadic involvement.

In sum, the response sample represents a more educated, more ethnically homogenous and slightly more conservative population regarding sexual experience than the national population. The sample is predominantly a white, well educated, financially secure, and relatively conservative.

Instrument Validity and Reliability

Reliability

The central predictor variable, differentiation of self, was measured by use of the recently developed, 43-item *Differentiation of Self Inventory* (Skowron & Friedlander, 1998). Four subscales, Emotional Reactivity, I Position, Emotional Cutoff and Fusion with Others are contained within the DSI instrument. Cronbach's alpha was utilized to estimate the internal consistency reliabilities for the full scale DSI as well as the four subscales for all respondents and for each gender. These estimates are reported in Table 10.

Table 10

Cronbach Alpha Reliability Estimates for DSI and DSI Subscales

Scale	Number of Items	α for All Respondents	α for Male Respondents	α for Female Respondents
Full DSI Scale	43	.81	.75	.84
Emotional Reactivity Subscale	12	.68	.65	.67
I-Position Subscale	11	.79	.82	.74
Emotional Cutoff Subscale	12	.73	.65	.78
Fusion With Others Subscale	9	.46	.28	.50

Pedhazur and Schmelkin (1991) note the acceptable level for reliability levels is best determined by the amount of tolerable error given the circumstances and intention of the study. An investigation such as the present study endeavoring to estimate a nebulous construct such as differentiation is anticipated to involve measurement error. The full scale DSI alpha coefficient represents a reasonable alpha level of .81. Alpha coefficients for the subscales are less hearty than the full DSI scale but, with the exception of the Fusion with Others scale, prove adequate particularly given the difficulty in assessing differentiation. The reliability estimate for the Fusion with Others subscale, however, is somewhat inadequate particularly for male respondents.

When comparing reliability coefficients between genders, the full scale DSI proved more reliable in the present study for women than for men as the Fusion with Other's scale demonstrated particularly poor reliability for men. Luepnitz (1988) has contended Bowen's construct of differentiation is strongly male biased in its emphasis of the intellectual system over the emotional system. Consequently, one might anticipate the DSI and its subscales to prove more reliable for males than females. The present study, however, found the a slightly more reliable instrument for females than males.

Validity

Confirmatory factor analysis was used by the developers of the DSI instrument to evaluate the four factor structure of the DSI using Lisrel 7 (Skowron & Friedlander, 1998). To eliminate the use of single item indicators and to minimize the number of indicators to more effectively utilize Lisrel procedures, single instrument items for each of the four subscales were randomly summed into meta-items incorporating 3 to 4 instrument items for each indicator, resulting in 3 indicators per subscale and 12 total indicators.

Table 11

Correlation Matrix for Initial Confirmatory Factor Analysis

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. ER ₁	--											
2. ER ₂	.25	--										
3. ER ₃	.67	.26	--									
4. IP ₁	.40	.21	.47	--								
5. IP ₂	.38	.27	.47	.60	--							
6. IP ₃	.54	.33	.51	.58	.58	--						
7. EC ₁	.01	.18	.18	.14	.16	.04	--					
8. EC ₂	.12	.01	.31	.18	.20	.20	.58	--				
9. EC ₃	.17	-.13	.26	.17	.13	.18	.14	.60	--			
10 FO ₁	.36	.29	.29	.15	.07	.24	-.04	-.16	-.11	--		
11 FO ₂	.33	.15	.15	.04	-.03	.15	-.02	-.06	-.10	.46	--	
12 FO ₃	.14	.07	.07	-.05	.00	.03	-.27	-.21	.04	.05	.25	--

Note: ER = Emotional Reactivity; IP = I Position; EC = Emotional Cutoff; FO = Fusion with Others; DSI = Differentiation of Self Inventory; ER₁ = DSI Items 1, 14, 26, 38; ER₂ = DSI Items 6, 18, 30, 40; ER₃ = DSI Items 10, 21, 34; IP₁ = DSI Items 4, 15, 27, 41; IP₂ = DSI Items 7, 19, 31, 43; IP₃ = DSI Items 11, 23, 35; EC₁ = DSI Items 2, 12, 24, 36; EC₂ = DSI Items 3, 16, 28, 39; EC₃ = DSI Items 8, 20, 32, 42; FO₁ = DSI Items 5, 17, 29; FO₂ = DSI Items 9, 22, 33; FO₃ = DSI Items 13, 25, 37; To estimate each indicator, individual items were summed and divided by number of items per indicator (Skowron & Friedlander, 1998)

For the current study, the procedure utilized by Skowron and Friedlander (1998) was replicated using data from the response sample. Table 11 depicts the correlation matrix for the initial confirmatory factor analysis. A path diagram of the results of the initial confirmatory factor analysis is found in Appendix F.

The results of the initial confirmatory factor analyses indicated an improper solution as two resulting estimates took impossible values such as a negative variance estimate and variable correlation greater than one. Such cases are referred to as "Heywood cases" and result from several conditions such as outlier influence, poor model specification or small sample size (Bollen, 1989). Given the number of parameters specified in the model, the small sample size ($n=125$) of the present study most likely created the resultant Heywood cases.

In response to the Heywood cases, a principal-components factor analysis of the 43 items of the DSI was conducted using an orthogonal rotation identifying factors with eigenvalues greater than 3.0 and factor loadings greater than .40 (see Appendix H). Two factors emerged from the factor analysis. Of the 43 DSI items, 30 items loaded on one of two of the emerging factors. Of the remaining 13 items failing to load on either factor, 7 were Fusion with Others items as only 2 of the 9 total Fusion with Others items loaded on one of the two factors. One Fusion with Others item emerging from the factor analysis loaded primarily with emotional cutoff items and the second Fusion with Others factor loaded primarily with the remaining Emotional Reactiveness, I Position and Fusion items.

DSI scores were then recalculated by eliminating the 13 items failing to load on either of the two factors, by summing the 30 remaining items, and then dividing by 30. Identical procedures were used to recalculate the two subscale measures. A confirmatory factor analysis was then repeated with the new more parsimonious two factor model by repeating procedures

from the initial analysis. Table 12 lists the correlation matrix for the revised two factor model.

See Appendix G for the revised two-factor model path diagram.

Table 12

Correlation Matrix for the Revised Confirmatory Factor Analysis

Variable	1	2	3	4	5	6
EC ₁	--					
EC ₂	.53	--				
EC ₃	.43	.34	--			
ER ₁	.16	.16	.30	--		
ER ₂	.22	.14	.29	.77	--	
ER ₃	.18	.19	.26	.57	.57	--

Note: ER = Revised Emotional Reactivity; EC = Revised Emotional Cutoff; DSI = Differentiation of Self Inventory; ER₁ = DSI Items 18, 23, 29, 30, 34, 35; ER₂ = DSI Items 15, 21, 26, 27, 38, 43; ER₃ = DSI Items 1, 10, 14, 19,40; EC₁ = DSI Items 2, 3, 28,36, 42; EC₂ = DSI Items 8, 12, 16, 39; EC₃ = DSI Items 13, 20, 24, 32; To estimate each indicator, individual items were summed and divided by number of items per indicator (Skowron & Friedlander, 1998)

Various indices assess how well the confirmatory factor model fits the data. The goodness-of-fit index (GFI), the adjusted goodness-of-fit index (adjusted GFI) and the root mean squared of the residuals index (RMS) are commonly used to assess model fit (Crowley & Fan; Skowron & Friedlander, 1998). Well fitting models are indicated by a GFI > .90, an adjusted GFI >.80 and a RMS <.10 (Crowley & Fan; Skowron & Friedlander, 1998). Indices from the revised model indicated a GFI = .98, an AGFI=.94 and a RMS=.05 demonstrating a well fitting model. Given the revised two factor model is far more parsimonious than the initial four factor model, the low sample size is less apt to impede the results.

DSI scores utilizing all 43 items were found to have a .97 correlation with the revised DSI scores drawing upon 30 items. The excellent fit indices of revised model provides evidence of construct validity for a two factor model. The extremely high correlation between the original DSI scores and the revised 30 item score indirectly implies the validity of the 43 item measure given its nearly perfect correlation to the revised score.

Confirmatory factor analyses were utilized by Skowron and Friedlander (1998) to demonstrate the construct validity of the DSI. Confirmatory factor analyses in the present study

supports the validity that the instrument overall is measuring the construct it is intended to assess.

Hypotheses Testing

Univariate logistic regression analysis was employed to examine the relationship between differentiation of self and specific extramarital behaviors. Table 13 reports the logistic regression coefficients for differentiation. The level of differentiation of self as measured

Table 13

Univariate Logistic Regression Results with Differentiation of Self as Predictor

Behavior with someone other than spouse will married to spouse	Total Sample			Males			Females		
	β	e^b	Sig	β	e^b	Sig	β	e^b	Sig
Sexual Intercourse	.20	1.21	.74	-1.07	.34	.26	1.18	3.29	.19
Receiving oral sex	-.72	.49	.23	.24	1.27	.80	1.57	4.81	.08
Performing oral sex	-.54	.57	.39	.15	1.17	.88	1.17	3.22	.21
Sexual Play (breast or genital)	-.25	.78	.65	-.51	.60	.56	1.37	3.92	.10
Passionate Kissing	-.47	.63	.40	-.23	.79	.80	1.37	3.92	.10
Kissing	-.56	.56	.22	-.01	.99	.98	1.63	5.11	.03*
Deep Romantic Attachment	-1.21	.29	.05	.61	1.84	.60	1.41	4.14	.08
Romantic Feelings	-.19	.82	.63	.13	1.14	.84	.63	1.88	.27
Casual Flirting	.20	1.22	.66	-.43	.65	.57	.07	1.07	.91

Note: e^b = exponentiated beta. * $p < .05$.

by the DSI instrument failed to predict any extramarital behavior at the .05 level of significance. Although none of the null hypotheses may be rejected for the total sample, it is worthy to note the level of differentiation of self was most predictive of deep romantic attachment and was significant at the $p < .10$ level. If the level of differentiation of self is predictive of anything regarding extramarital behaviors for the sample of the present study, it is most likely to predict an emotive rather than behavioral variable. This finding makes intuitive sense. If differentiation of self reflects an individual's capacity to balance emotional and intellectual functioning, an individual with low differentiation of self is more likely to be guided by the emotional system and consequently more focused upon emotional attachment.

The level of differentiation also failed to predict extramarital involvement among males. For females, however, level of differentiation was predictive of extramarital kissing at the .05 level of significance. However, differentiation of self was hypothesized to be negatively associated with the likelihood of extramarital involvements. Exponentiated betas greater than 1 indicate the odds of the outcome (kissing) increases with positive change in the independent variable (Cizek & Fitzgerald, 1999). Results from the female subgroup indicate that as the level of differentiation increases by one unit (which is substantial on a 6 point scale), the likelihood of kissing a person other than a spouse while married is increased by 63%. While they are not significant at the $p < .05$ level of significance, differentiation is positively associated with other behaviors near the .10 confidence level. It appears that at least for females, increase in differentiation may be at least slightly associated with an increased likelihood toward extramarital involvements.

Again, feminist theory of marriage may best explain this unanticipated finding. Dryden (1999) has concluded gender inequality is an issue within many marriages. Dryden notes that men, from their position of privilege and power, have more to gain from marriage. Dryden discovered a pattern in her research such that husbands tended to engage in distancing and separation practices which seemed to heighten insecurity among wives. This pattern comports with Schnarch's (1991) notion of self and other validation. As individuals take a more differentiated stance, they are less fused with and less reliant upon their partner or some one else to determine their sense of self. Thus, wives who increase their level of differentiation, become more self-validating and may seek alternative relationships as part of the early stage of uncoupling. Alternatively, the distancing dynamics employed to maintain marital inequality may effectively heighten insecurity particularly among low differentiated females along with the

need for other-validation thus fostering an increased movement toward attachment with another to experience the desired validation.

The direction of the beta coefficients in Table 13 were in the opposite direction for men as for women. While there were no statistically significant findings for men, it appears that if differentiation has any influence upon male extramarital involvement, it operates conversely for females. Stated differently, for males, the likelihood of extramarital involvement increases with corresponding decrease in differentiation while the likelihood for females increases with an increase in differentiation.

Again, drawing conclusions from Table 13 is highly speculative. The only statistically significant finding from Table 13 involved the ability of differentiation to predict the likelihood of females within the sample to participate in kissing another person other than a spouse. The social and cultural function of a kiss is highly variable and far less indicative of intense, if any, extramarital involvement than more involved behaviors such as intercourse. None-the-less, confidence intervals for females far more frequently approached levels of significance than did males.

Additional Analyses

Unable to reject the null hypotheses for the total sample, alternative predictors of extramarital behaviors were explored by considering variables of interest from previous studies and investigations. Various potential predictor variables such as age, gender, income, political orientation etc. were correlated with the sexual intercourse with others while married variable. Table 14 depicts the correlation matrix of statistically significant correlations of predictor variables with sexual intercourse involvement.

The tendency to justify various behaviors was strongly correlated with the propensity toward extramarital sexual intercourse. Treas and Giesen (2000) found permissive values to be predictive of sexual infidelity in the 1992 National Health and Social Life Survey. The political orientation, justification and acceptance variable each reflect a personal value variable and might be anticipated to influence the likelihood of extramarital involvement. Logistic regression analyses were run to evaluate the predictive ability of these three values to predict extramarital involvements. Table 14 reflects the logistic regression results for the age, justification, acceptance and political orientation variable.

Table 14

Correlation Matrix for Potential Predictor Variables

Variable	1	2	3	4	5
1. Political orientation	-				
2. Tendency to justify behaviors	.30**	-			
3. Acceptance of behaviors	.49**	.33**	-		
4. Age	-.04	.09	-.17	-	
5. Sexual intercourse	-.19*	-.59**	-.22*	-.27**	-

Note: Political orientation: 1= very conservative, 5=very liberal

Tendency to justify: Sum of opinion questions, 8= completely unjustified, 40=completely justified

Acceptance: Sum of scenario questions, 7=totally rejecting, 35=totally accepting

Sexual intercourse: 1=yes, 2=no

* correlation significant at .05 level (two tailed), ** correlation significant at .01 level (two-tailed)

Table 15 demonstrates the capacity of personal values variables to predict involvement in various extramarital behaviors. More liberal and accepting values best predict extramarital involvement for the Virginia Tech Alumni sample. Higher age levels were associated with a slightly greater likelihood for some extramarital behaviors. This is an important reminder when considering cumulative incidence rates of extramarital behaviors. The older one is, the greater opportunity one has to participate in extramarital involvement.

Table 15

Univariate Logistic Regression Results with Differentiation of Self as Predictor

Behavior with someone other than spouse will married to spouse	Justification		Acceptance		Political Orientation		Age	
	β	e^b	β	e^b	β	e^b	β	e^b
Sexual Intercourse	-.21	.81**	-.09	.91*	-.65	.52*	-.05	.95**
Receiving oral sex	-.20	.82**	-.14	.87**	-.66	.51*	.00	1.00
Performing oral sex	-.17	.83**	-.17	.84**	-.96	.38**	.01	1.01
Sexual Play (breast or genital)	-.18	.83**	-.10	.89**	-.63	.53*	-.03	.97*
Passionate Kissing	-.19	.83**	-.11	.89**	-.63	.53*	-.02	.98
Kissing	-.14	.87**	-.07	.92*	-.52	.59*	-.05	.95**
Romantic Attachment	-.17	.84**	-.16	.85**	-.83	.43*	-.01	.99
Romantic Feelings	-.14	.87**	-.10	.90**	-.52	.59*	-.03	.97*
Casual Flirting	-.15	.86**	-.15	.86**	-1.25	.28**	-.01	.99

Note: e^b = exponentiated beta. * $p < .05$, ** $p < .01$

Summary

The Virginia Tech Alumni sample reasonably represented the population of Virginia Tech alumni but does not fully represent the national population. The DSI instrument measuring the level of differentiation among respondents provided at least a moderately trustworthy indication of differentiation. Assuming the measure of differentiation of self adequately reflected the respondent sample, none of the proposed hypotheses could be supported. Differentiation failed to predict specific extramarital behaviors. Personal value measures such as political orientation, and a tendency to justify extramarital behavior best predicted the likelihood to have engaged in certain extramarital behaviors. It is undeterminable, however, if the personal values preceded extramarital behaviors or if the participation of extramarital activities reflexively influenced personal values.

As an unanticipated finding, level of differentiation for women appears to be positively but not significantly associated with the likelihood to have experienced extramarital activities. Conversely, if differentiation has any relationship with the likelihood for men to have experienced extramarital activity, it is a negative association. The stronger association between the two variables for women may be explained by the gender inequality theory of marriage.

CHAPTER V

CONCLUSION

This chapter includes a report of the summarized results of the study, a discussion of the limitations of the study, implications for theory and implications for future research for future research.

Summary of Results

The purpose of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. Nelson (1996, p. 464) has noted "attempts to measure Bowen's [(1978)] concept differentiation of self are notoriously difficult". Research efforts considering issues such as sexuality prove equally vexing. Low response rates limit the generalizability of the results. The respondent sample of the present study reflected a predominately white, well educated, somewhat conservative population with average opportunities for extramarital involvement. While these characteristics somewhat reflect the population of Virginia Tech alumni, it fails to match the national population particularly related to variables impacted by education.

The measures of differentiation of self appeared to be fairly trustworthy but were slightly more reliable for female respondents. Differentiation of self, however, failed to predict any specific extramarital behavior for the response sample. However, differentiation of self was predictive ($p < .05$) for women of the likelihood to have been involved with extramarital kissing. One unanticipated finding was discovered. Differentiation of self was anticipated to be negatively associated with extramarital involvement. However, for females, differentiation of self was positively associated, though not significantly, with the likelihood of extramarital involvement while virtually no relationship between the constructs existed for males.

Alternative predictor variables were examined and those with a higher tendency to justify extramarital involvement were most associated with extramarital activities. In sum, differentiation of self as measured by the *Differentiation of Self Inventory* did not significantly predict specific extramarital involvement among graduates of Virginia Tech University.

Limitations of the Study

Response Rate

Only 19% of the mailed surveys were returned reflecting a very low response rate. The low rate of return created challenges to interpretation of the data. A low return rate undermines the generalizability of the results due to the strong self-selection bias inherent in poor returns. Participants who responded to the mailing most likely had a specific interest in the topic of extramarital activity. It is reasonable to assume, non-respondents may have been more likely to have experienced the behaviors under investigation. Utilizing a follow-up mailing would have proven costly and may have offended alumni who intentionally elected not to return the survey. The absence of follow up procedures made it impossible, however, to determine what factors constituted non-response.

Sample Size

The small sample size encroached upon the viability of statistical procedures. Confirmatory factor analyses are preferred to have a minimum of 150 to 200 cases. The small sample size introduced an improper solution and the presence of Heywood cases in the initial confirmatory factor analysis.

The poor response rate leading to the small sample size eliminates the ability to make a reasonable estimation regarding the prevalence of extramarital activity. It is possible the remaining 80% of surveyed alumni have had an extramarital involvement. It is equally

conceivable 0% of the remaining population has had an extramarital involvement. The excessive range of uncertainty makes any reasonable estimation impossible.

Homogeneity of Sample

By selecting a convenience sample constituting alumni of a state university, a level of homogeneity is unavoidable. The variables that attracted students to Virginia Tech, the personal qualities that empowered alumni to complete their programs while students at Virginia Tech and the variables that influenced respondents to return they questionnaire are just a few of the characteristics shared by the population under investigation. While there was reasonable variance among demographic and independent variables, a less homogenous population would likely generate greater diversity as improve the trustworthiness of statistical procedures.

Instrumentation

As noted earlier, measuring constructs such as differentiation of self can prove a challenging task. The *DSI* proved a rather simple instrument to administer, score and analyze. However, the instrument is a new instrument with little to no history, other than the original validation procedures, to affirm its validity and reliability.

The survey instrument was intended to be able to be completed in a relatively short period of time as not to overwhelm potential respondents. However, additional information may have aided the interpretation of the results. For example, greater clarity regarding behaviors with multiple contexts such as "kissing" may have brought greater interpretability to the data. Further, assessing extramarital involvement as one event at any point during a life time may have been too weak of a measure of involvement. Future research efforts may devise an extramarital involvement index that assesses variabilities of involvement such as number of different partners, duration of involvements, intensity of involvement, degree of secrecy and the

frequency of activity (Lampe, 1987). An index procedure would better quantify the construct of extramarital involvement. Assessing if the respondent's partner(s) has had an extramarital involvement would also more accurately clarify the number of relationships touched by extramarital activity.

Theoretical Implications

The present study endeavored to investigate differentiation of self as a predictor of extramarital involvement. The findings of study did not support differentiation of self as a direct predictor of extramarital involvement. However, unanticipated findings regarding the interplay of gender, differentiation of self and extramarital activity offer new and valued insights to theoretical explanation of extramarital activity. While there was no evidence to support differentiation of self as a direct predictor of extramarital activity, perhaps differentiation of self is a factor in a larger relational ecology, which informs the likelihood of extramarital involvement.

The present study endeavored to integrate elements of Bowenian and object relations theory in support of differentiation of self as a predictor of extramarital involvement. Bowen and Kerr (1988) and Hendrix (1988) note the triune nature of the human brain. Bowen and Kerr (1988) find a similarity between the components of the brain (stem, limbic system and cerebral cortex) and the emotional, feeling and intellectual systems noted in family theory. Object relations theory emerged from psychoanalytic theory famous for a similar trinity involving the id, ego and super ego. Contemporary marital theorists, drawing upon object relations theory, consider yet another triad of the libidinal ego, the central ego and the anti-libidinal ego (Scharff, 1995). Regardless of language, each considers the relationship between conscious and unconscious dimensions of the human psyche.

Object relations theory considers the replication of early familial dynamics of attachment within the adult marital dynamics. Hendrix (1988) has suggested marriage may be a place of healing and growth as unconscious hurts from childhood are manifest in adult relationships and made conscious. Addressing such hurts is likely to increase individual anxiety and escape from such conscious awareness of Self through various distractions, including extramarital involvement, may be attractive. Hendrix (1988) however, proposes closing these "exits" in movement toward a conscious marriage. Drawing upon Bowenian theory, Schnarch (1991) proposes a similar notion of the sexual crucible. From a position of high differentiation, one may serve as an involved, yet non-reactive container for another's anxiety and thus aid in the other's metamorphosis. Bowen (1985) suggested triangles occur when stress is introduced into a two-person relationship. Thus, integrating the various theoretical elements noted above, the present study assumed that in marital relationships, painfully familiar dynamics are likely to be replicated in marital relationships, which introduce stress to the system. The content and dynamic processes of marital conflict may have unconscious meaning separate from the conscious meaning. It was further assumed, individuals with low levels of differentiation would be more likely to seek escape from the challenge to the Self through various dissociating "exits" from the relationship. Extramarital involvement, as a relational exit, is an obvious form of triangulation. Thus, it was hypothesized, differentiation of self is associated with extramarital activity such that as the degree of differentiation of self decreases the likelihood of extramarital involvement increases.

While no statistically significant association was found between extramarital involvement and the degree of differentiation, the relationship between extramarital activity and differentiation appeared to vary by gender. Females demonstrated a positive association between

differentiation and extramarital involvement while the association for males tended to negatively associated. Specifically, for females, as the level of differentiation increased, the likelihood of extramarital involvement increased as well. Perhaps this finding evolved from challenges to the research methodology and the difficulty in assessing differentiation. Perhaps, however, improved methodology in future research would further delineate this gender various to a degree of statistical significance.

Alternative variables not considered in the present study may explain the noted gender difference. Schnarch (1991, p. 370) has stated, "The struggle of marriage is to find out who you are, while maintaining your boundaries with a partner who is only too eager to tell you." More undifferentiated relationships are likely to be more dependent upon validation from the other and thus more fraught with manipulation and control making power an important theoretical consideration. Economic, sociological and psychological barriers frequently have placed women in positions of inequality to men (Schwartz, 1994). Further, studies have suggested that men gain more benefits from marriage than do women (Dryden, 1999; Luepnitz, 1988). Perhaps differentiation of self may prove to be predictive of extramarital involvement when understood in relationship to power and gender. Results of the current study would offer at least tacit support of the idea that men may have extramarital relationships as a means of expressing their power while females may involve themselves as a means to claim more power. Saunders and Edwards (1984) have already found dyadic independence to improve path models of extramarital determinants for females.

Power, gender and differentiation of self may also be related in a curvilinear rather than a linear fashion. Schnarch (1991, p. 372) has suggested that for low differentiated couples, monogamy results from "reciprocal extortion of sexual exclusivity." From this view, a female

seeking to claim more personal power may seek extramarital involvement with increased differentiation as proposed above. Schnarch (1991) notes, however, that with highly differentiated marriages involving a stronger commitment to the Self, a greater likelihood for open marriages may exist. Schwartz (1994) has similarly recognized that it is tempting to believe a peer marriage might be more likely to spawn extramarital activity, but contends a peer oriented marriage is more likely to actually serve as a cure for extramarital involvement by eliminating relational inequality.

In short, the current study failed to support differentiation of self as a direct predictor of extramarital involvement. However, evidence of the study supports further exploration of a relational ecology involving gender, differentiation and power variables, which may better predict the likelihood of extramarital activity.

Implications for Future Research

The present study is the first known study to consider the relationship between differentiation and extramarital involvement. While the present study failed to support the hypotheses, future research adequately addressing the limitations of the study may find alternative results. Improved research methodologies exploring the relationship of gender, differentiation and relational equity may also further understanding of the proposed model development noted above.

A number of additional possibilities involving differentiation would advance the extramarital literature. First, comparing clinical and non-clinical samples may introduce enough variance in degrees of differentiation to improve the discriminating power of the instrument and enhance the interpretability of the data. Second, extramarital relationships assume a variety of contexts as evidenced by the numerous efforts to develop typologies of extramarital

involvement. Differentiation may influence different typologies of involvement in different degrees. Third, since increased age allows for greater opportunities to have experienced extramarital involvement, selecting a sample from an older population, may better reflect the cumulative prevalence of extramarital involvement. Fourth, clinical efforts may be benefited by investigating couples who have successfully negotiated an experience with extramarital involvement. Research related to forgiveness may prove an overlap with differentiation as a forgiveness process related to extramarital involvement would almost demand a differentiated stance. Fifth, the positive association of extramarital involvement and differentiation of self among women was an incidental finding of the present study, yet it introduces an exciting opportunity to further explore the relationship of power, equality and differentiation within marital relationships.

Conclusions

The purpose of the present study was to examine differentiation of self as a predictor of involvement in specific extramarital behaviors. The challenges of collecting an adequate sample from a diverse population with a valid measure of differentiation and clearly defined independent variable limited the generalizability of the study. However, differentiation of self was not found to be predictive of the likelihood of experience with extramarital involvement. Greater tendency to justify extramarital behavior, political orientation and age appeared as alternative predictors of involvement. Differentiation was demonstrated to be somewhat positively correlated with the likelihood of extramarital involvement for females but was unrelated or slightly negatively correlated with the likelihood of extramarital involvement for males.

REFERENCES

- Abramson, P.R. (1990). Sexual science: Emerging discipline or oxymoron. *Journal of Sex Research, 27*, 147-165.
- Atkinson, B. (1999, July). The emotional imperative: Psychotherapists cannot afford to ignore the primacy of the limbic brain. *Family Therapy Networker, 22-33*.
- Atwater, L. (1982). *The extramarital connection: Sex, intimacy & identity*. New York: Irvington Publishers.
- Atwood, J.D., & Seifer, M. (1997). Extramarital affairs and constructed meanings: A social constructionist therapeutic approach. *The American Journal of Family Therapy, 25*(1), 55-75.
- Anthanasίου, R., Shaver, P. & Tavris, C. (1970). Sex. *Psychology Today, 4*(2), 39-52.
- Bell, R.R., Turner, S. & Rosen, L. (1975). A multivariate analysis of female extramarital coitus. *Journal of Marriage and the Family, 37*(2), 375-384.
- Benokraitis, N. (1991). *Marriages and families: Changes, choices and constraints*. New Jersey: Prentice Hall.
- Betzig, L. (1989). Causes of conjugal dissolution: A cross cultural study. *Current Anthropology, 30*(5), 654-676.
- Billy, J.O.G., Tanfer, K., Grady, W.R., & Klepinger, D.H. (1993). The sexual behavior of men in the United States. *Family Planning Perspective, 25*(2), 52-60.
- Black, D. (1998, Oct. 24). Yet another affair to remember...Society's tolerance for extramarital flings seems to be growing. *The Toronto Star, L1*.
- Blumstein, P. & Schwartz, P. (1983). *American Couples: Money, Work, Sex*. New York: William Morrow & Company.

- Booth, A., & Dabbs, J.M. (1993). Testosterone and men's marriages. *Social Forces*, 72(2), 463-477.
- Boylan, B.R. (1971). *Infidelity*. New Jersey: Prentice-Hall, Inc.
- Bowen, M. (1985). *Family therapy in clinical practice*. New Jersey: Aronson.
- Bray, J.H., Williamson, D.S., & Malone, P.E. (1984). Personal authority in the family system: Development of a questionnaire to measure personal authority in intergeneration family processes. *Journal of Marital and Family Therapy*, 10(2), 167-178.
- Brown, E.M. (1991). *Patterns of infidelity and their treatment*. New York: Brunner/Mazel.
- Bukstel, L.H., Roeder, G.D., Kilmann, P.R., Laughlin, J. & Sotile, W.M (1978). Projected extramarital sexual involvement in unmarried college students. *Journal of Marriage and the Family*, 40(2), 337-340.
- Buss, D.M. & Schackelford, T.K. (1997). Susceptibility to infidelity in the first year of marriage. *The Journal of Research in Personality*, 31, 193-221.
- Buunk, B.P. & Bakker, A.B. (1995). Extradyadic sex: The role of descriptive and injunctive norms. *The Journal of Sex Research*, 32(4), 313-318.
- Capaldi, D. (1996). Predicting the timing of first sexual intercourse for at-risk adolescent males. *Child Development*, 67(2), 344-359.
- Cizek, G.J. & Fitzgerald, S.M. (1999). Methods plainly speaking: An introduction to logistic regression. *Measurement and evaluation in counseling and development*, 31(4), 223-245).

Crowley, S.L. & Fan, X. (1997). Structural equation modeling: Basic concepts and applications in personality assessment research. *Journal of Personality assessment*, 68(3), 508-531.

Davenport, W. (1987). An anthropological perspective. J.H. Geer & W.T. O'Donohue (Eds.). *Theories of human sexuality* (pp. 197-234). New York: Plenum Press.

DeLamater, J. (1987). A sociological approach. In J.H. Geer & W.T. O'Donahue (Eds.). *Theories of human sexuality* (pp. 237-260). New York: Plenum Press.

Dryden, C. (1999). *Being married: Doing gender*. New York: Routledge.

Edwards, J.N., & Booth, A. (1976). Sexual behavior in and out of marriage: An assessment of correlates. *Journal of Marriage and the Family*, 38(1), 73-81.

Fisher, H.E. (1992). *Anatomy of love: The natural history of monogamy, adultery, and divorce*. New York: Norton.

Fowler, F.J. (1993). *Survey research methods* (2nd ed.). Newbury Park: Sage.

Geer, J. H. & O'Donohue, W.T. (1987). Introduction and overview. In J.H. Geer & W.T. O'Donohue (Eds.). *Theories of Human Sexuality* (pp. 34-38). New York: Plenum Press.

Gagnon, J.H. & Parker, R.G. (1995). Conceiving Sexuality. In J.H. Gagnon & R.G. Parker (Eds.). *Conceiving sexuality: Approaches to sex research in the postmodern world* (pp. 3-19). New York: Routledge.

Glass, S.P. (2000). Prevalence and impact of extramarital involvement. *AAMFT Clinical Update*, 2(1), 1-7.

Glass, S.P. & Wright, T.L. (1997). Reconstructing marriages after the trauma of infidelity. In W.K. Halford & H.J. Markman (Eds.). *Clinical handbook of marriage and couple interventions* (pp. 471-507). New York: John Wiley & Sons.

Glass, S.P. & Wright, T.L. (1992). Justifications for extramarital relationships: The association between attitudes, behaviors, and gender. *The Journal of Sex Research*, 29(3), 361-387.

Glass, S.P. & Wright, T.L. (1988). Clinical implications of research on extramarital involvement. In R.A. Brown & J.R. Field (Eds.). *Treatment of sexual problems in individual and couples therapy* (301-345). USA: PMA Publishing.

Glass, S.P. & Wright, T.L. (1985). Sex differences in type of extramarital involvement and marital dissatisfaction. *Sex Roles*, 12(9), 1101-1120.

Glenn, N.D., & Weaver, C.N. (1979). Attitudes toward premarital, extramarital, and homosexual relations in the U.S. in the 1970s. *The Journal of Sex Research*, 15(2), 108-118.

Goldenberg, I., & Goldenberg, H. (2000). *Family therapy: An overview*. Belmont, CA: Wadsworth.

Gottman, J.M. (1994). *Why marriages succeed or fail*. New York: Simon & Schuster.

Greeley, A. (1994). Marital infidelity. *Society*, 31(4), 9-13.

Greeley, M., Michael, R.T., & Smith, T.W. (1990). Americans and their sexual partners. *Society*, 5, 36-42.

Haber, J. (1993). A construct validity study of differentiation of self scale. *Scholarly Inquiry for Nursing Practice: An international Journal*, 7(3), 165-178.

Halper, J. (1988). *Quiet desperation: The truth about successful men*. New York: Warner Books.

Held, B.S. (1995). *Back to reality: A critique of postmodern theory in psychotherapy*. New York: Norton & Company.

- Hite, S. (1976). *The Hite Report: A nationwide study on female sexuality*. New York: Macmillan.
- Hite, S. (1981). *The Hite Report on male sexuality*. New York: Knopf.
- Hendrix, H. (1988). *Getting the love you want: A guide for couples*. New York: Harper Collins.
- Humphrey, F.G. (1982). Extramarital affairs: Clinical approaches to marital therapy. *Psychiatric Clinics of North America*, 5(3), 581-593.
- Humphrey, F.G. (1987). Treating extramarital sexual relationships in sex and couples therapy. In G.R. Weeks & L. Hof (eds.), *Integrating sex and marital therapy: A clinical guide*, New York: Brunner/Mazel.
- Hunt, M. (1969). *The affair: A portrait of extramarital love in contemporary America*. New York: Signet.
- Hunt, M. (1974). *Sexual behavior in the 1970s*. Chicago: Playboy Press.
- Janus, S.S. & Janus, C.L. (1993). *The Janus report on sexual behavior*. New York: John Wiley and Sons.
- Johnson, R.E. (1970a). Extramarital sexual intercourse: A methodological note. *Journal of Marriage and the Family*, 32(2), 279-282.
- Johnson, R.E. (1970b). Some correlates of extramarital coitus. *Journal of Marriage and the Family*, 32(3), 449-456.
- Kaslow, F. (1993). Attraction and affairs: Fabulous and Fatal. *Journal of Family Psychotherapy*, 4(4), 1-34.
- Kell, C. (1992). The internal dynamics of the extramarital relationship: A counseling perspective, *Sexual and Marital Therapy*, 7(2), 157-172.

- Kelly, G.F. (1995). *Sexuality today: The human perspective* (5th ed.). Dubuque, IA: Brown & Benchmark.
- Kerr, M.E. & Bowen, M. (1988). *Family evaluation: An approach based upon Bowenian theory*. New York: Norton.
- Kinsey, A.C. Pomeroy, W.B. & Martin, C.E. (1948). *Sexual behavior in the human male*. Philadelphia: Saunders & Company.
- Kinsey, A.C., Pomeroy, W.B., Martin, C. E. & Gebhard, P.H. (1953). *Sexual behavior in the human female*. Philadelphia: Saunders & Company.
- Laumann, E.O., Gagnon, J.H., Michael, R.T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- Lawson, A. (1988). *Adultery: An analysis of love and betrayal*. New York: Basic Books.
- Leigh, B.C., Temple, M.T., & Trocki, K.F. (1993). The sexual behavior of US Adults: Results from a national survey. *American Journal of Public Health*, 83(10), 1400-1408.
- Leigh, W. (1985). *The infidelity report: An investigation of extramarital affairs*. New York: William Morrow.
- Levant, R.F. (1997). Nonrelational sexuality in men. In R.F. Levant & G.R. Brooks (Eds.). *Men and sex: New psychological perspectives*. New York: Wiley & Sons.
- Levin, R.J. (1975, October). The Redbook report on premarital and extramarital sex: The end of the double standard. *Redbook Magazine*, 38,40,42,44,190,192.
- Lieberman, B. (1988). Extrapremarital intercourse: Attitudes toward and neglected sexual behavior. *The Journal of Sex Research*, 24, 291-299.

- Luepnitz, D.A. (1988). *The family interpreted: Psychoanalysis, feminism and family therapy*. New York: Basic.
- Lusterman, D. (1998). *Infidelity: A survival guide*. Oakland, CA: New Harbinger.
- Magar, M.E. (1972). *Adultery and its compatibility with marriage*. Monona, WI: Nefertiti Publishers.
- Marett, K.M. (1990). Extramarital affairs: A birelational model for their assessment. *Family Therapy, 17*(1), 21-28.
- Mason, G. (1991). Female infidelity: May the best sperm win. *New Scientist, 129*(1752), 29.
- Maykovich, M.K. (1976). Attitudes versus behavior in extramarital sexual relations. *Journal of Marriage and the Family, 38*(4), 693-699.
- Meyering, R.A., & Epling-McWherter, E.A. (1986). Decision making in extramarital relationships. *Lifestyles: A Journal of Changing Patterns, 8*(2), 115-129.
- Michael, R.T., Gagnon, J.H., Laumann, E.O., & Kolata, G. (1994). *Sex in America: A definitive survey*. Boston: Little, Brown and Company.
- Moultrup, D. (1990). *Husbands, wives and lovers: The emotional system of the extramarital affair*. New York: Guilford.
- Neubeck, G., & Schletzer, V.M. (1969). A study of extramarital relationships. In G. Neubeck (Ed.). *Extramarital relations*. New Jersey: Prentice Hall.
- Nelson, T. (1996). Survey research in marriage and family therapy. In D.H. Sprenkle & S.M. Moon, (Eds.). *Research methods in family therapy* (pp. 447-468). New York: Guilford Press.

- Papero, D.V. (1995). Bowen family systems and marriage. In N.S. Jacobson & A.S. Grumman, (Eds.). *Clinical handbook of couple therapy* (pp. 11-30). New York: Guilford Press.
- Parkinson, A.B. (1991). Marital and extramarital sexuality. In S.J. Bahr (Ed.). *Family research: A sixty year review, 1930-1990, Volume 1.* (pp. 65-95). New York: Lexington Books.
- Parrott, L. & Parrott, L. (1995). *Saving your marriage before it starts.* Grand Rapids, MI: Zondervan.
- Pedhazur, E.J. (1991). *Measurement, design and analysis: An integrated approach.* New Jersey: Lawrence Erlbaum.
- Pesttrak, V.A., Martin, D. & Martin, M. (1985). Extramarital sex: An examination of the literature. *International Journal of Family Therapy*, 7(2), 107-115.
- Pierce, FP, Sprenkle, D.H., and Wetchler, J.L. (1996). *Family therapy sourcebook* (2nd ed.). New York: Guilford Press.
- Pittman, F.S. (1989). *Private lies: Infidelity and the betrayal of intimacy.* New York: Norton.
- Pittman, F.S., & Wagers, T.P. (1995). Crises of infidelity. In N.S. Jacobson & A.S. Gurman, (Eds.). *Clinical handbook of couple therapy* (295-317). New York: Guilford Press.
- Reiss, I.L., Anderson, R.E., & Sponaugle, G.C. (1980). A multivariate model of determinants of extramarital sexual permissiveness. *Journal of Marriage and the Family*, 42(2), 395-411.
- Saunders, J.M., & Edwards, J.N. (1984). Extramarital sexuality: A predictive model of permissive attitudes. *Journal of Marriage and the Family*, 46(1), 825-835).
- Schackelford, T.K., & Buss, D.M. (1997). Cues to infidelity. *Personality and Social Psychology Bulletin*, 23(10), 1034-1045.

Scharff, J.S. (1995). Psychoanalytic marital therapy. In N.S. Jacobson & A.S. Gurman, (Eds.). *Clinical handbook of couple therapy* (pp. 164-196). New York: Guilford Press.

Schnarch, D.M. (1991). *Constructing the sexual crucible: An integration of sexual and marital therapy*. New York: Norton.

Schwartz, P. (1994). *Peer marriage: How love between equals really works*. New York: Free Press.

Sheppard, V.J., Nelson, E.S., & Andreoli-Mathie, V. (1995). Dating relationships and infidelity: Attitudes and behaviors. *Journal of Sex and Marital Therapy*, 21(3), 202-212.

Singh, B.K., Walton, B.L., & Williams, J.S. (1976). Conditions and contingencies. *Journal of Marriage and the Family*, 38(4), 701-712.

Skowron, E.A., & Friedlander, M.L. (1999). The differentiation of self inventory: Development and initial validation. *Journal of Counseling Psychology*, 45(3), 235-246.

Slipp, S. (1991). *The technique and practice of object relations family therapy*. New Jersey: Aronson.

Small, M.F. (1995). *What's love got to do with it? The evolution of human mating*. New York: Anchor Books.

Smith, T.W. (1991). Adult sexual behavior in 1989: Number of partners, frequency of intercourse and risk of AIDS. *Family Planning Perspectives*, 23(3), 102-107.

Spanier, G.B. & Margolis, R.L. (1983). Marital separation and extramarital sexual behavior. *The Journal of Sex Research*, 19(1), 23-48.

Sprecher, S., Regan, P.C., & McKinney, K. (1998). Beliefs about the outcomes of extramarital sexual relationships as a function of the gender of the "cheating spouse." *Sex-Roles*, 38(3-4), 301-311.

- Sprenkle, D., & Weis, D. (1978). Extramarital sexuality: Implications for marital therapists. *Journal of Sex and Marital Therapy*, 4(4), 279-291.
- Staheli, L. (1997). *Triangles: Understanding, preventing and surviving an affair*. New York: Harper Collins.
- Strean, H.S. (1980). *The extramarital affair*. New York: Collier Macmillan.
- Symons, D. (1987). A sociological approach. In J.H. Geer & W.T. O'Donahue (Eds.). *Theories of human sexuality*. New York: Plenum Press.
- Taylor, C. (1986). Extramarital sex: Good for the goose? Good for the gander? *Women and Therapy*, 5(2-3), 289-295.
- Thoburn, J. & Balswick, J.O. (1993). A prevention approach to infidelity among male protestant clergy. *Pastoral Psychology*, 42(1), 45-51.
- Thoburn J. & Balswick, J.O. (1994). An evaluation of infidelity among male protestant clergy. *Pastoral Psychology*, 42(4), 285-293.
- Treas, J. & Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Marriage and the Family*, 62(1), 48-60.
- Vaughn, P. (1998). *The monogamy myth: A personal handbook for recovering from affairs*. New York: Newmarket Press.
- Volk, R.J. & Flori, D.E. (1996). Structural equation modeling. In D.H. Sprenkle & S.M. Moon, (Eds.). *Research Methods in Family Therapy*, New York: Guilford.
- Ward, B. (1998, August 21) High infidelity: A once-taboo topic gets lots of exposure, thanks to President Clinton and other well-known philanderers. *Calgary Herald*, pp. D-2.
- Wishman, M.A., Dixon, A.E., & Johnson, B. (1997). Therapist' perspectives of couple problems and treatment issues in couple therapy. *Journal of Family Psychology*, 11, 361-366.

Weeks, J. (1985). *Sexuality and its discontents: Meaning, myths and modern sexualities*. London: Routledge & Kegan Paul.

Weis, D.L., & Felton, J.R. (1987). Marital exclusivity and the potential for future conflict. *Social Work*, 32(1), 45-49.

Weis, D.L., & Slosnerick, M. (1981). Attitudes toward sexual and nonsexual extramarital involvements among a sample of college students. *Journal of Marriage and the Family*, 43(2), 349-358.

Whitehurst, R.N. (1969). Extramarital sex: Alienation or extension of normal behavior. In G. Neubeck (Ed.). *Extramarital relations*. New Jersey: Prentice Hall.

Wiederman, M.W., & Allgeier, E.R. (1997). Expectations and attributions regarding extramarital sex among young married individuals. *Journal of Psychology and Human Sexuality*, 8(3), 21-35.

Wolfe, L. (1981). *The Cosmo report*. New York: Arbor House.

Yablonsky, L. (1979). *The extra-sex factor: Why over half of America's married men play around*. New York: Times Books.

APPENDIX A

Introductory Letter

Christopher M. Habben
517 Cleveland Avenue
Salem, VA 24153

«Prefix» «First_Name» «MI» «Last_Name» «Suffix»
«Address»
«City», «State» «Zip»

Dear «Prefix» «Last_Name»:

My name is Christopher Habben. I am a future Virginia Tech alumnus and I need your help! I am not asking for money, but I am seeking a bit of your time. Currently, I am a fourth year doctoral student at Virginia Tech pursuing a Ph.D. in Marriage and Family Therapy and undertaking my dissertation research project. In addition to the training I have received in working with couples while at Virginia Tech, I also have had an opportunity to teach a course in human sexuality. Because of these experiences, I became very interested in understanding and investigating sexual behaviors in relationships. I have developed a questionnaire regarding relationships, and I need volunteers to complete the questionnaire. As you probably know, a high return rate is imperative to good research using survey instruments. When I ran across a Virginia Tech Alumni Directory, I was immediately reminded of how supportive Virginia Tech alums can be and I decided to ask my future fellow alums to help me with this project. Would you be willing to help me?

I have selected 700 people from the 1998 alumni directory completely at random using a random numbers chart and your name was one of the 700 I selected! I realize I am asking you for your valuable time. I anticipate the survey will likely take about 15 to 20 minutes to complete. Since it is important that I have a robust number of returned surveys with candid responses, I have taken steps to assure participants of their anonymity. I have enclosed the questionnaire and an informed consent form explaining more about the project. Your participation will not only help me complete my degree program but more importantly, the information you provide will also contribute to ongoing efforts to help others.

Please read the yellow informed consent form carefully. Sign the yellow consent form and seal it in the envelope labeled "informed consent" which I have provided. Then, complete the questionnaire. Place the completed questionnaire and the sealed informed consent envelope in the larger stamped return envelope, which I have also provided. Upon receipt of the returned questionnaire, I will separate the sealed informed consent envelopes from the questionnaires. I will then open the informed consent envelope at a later date to ensure that I will never be able to associate any individual with any returned questionnaire.

If you have any questions about this project, you may contact me by telephone at 540-387-3306 or by email at chabben@vt.edu. The name and telephone number of my committee chair is listed on the informed consent form as well. Thank you in advance for your kind consideration of my request. I believe there is much to gain in researching this area. I hope I may count on your assistance.

Best wishes and my sincere thanks,

Christopher M. Habben, MS
Doctoral Candidate
Virginian Tech

APPENDIX B

Informed Consent

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Participants of Investigation Projects

Title of Project: Differentiation and Extramarital Involvement

Investigator: Christopher M. Habben, M.S. MFT, M.A.

I. The Purpose of the Research

You are invited to join 700 randomly selected people in a study about extramarital involvement. I am particularly interested in understanding the relationship between extramarital involvement and an individual's capacity to respond to anxiety.

II. Procedures

In the mailing, you have received an introductory letter, an informed consent document, a questionnaire, an envelope labeled "informed consent", and a stamped return envelope. Please read the entirety of the informed consent. If you agree to participate, please sign your name and seal this document in the envelope labeled "informed consent". Next, complete the questionnaire completely and to the best of your ability. Upon completion of the questionnaire, place the completed questionnaire and the envelope labeled "informed consent" into the stamped and addressed envelope provided. Upon receipt of your returned questionnaire, I will immediately separate the sealed informed consent document from your questionnaire and open it at a later date to protect your absolute anonymity.

III. Risks

The survey is not intended nor anticipated to cause risk. However, you may experience some questions typically considered as private which conceivably *may* introduce a level of discomfort in your response. To minimize perceivable risk, great effort is being made to assure your absolute confidentiality and anonymity. Please complete the questionnaire privately.

IV. Benefits of this project

The information you provide in this study will prove very helpful to other marital couples and to researchers and professionals who teach and work with couples and families.

V. Extent of Confidentiality

Extreme effort is and will be made to keep the information you provide anonymous and confidential. The procedures have been designed to remove any means of associating your name to any returned questionnaire. By separating the questionnaire from the informed consent envelope, the investigator has no means to identify respondents or to associate a participant with any completed survey.

VI. Compensation

There is no compensation for participation in this project.

VII. Freedom to Withdraw

You may elect to not answer a particular question. You are equally free to withdraw from the study by not responding to the questionnaire. However, to protect your anonymity, no association is made between yourself and the questionnaire. Once you return the questionnaire, your specific questionnaire is unidentifiable and therefore unable to be withdrawn.

VIII. Approval of Research

This research has been approved, as required by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University, and by the Department of Human Development.

IX. Participants' Responsibilities

I voluntarily agree to participate in this study.

X. Subject's Permission

I have read and understand the Informed Consent and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for participation in this project.

I may withdraw before returning the questionnaire without penalty. I agree to abide by the guidelines of this project

Name

Date

Should you have any questions about this research or its conduct, you may contact the following persons at Virginia Polytechnic Institute and State University.

Christopher M. Habben, MS MFT, MA, Investigator
Michael J. Sporakowski, Ph.D., Faculty Advisor
H.Thomas Hurd, Ph.D.,
Institutional Research Board Research Division

Phone: 540-387-3306
Phone: 540-231-4794
Phone: 540-231-9359

If you would like me to send you the results of this project, please circle *Yes* below

Yes I would like to be sent the results of this project

Return address: _____

No I am not interested in seeing the results of this study

Christopher M. Habben, MS
Investigator

Michael J. Sporakowski, Ph.D.
Faculty Advisor

APPENDIX C

Survey Instrument

Instructions

Thank you for your willingness to participate in this research project. Before completing the following questionnaire, please carefully read and sign the informed consent form included in the mailing. Seal the signed informed consent form in the provided envelope labeled "informed consent". Next, find a location to privately complete this questionnaire form without interruption. The survey will most likely require a few minutes of your time to complete. When you have completed the questionnaire, enclose the questionnaire and the sealed envelope labeled "informed consent" in the stamped, return envelope provided. Again, thank you for your participation.

What is your opinion?

Below is a list of reasons that people sometimes offer to explain why they have been sexually involved with someone outside of their marriage. To what extent would each of the following reasons justify to you involvement in an extramarital sexual relationship?

	<i>completely unjustified</i>	<i>somewhat unjustified</i>	<i>3</i>	<i>partially justified</i>	<i>completely justified</i>
1. When one's spouse views sex with contempt	1	2	3	4	5
2. When one's spouse is unable to have sex due to physical limitation	1	2	3	4	5
3. When one's spouse is consistently unaffectionate	1	2	3	4	5
4. When one's spouse believes sex is exclusively for child bearing	1	2	3	4	5
5. When there is an extended separation due to military, job, prison etc	1	2	3	4	5
6. When one's spouse is incapable of satisfying sexually	1	2	3	4	5
7. When one's spouse is having an affair with someone else	1	2	3	4	5
8. When one's spouse is excessively overweight	1	2	3	4	5

Now, suppose that you were very close friends with several couples in your community and as it happened, your husband [wife] had gone on an extended trip, leaving you home alone. Suppose a similar thing happened to some of your close friends. That is, the wife [husband] of one of those acquaintances left the state to visit relatives, leaving her husband [his wife] home alone. How accepting or rejecting would you be about :

	<i>Totally Rejecting</i>	<i>Somewhat Rejecting</i>	<i>3</i>	<i>Somewhat Accepting</i>	<i>Totally Accepting</i>
1. Spending an evening or evenings with him [her] in his [her] living room?	1	2	3	4	5
2. Going to the movies or to the theatre together?	1	2	3	4	5
3. Going out to dinner with him [her] at a secluded place?	1	2	3	4	5
4. Dancing with him [her] to the stereo?	1	2	3	4	5
5. Spending a couple days at a secluded cabin with him [her] near a beautiful lake where no one would find out?	1	2	3	4	5
6. Necking or sexual petting with him [her]?	1	2	3	4	5
7. Becoming sexually involved with him [her]?	1	2	3	4	5

Demographic Information

Please circle the response or fill in the blanks which best describe you.

1. What is your sex?

1. Male
2. Female

2. What is your date of birth?

----- ----- -----
 Day Month Year

3. Which one of the following best describes your current marital status?

1. Single, Never married
2. Married, First marriage
3. Married but separated
4. Remarried, Second or greater marriage
5. Single, Divorced
6. Single, Widowed

4. What is your approximate Annual Family Income ?

\$ _____ per year

5. Please circle the highest grade you complete in school.

(Elementary)	(High School)
K 1 2 3 4 5 6 7 8 9 10 11 12	
(College)	(Graduate Education)
13 14 15 16 17 18 19 20 21 22 23+	

6. Which one of the following best describes your current political orientation?

1. Very Conservative
2. Conservative
3. Moderate
4. Liberal
5. Very Liberal

7. Circle one or more of the following which best describes your ethnicity.

1. White, Caucasian
2. Black, African American, Negro
3. Spanish, Hispanic, Latino
(circle one below or complete the blank if Spanish, Hispanic, Latino)
 1. Mexican, Mexican American, Chicano
 2. Puerto Rican
 3. Cuban
 4. Other: _____
4. Alaskan native/Native American
5. Asian Indian
6. Chinese
7. Filipino
8. Japanese
9. Korean
10. Vietnamese
11. Native Hawaiian
12. Guamanian or Chamorro
13. Samoan
14. Other Pacific Islander _____
15. Other _____

8. Which one of the following best describes your current religious affiliation?

1. Protestant (Christian)
(circle one below or complete blank if Protestant)
 1. Baptist
 2. Methodist
 3. Lutheran
 4. Presbyterian
 5. Episcopalian
 6. Non-denominational
 7. Other _____
2. Roman Catholic
3. Jewish
4. Orthodox (Such as Greek or Russian)
5. Hindu, Muslim, or other Eastern Religion
6. None
7. Other _____

Sexual Relationship Information

Please circle the response or fill in the blanks which best represent your experience.

For questions 1 and 2, please think of your sexual experiences previous to your first marriage.

1. Please list the age at which you first experienced the following events or circle *NA* if the event does not apply to your personal experience.

<u>Event</u>	<u>Age</u>	
Passionate kissing ("French kissing")	----	NA
Sexual play (breast or genital petting)	----	NA
Performed oral sex	----	NA
Received oral sex	----	NA
Engaged in sexual intercourse	----	NA

2. With how many different partners have you experienced the following events prior to your first marriage?

<u>Event</u>	<u># of Partners</u>
Passionate kissing (e.g., "French kissing")	-----
Sexual play (e.g., breast or genital petting)	-----
Performed oral sex upon partner	-----
Received oral sex from partner	-----
Sexual intercourse	-----

3. Which one of the following statements best describes the understanding between you and your current (or most recent) spouse concerning sex outside of your marriage?

1. We have discussed it and decided that under no circumstances is it all right.
 2. We have discussed it and decided that under some circumstances it is all right.
 3. We have not discussed it but I feel we would agree that under no circumstances is it all right.
 4. We have not discussed it, but I feel we would agree that under some circumstances it is all right.
- X. I have never been married.

Questions 4 and 5 concern sexual behavior with individuals other than your spouse, while you have been married.

4. Please circle "Yes" if you have experienced any of the following behaviors with some one other than your spouse while you were married.

If you have never been married, please circle "Yes" if you experienced any of the following behaviors with some one who was married to some one else at the time.

"I...(behavior below).. someone other than my spouse"

Casually flirted with	Yes	No
Had romantic feelings for	Yes	No
Had a deep romantic attachment with	Yes	No
Kissed (e.g., kiss on the lips)	Yes	No
Passionately kissed ("French kissing")	Yes	No
Engaged in sexual play with (breast or genital petting)	Yes	No
Performed oral sex upon	Yes	No
Received oral sex from	Yes	No
Engaged in sexual intercourse with	Yes	No

5. Please identify the number of different people, other than your spouse, with whom you experienced the following behaviors while you were married.

If you have never been married, please identify the number of people with whom you experienced the following behaviors while they were married to some one else at the time.

<u>Behavior</u>	<u># of People</u>
Casually flirted	-----
Had romantic feelings	-----
Had a deep romantic attachment	-----
Kissed (e.g., kiss on the lips)	-----
Passionately kissed ("French kissing")	-----
Engaged in sexual play with (breast or genital petting)	-----
Performed oral sex	-----
Received oral sex	-----
Engaged in sexual intercourse	-----

Marital History

Please complete the following information as it applies to you.

	Date Married	Date of divorce or death of spouse	Divorced or Widowed (Circle One)	
First Marriage:	-----	-----	Divorced	Widowed
Second Marriage:	-----	-----	Divorced	Widowed
Third Marriage:	-----	-----	Divorced	Widowed
Fourth Marriage:	-----	-----	Divorced	Widowed

Opportunity

Regardless of how you might react, the following questions concern the number of opportunities you perceive you have in your daily activities to involve yourself in extramarital activity.

	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>	
1. If I desired, my daily activities would make it convenient for me to conceal extramarital activities from my spouse, family and friends.	1	2	3	4	5
2. If I desired, my daily activities expose me to an ample number of people with whom I might experience extramarital activities.	1	2	3	4	5

Thank you for the time you invested in responding to this questionnaire, the trust you placed in the project and your willingness to share your beliefs, ideas and experiences regarding a very private concern. If you have any additional comments, clarifications, or thoughts that you would like to make, please do not hesitate to make those comments in the space below. When you are finished, please seal this questionnaire along with the sealed "informed consent envelope" in the return envelope provided.

Thank you.



Page 6

APPENDIX D

DSI Instrument

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (*not at all*) to 6 (*very*) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. **Be sure to answer every item** and try to be as honest and accurate as possible in your responses.

	<i>Not at all true of me</i>				<i>Very true of me</i>
1. People have remarked that I am overly emotional.	1	2	3	4	5 6
2. I have difficulty expressing my feelings to people I care for.	1	2	3	4	5 6
3. I often feel inhibited around my family.	1	2	3	4	5 6
4. I tend to remain pretty calm even under stress.	1	2	3	4	5 6
5. I'm likely to smooth over or settle conflicts between two people I care about.	1	2	3	4	5 6
6. When someone close disappoints me, I withdraw from him or her for a time.	1	2	3	4	5 6
7. No matter what happens in my life, I know that I'll never lose my sense of who I am.	1	2	3	4	5 6
8. I tend to distance myself when people get close to me.	1	2	3	4	5 6
9. It has been said (or could be said) of me that I am still very attached to my parent(s).	1	2	3	4	5 6
10. I wish that I weren't so emotional.	1	2	3	4	5 6
11. I usually do not change my behavior simply to please another person.	1	2	3	4	5 6
12. My spouse or partner could not tolerate it if I were to express to him or her my true feelings.	1	2	3	4	5 6
13. Whenever there is a problem in my relationship, I'm anxious to get it settled right away.	1	2	3	4	5 6
14. At times my feelings get the best of me and I have trouble thinking clearly.	1	2	3	4	5 6
15. When I am having an argument with someone, I can separate my thoughts about the issue from my feeling about the person.	1	2	3	4	5 6
16. I'm often uncomfortable when people get too close to me.	1	2	3	4	5 6
17. It's important to me to keep in touch with my parents regularly.	1	2	3	4	5 6
18. At times, I feel as if I am riding an emotional roller coaster.	1	2	3	4	5 6
19. There is no point in getting upset about things I can not change.	1	2	3	4	5 6
20. I'm concerned about losing my independence in intimate relationships.	1	2	3	4	5 6
21. I'm overly sensitive to criticism.	1	2	3	4	5 6
22. When my spouse or partner is away for too long, I feel like I am missing a part of me	1	2	3	4	5 6
23. I'm fairly self-accepting.	1	2	3	4	5 6
24. I often feel that my spouse or partner wants too much from me.	1	2	3	4	5 6
25. I try to live up to my parents' expectations	1	2	3	4	5 6
26. If I have had an argument with my spouse or partner, I think about it all day	1	2	3	4	5 6
27. I am able to say no to others even when I feel pressured by them.	1	2	3	4	5 6
28. When one of my relationships becomes very intense, I feel the urge to run away from it	1	2	3	4	5 6
29. Arguments with my parent(s) or sibling(s) can still make me feel awful.	1	2	3	4	5 6
30. If someone is upset with me, I can't seem to let it go easily.	1	2	3	4	5 6
31. I'm less concerned that others approve of me than I am about doing what I think is right	1	2	3	4	5 6
32. I would never consider turning to any of my family members for emotional support	1	2	3	4	5 6
33. I find myself thinking a lot about my relationship with my spouse or partner	1	2	3	4	5 6
34. I'm very sensitive to being hurt by others	1	2	3	4	5 6
35. My self-esteem really depends upon on how others think of me	1	2	3	4	5 6
36. When I am with my spouse or partner, I feel smothered	1	2	3	4	5 6
37. I worry about people close to me getting sick, hurt, or upset	1	2	3	4	5 6
38. I often wonder about the kind of impression I create	1	2	3	4	5 6
39. When things go wrong, talking about them usually makes it worse	1	2	3	4	5 6
40. I feel things more intensely than others do.	1	2	3	4	5 6
41. I usually do what is right, regardless of what others say	1	2	3	4	5 6
42. Our relationship might be better if my spouse or partner would give me the space I need.	1	2	3	4	5 6
43. I tend to feel pretty stable under stress.	1	2	3	4	5 6

APPENDIX E

DSI Scoring Procedures

DSI Scoring Procedures

Differentiation of Self Inventory Subscale Composition (Underline means reverse scored)

Emotional Reactivity: 1, 6, 10, 14, 18, 21, 26, 30, 34, 38, 40

I Position: 4, 7, 11, 15, 19, 23, 27, 31, 35, 41, 43

Emotional Cutoff: 2, 3, 8, 12, 16, 20, 24, 28, 32, 36, 39, 42

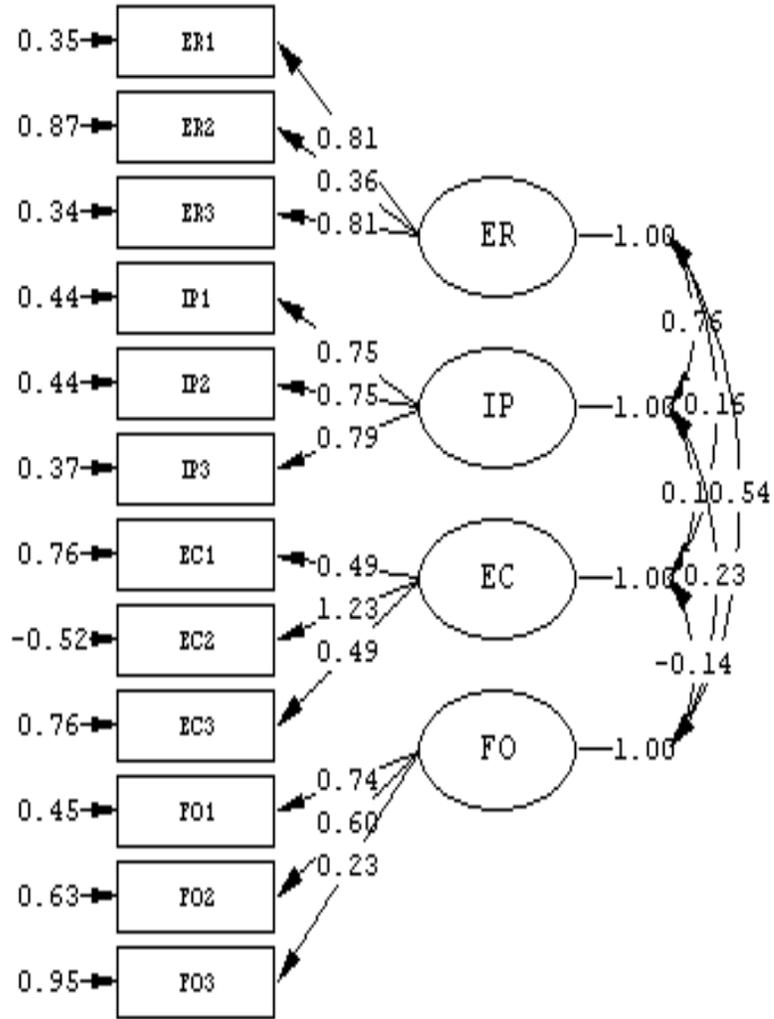
Fusion with Others: 5, 9, 13, 17, 22, 25, 29, 33, 37

DSI Full-scale score: Reverse score all underlined items so that higher scores signify greater differentiation. Scores on all items are then summed and divided by total number of items

Subscale scores: Reverse score underlined items for scale, sum scale then divide by number of items in subscale

APPENDIX F

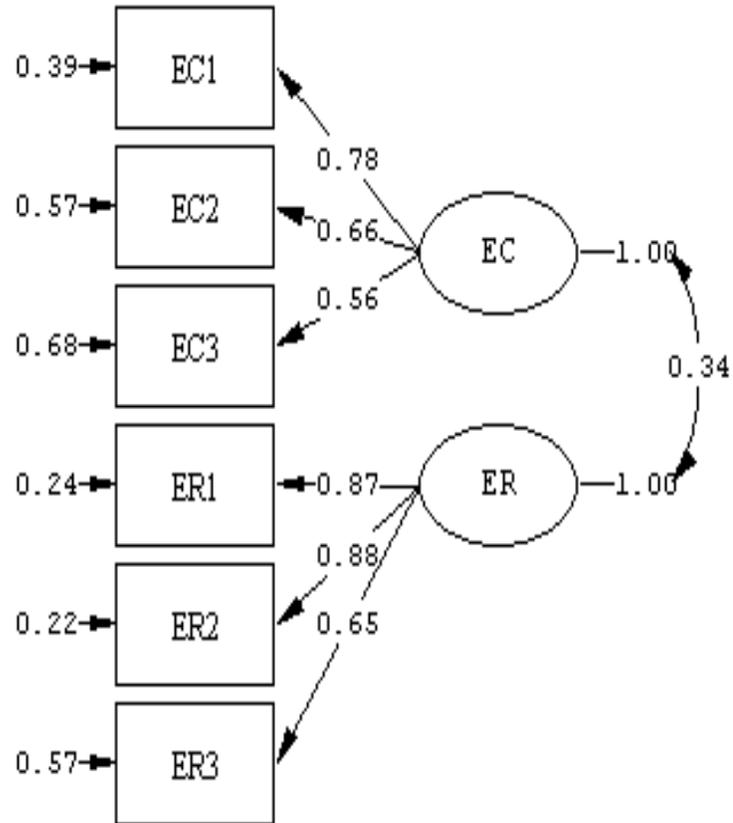
Initial Confirmatory Factor Analysis (Four Scale Model)



$\chi^2 = 83.83, df = 48, GFI = .90, AGFI = .83, RMS = .08$

APPENDIX G

Confirmatory Factor Analysis (Two Scale Model)



$$\chi^2 = 8.59, df = 8, GFI = .98, AGFI = .94, RMS = .05$$

APPENDIX H

Factor Loadings

<u>Factor Loadings for DSI Items</u>			
Subscale	Item Number	Factor 1	Factor 2
ER	1	.65	
EC	2		.61
EC	3		.60
	4		
	5		
	6		
	7		
EC	8		.60
	9		
ER	10	.65	
	11		
EC	12		.56
FO	13		-.44
ER	14	.65	
IP	15	.55	
EC	16		.63
	17		
ER	18	.65	
EP	19	.55	
EC	20		.49
ER	21	.71	
	22		
IP	23	.44	
EC	24		.41
	25		
ER	26	.53	
IP	27	.41	
EC	28		.63
FO	29	.62	
ER	30	.74	
	31		
EC	32		.54
	33		
ER	34	.59	
IP	35	.70	
EC	36		.61
	37		
ER	38	.50	
EC	39		.66
ER	40	-.57	
	41		
EC	42		-.61
IP	43	.48	

Note: Principal Components Extraction, Varimax Rotation Method

ER = Emotional Reactivity, IP = I Position, EC = Emotional Cutoff, FO = Fusion with Others

CHRISTOPHER M. HABBEN

517 Cleveland Avenue Salem, VA 24153 (540) 387-3306

Personal

Date of Birth: 06/14/66
Birthplace: Morrison, IL
Marital Status: Married; Amy S. Hendrickson, September, 1992
E-mail: Chabben@vt.edu

Education

Ph.D. Virginia Polytechnic Institute & State University (In Progress)
Program: Marriage & Family Therapy (Expected Completion 2000)
(COAMFTE Accredited Doctoral MFT Program)

M.A. Fuller Theological Seminary, Pasadena, CA, 1996
Program: Theology

M.S. Fuller Theological Seminary, Pasadena, CA, 1995
Program: Marriage & Family Therapy
(COAMFTE Accredited Master's MFT Program)

B.A. Hope College, Holland, Michigan, 1988
Major: Psychology
Minor: Religion

Supervised Internship/Practicum Experience

July 1998 - Present *Family Service of Roanoke Valley*, Roanoke, VA
Supervisor: William R. Scott, Ph.D.
Experience: Individual, couple, family & group therapy;
supervision training.

January 1997-May, 1998 *Center for Family Services*
Virginia Polytechnic Institute & State University, Blacksburg, VA
Supervisors: Scott Johnson, Ph.D.
Howard Protinsky, Ph.D.
Michael Sporakowski, Ph.D.
Anne Prouty, Ph.D.
Experience: Individual, couple and family therapy.

September, 1995-May, 1996 *University Counseling Center*
Azusa Pacific University, Azusa, California
Supervisor: David Brokaw, Ph.D.
Experience: Primarily individual therapy for
undergraduate students.

April, 1994-December, 1995 *Outreach Counseling*, Arcadia, California
Supervisor: Sharon Patapoff, MA., MFCC
Experience: Individual, couple and family therapy.

Professional Presentations

Marriage enrichment retreat. Sponsored by Reformed Church of Thousand Isles,
Alexandria Bay, NY, August, 1996.

Marriage enrichment workshop for undergraduate student couples. Sponsored by
Azusa Pacific University Residential Life, Azusa, CA, March, 1996.

"Examining current needs of the family". Presentation for Industrial Chaplains
Training Conference, Roanoke, VA, Oct 24, 1998.

"Guiding Parents on Their Teen's Sexuality, Pregnancy, and Parenthood: Promising
Practices from Research"
National Council on Family Relations Conference, Irvine, CA, Nov. 12, 1999.

Teaching Experience

Human Sexuality. Graduate Teaching Assistantship. Virginia Tech University. Fall '96-Spring '98
Developed syllabus, delivered lectures, constructed exams, evaluated written work of students, and
responsible for all facets of undergraduate course of 150-300 students.
Supervisor: Dr. Michael J. Sporakowski, Family & Child Development Department Chair

Public Speaking. Graduate Teaching Assistantship. Virginia Tech University. Fall '98-May '99.
Evaluate public presentations for recitation sections of undergraduate course.
Supervisor: Dr. Wayne Hensley, Public Speaking Director, Communication Studies.

Professional Memberships

American Association of Marriage and Family Therapists, Student Member
American Association of Marriage and Family Therapists, Supervisor-in-Training
National Council on Family Relations, Student Member,
Sections: Education & Enrichment, Family Therapy,
Research & Theory, and Religion & Family Life
National Council on Family Relations, Certified Family Life Educator

Employment History

- 1991-1993 Assistant Director of Admissions, Hope College, Holland, Michigan
*Supervised detailed recruitment programs conducted by staff.
*Researched recruiting constituency utilizing SPSS-X program for strategic enrollment development.
*Directed complete merit scholarship selection process among prospective students.
*Coordinated computer automated direct mail marketing system.
- 1988-1991 Admissions Counselor, Hope College, Holland, Michigan
*Responsible for matriculation of students to Hope College from five states.
*Coordinated leading recruitment program designed to simulate actual college experience.
*Interviewed prospective students and families.
*Participated in the review of applicants for admission

Professional Development

Seminars Attended

- Competency Based Therapy*, Virginia Tech University, February, 1997.
Dr. David Waters, University of Virginia
- Mind-Body Therapy Workshop*, Virginia Tech University, February, 1997.
Julie Lusk, M.Ed., LPC, Certified Yoga Instructor
- Harville Hendrix Public Lecture*, Fuller Theological Seminary, July, 1995.
Dr. Harville Hendrix & Helen Hunt,
The Institute for Relationship Therapy Founder and President
- Couple Communication• Instructor Training*, Fuller Theological Seminary, June, 1995.
Dr. Sherod Miller, Interpersonal Communication Programs, Inc. Chairperson
- Child Abuse Seminar*, Fuller Theological Seminary, March, 1995.
Dr. Tamara L. Anderson, Biola University, Rosemead School of Psychology
- Family Law Workshop*, Fuller Theological Seminary, February, 1995.
Ronald Supancic, J.D., Certified Family Law Specialist
- PREP Communication Program*, Fuller Theological Seminary, June, 1994.
Dr. Scott Stanley, University of Denver,
Co-Director of Center for Marital & Family Studies
- Enjoying the Gift of Sex*, Fuller Theological Seminary, November, 1993.
Dr. Clifford Penner & Joyce Penner, Associated Psychological Services

Conferences Attended

National Council on Family Relations Annual Conference, Crystal City, VA, November, 1997.

American Association of Marriage & Family Therapists 55th Annual Conference, Atlanta, GA, September, 1997.

Smart Marriages, Happy Families, The Coalition for Marriage, Family and Couples Education. Washington, D.C., May, 1997.

Family Therapy Networker Conference, Washington, D.C., April, 1997.

Southeastern Conference of Child & Family Development, Blacksburg, VA, February, 1997.

American Association of Marriage & Family Therapists 53rd Annual Conference, Baltimore, MD, November, 1995.

International Congress on the Family, Denver, CO, July, 1995.

American Association of Marriage & Family Therapists 52nd Annual Conference, Chicago, IL, November, 1994

Student Involvement

- *Interim Vice-President, All Seminary Council, Fuller Theological Seminary, 1996.
- *Orientation Coordinator, Fuller Theological Seminary, Marriage & Family Division, Summer, 1995.
- *All Seminary Council, Fuller Theological Seminary, 1994-1995.
Committees: Student Constitution Committee
Student Affairs Committee
Development Committee
Technology Task Force Committee
- *President, Psychology Graduate Union, Marriage & Family Division, Fuller Theological Seminary, 1994-1995.
- *Professional Liaison, Psychology Graduation Union, Marriage & Family Division, Fuller Theological Seminary, 1993-1994.

Volunteer Experiences

- *Student Volunteer. *Smart Marriages-Happy Families Conference.* Washington, D.C., May 1997.
- **Young Life* Youth Volunteer. Holland, MI, 1991-1993.
- *Nursing Home Visitation Coordinator. Hope College, Holland, MI, 1986-1988.

Professional Interests

- *Human Sexuality
- *Spirituality
- *Premarital-Counseling/Education
- *Marital Therapy
- *Family Life Education and Enrichment Programs
- *Divorce prediction and prevention