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The Role of Deception in Mediating Relationship Involvement of Couples Interacting on the Internet: Stages of Intimate Formation

Dustin W. Edgerton
Utah State University

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THE ROLE OF DECEPTION IN MEDIATING RELATIONSHIP INVOLVEMENT
OF COUPLES INTERACTING ON THE INTERNET:
STAGES OF INTIMATE FORMATION

by

Dustin W. Edgerton

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development
(Marriage and Family Therapy)

UTAH STATE UNIVERSITY
Logan, Utah

2004
ABSTRACT

The Role of Deception in Mediating Relationship Involvement of Couples Interacting on the Internet:
Stages of Intimate Formation

by

Dustin W. Edgerton, Master of Science
Utah State University, 2004

Major Professor: Dr. D. Kim Openshaw
Department: Family, Consumer, and Human Development

A vast majority of individuals involve themselves in an intimate relationship at one time or another. This study looks at a new, but increasing, forum of relationship development, that of the Internet. More specifically, this study addresses various stages of Internet relationship development, and deception individual's use during the process of forming and maintaining these relationships.

This research gathered quantitative and qualitative information from 134 individuals involved in online relationships. The quantitative analyses provided only a few significant findings and it is suggested that the current methods of measuring deception are inadequate and do not appear to represent the types of deception that may be employed by those developing relationships on the Internet. The qualitative findings indicate that over half the people in this study report using deception in their Internet
relationships and there appear to be different motivations for doing so.
ACKNOWLEDGMENTS

This thesis is dedicated to everyone who supported me in accomplishing this project. I extend a special acknowledgment to my parents for the constant support and love throughout my educational career, to my wife for the encouragement and unconditional love she so freely gives me, to my children, Bryant, Kade, and Brooke, whose faces and smiles gave me the motivation to continue, and to my friends and colleagues for their constant support that got me though the long process. Finally, special thanks to my major advisor for his encouragement and dedication to this project.

Dustin W. Edgerton
# CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td></td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td></td>
<td>v</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td></td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>I.</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II.</td>
<td>LITERATURE REVIEW</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Attachment and Relationship Formation</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>30</td>
</tr>
<tr>
<td>III.</td>
<td>METHODS</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Sample</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Procedures</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Measures</td>
<td>36</td>
</tr>
<tr>
<td>IV.</td>
<td>RESULTS</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Use of Deception in Internet Relationships: An Analysis of the Quantitative Data</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>A Qualitative Understanding of the Use of Deception in Internet Relationships</td>
<td>50</td>
</tr>
<tr>
<td>V.</td>
<td>DISCUSSION</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Relationships</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Limitations</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Deception</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Use of the Deception in Internet Relationships</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>Implications for Marriage and Family Therapy</td>
<td>70</td>
</tr>
</tbody>
</table>
# REFERENCES

---

# APPENDICES

---

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Informed Consent</td>
<td>89</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Internet Deception Inventory</td>
<td>94</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Tables</td>
<td>100</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>The Relationship Between Level of Intimacy and Duration of Time Spent Interacting on the Internet</td>
<td>43</td>
</tr>
<tr>
<td>2</td>
<td>The Relationship Between Level of Intimacy and Duration of Time Spent Interacting on the Internet Based on Gender</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>The Relationship Between Deception and the Level of Internet Intimacy</td>
<td>47</td>
</tr>
<tr>
<td>4</td>
<td>The Relationship Between General Deception, Impression Management, and Partner Deception, and the Level of Internet Intimacy by Gender</td>
<td>49</td>
</tr>
<tr>
<td>5</td>
<td>Percentage of Respondents Indicating Honest Versus Deception in Their Internet Relationships</td>
<td>51</td>
</tr>
<tr>
<td>6</td>
<td>Percentage of Individuals According to Whether They Lie About Personal Information, Sex and Past Relationships, or About Everything in Their Interactions on the Internet</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>Percentage of Individuals According to When they Choose to Become More Honest in the Internet Relationships</td>
<td>56</td>
</tr>
<tr>
<td>8</td>
<td>Categories Associated with Telling the Truth to One’s Partner After Having Lied</td>
<td>58</td>
</tr>
<tr>
<td>9</td>
<td>Percentage of Individuals According to When They Decide to Meet Face to Face</td>
<td>60</td>
</tr>
<tr>
<td>10</td>
<td>An Examination of Findings Based on the General Deception Scale</td>
<td>68</td>
</tr>
<tr>
<td>11</td>
<td>An Examination of Findings Based on the Impression Management Scale</td>
<td>69</td>
</tr>
<tr>
<td>12</td>
<td>An Examination of Findings Based on the Partner Deception Scale</td>
<td>69</td>
</tr>
<tr>
<td>13</td>
<td>The Relationship Between the General Use of Deception (General Deception) and Demographic Variables</td>
<td>101</td>
</tr>
<tr>
<td>Page</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>14</td>
<td>The Relationship Between the General Use of Deception (General Deception) and Demographic Variables by Gender</td>
<td>102</td>
</tr>
<tr>
<td>15</td>
<td>The Relationship Between the One Partner Perceiving the Other as Being Deceptive (Partner Deception) and Demographic Variables</td>
<td>103</td>
</tr>
<tr>
<td>16</td>
<td>The Relationship Between the One Partner Perceiving the Other as Being Deceptive (Partner Deception) and Demographic Variables by Gender</td>
<td>104</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>32</td>
</tr>
</tbody>
</table>

- Distribution of sample according to region and developmental stage
CHAPTER I
INTRODUCTION

Considerable research (e.g., Ainsworth, 1982; Bowlby, 1969; Hanzan & Shaver, 1994; Harlow, 1961; Simpson & Rholes, 1998; Sperling & Berman, 1994) has been focused on the importance of relationships in the lives of human beings. In this research there is consensus that people have a need to feel emotionally connected, or attached, to another person. Literature suggests that in the process of forming relationships an individual will move from stranger and acquaintance on across a continuum in the dating process to that of courting and intimacy (Cox, 2001). While this process seems straightforward, the desire to present oneself in the best light possible opens the likelihood that individuals may choose to guard against personal exposure that may impede the process of relationship development. One method that may be employed to avoid personal self-disclosure is that of deception. According to Ford (1996), the use of lies or deception tends to be almost universal and may even function as a “norm,” not only in the process of relationship formation, but also in that of relationship maintenance.

An area of relationship formation that is growing significantly is that of Internet relationships. It seems logical that if one is forming a relationship in a face-to-face manner, that one may attempt to conceal information (e.g., personality traits, past experiences) that may interfere with the ability to solidify a relationship. It is not known, however, to what extent those who are involved in Internet relationships use deception. It seems that there may be as much need to use “measured honesty” (Stuart,
1980) and thus be deceptive in Internet relationship formation as there is in face-to-face relationship development. In as much as it is unclear as to what extent deception plays a role in Internet relationships, and what types of deception may be employed, as well as how the stage of the relationship affects its use, this research focuses on Internet relationships and the use of deception. Primary quantitative research hypothesis involved in this study were as follows.

1. There is no statistically significant difference between the level of intimacy reported by participants and the duration of the relationship across time.

2. There is no statistically significant difference in the level of intimacy reported and the Demographic Information Form variables.

3. There is no statistically significant difference in the amount of deception reported by participants and the length of time they have associated with one another on the Internet.

4. There is no statistically significant difference in the reported amount of deception and the Demographic Information Form variables.

5. The type of deception reported by the participants is not significantly related to the level of intimacy reported by the participants.

The qualitative section of this study was composed of five questions dealing with how deception is used in Internet relationships. Specific questions asked of the participants included the following.

1. How and when do you choose to be deceptive in an Internet relationship?

2. When you choose to use deception, what do you choose to be deceptive about?
3. At what point in the relationship do you choose to become honest about that which you have previously been deceptive?

4. How do you present the information truthfully to your partner when you have previously been deceptive?

5. At what point and how do you decide to make the transition from an online relationship to a face-to-face one?
CHAPTER II
LITERATURE REVIEW

Attachment and Relationship Formation

Attachment is the "lasting psychological connectedness between human beings" (Bowlby, 1969, p. 194). An infant's first attachment is formed with the primary caregiver that provides physical and emotional care. Through interactions that take place in everyday care (e.g., feeding, changing, comforting), a relationship develops between the primary caregiver and the child. This first relationship then becomes the base from which all other relationships are formed (Bowlby).

Current research suggests that attachment is no longer a subject limited to the early years of life and bonding between mother and child. Main, Kaplan, and Cassidy (1985), as well as authors such as Hazan and Shaver (1994), have demonstrated that attachment is present in adult life and may be a key source of interdependence, a concept suggesting the ability of an individual to effectively balance independence with emotional connectedness, in a relational context (hereafter referred to as interdependence). Research (Rothbard & Shaver, 1994) further demonstrates that the work of Bowlby (1969) and Ainsworth (1967), while forming the basis of our understanding of attachment in children, also serves as the foundation for empirical validation of the attachment phenomena among adolescents through to adults.

Adolescence and Adulthood Attachment

Attachment in adolescence. Attachment skills fostered in infancy serve as
bridgework into adolescence and adulthood, forming the basis for a transition from
dependence on external sources to provide a sense of security and emotional
gratification, to the evolution of internal processes that guide attachment, with external
sources now taking a secondary position (Openshaw, personal communication, 2002).
Beginning with puberty, a variety of developmental changes occur which, in interaction
with one another, may result in an alteration in the meaning of attachment, and thereby
its implementation. For example, with the shift in cognitive development, it is possible
for a child—now an adolescent—to think outside of himself or herself. This ability
allows the individual to assume multiple perspectives of the self, as well as their
position relative to another person. Social development seems to parallel cognitive
development as is suggested in the term social cognition. As one is capable of seeing
outside themselves, understanding boundaries and fostering a sense of empathy, they
place themselves in a position wherein they can emotionally connect with another while
retaining their own identity (Openshaw, personal communication, 2002). Both
cognitive and social development are important factors guiding the process of
separation/individuation, or in other words, the ability to acquire a secure sense of one’s
own identity and thus achieve a sense of independence within their socio-political and
cultural contexts. Obviously this is not a “state” or “stage” but rather can be viewed as
evolutionary across the life cycle. Further, as one increases security within their own
identity, they are able to use the social skills enhanced through social cognition to enter
relationships, foster boundaries, and exit relationships in the process of moving from
acquaintance to interdependence, both of which emphasize the importance of emotional
connectiveness with those of significance.
Even though separation and individuation are occurring, if a positive separation is accomplished, with parents relinquishing control as youth accept responsibility and accountability, then there remains an emotional attachment (differentiation/interdependence) with the caregivers commensurate with the type of attachment they had as infants, children, and youth, with some modification as a result of socialization. Batgos and Leadbeater (1994) suggested that positive parent-child relationships were associated with more intimate peer relationships and greater interpersonal competence. They go on to suggest that a secure attachment with parents can act as a buffer to protect adolescents from viewing themselves as unlovable and unworthy of reward, and others as unsupportive and punitive. Separation/individuation parallels differentiation/interdependence in that the two processes provide a beginning point towards becoming one’s own person. As these two processes play out, a unique form of relating is fostered which has a continuum quality to it. At the one end of the continuum is the separation; the ability to be one’s self, where individuation or independence has been established. However, this sense of individuation/independence must be balanced by the other end of the continuum, with differentiation/interdependence, the ability to be physically separated, yet emotionally connected. It is suggested that individuals must achieve a state of independence and that when they are independent, they can choose interdependence (Covey, 1989). In fact, it is further suggested that the degree of independence achieved is proportional to the amount of interdependence an individual may display in a relationship context (Openshaw, personal communication, 2002; see also Schnarch, 1991).

Attachment theory provides a framework for understanding how emotional
connectiveness to significant others may be reflected in peer relationships. For example, those youth who have learned to foster a sense of self (i.e., independence), as well as demonstrated an ability to have a relationship with another (i.e., interdependence) are in a prime position to move comfortably in and out of relationships with varying degrees of commitment. On the other hand, those who have been deprived of the opportunity to develop attachment skills (repertoire deficit, Meichenbaum, 1977) or have learned them but do not apply them (skills deficit, Meichenbaum), have difficulty accommodating to relationships regardless of whether the dating is on the Intent or some other form of social interaction.

Attachment in young adulthood. As has been suggested, attachment is a process that is initiated in infancy and nurtured through adolescence. In young adulthood, the presentation of those schema associated with interpersonal behavior are particularly crystallized and may be manifest in the individual’s personality structure. Bowlby (1979) supported this position when he described attachment as processes affecting human beings “from the cradle to the grave” (p. 129).

It has only been in the past several decades that attachment has been identified as a fundamental relationship phenomena during adulthood (Hazan & Shaver, 1994; Main et al., 1985). During early adolescence, youth enter the dating scene in an attempt to “test out” their attachment abilities and skills, though they may certainly not be conscious that their behaviors are associated with attachment strategies learned throughout infancy and childhood. During later adolescence, and into early adulthood, these attachment abilities, capabilities and skills are used to selectively narrow the “pool of eligibles” in a process commonly referred to as mate selection. Again, however, the
underlying dynamics of the attachment phenomena will, more than likely, go unrecognized by those involved during this process. While they may encounter various difficulties during the dating process, many will not come to understand the relationship between the difficulties they are experiencing and the type of attachment they had with primary caregivers across their lifetime. Those who do not recognize the role attachment plays in their relationship evolution, so that they can accommodate and/or assimilate them, may experience distress in their relationships. A nonfunctional method of coping with distress evolving from incompatible attachment processes may be the use of manipulation (e.g., verbal, emotional or physical coercion) and deception (e.g., rationalization, justification, and lies) in the hopes of engendering "compatibility" (Openshaw, personal communication, 2002).

An Overview of Mate Selection

The process by which adolescents and adults narrow the "pool of eligibles" and move the dating process from that of "enjoying time together" without significant psychoemotional or physical commitment into relationships involving much greater levels of intimacy, with the ultimate outcome being that of "marriage" or "partnering," is referred to as "mate selection" (Burr, 1970). Mate selection has been a topic of social science interest for decades (Moss, Apolonio, & Jensen, 1970; Murstein, 1980; Parsons, 1998; Surra, 1990) with research focusing on such variables as communication (Baxter & Bullies, 1986; Parks & Adelman, 1983), social skills (Filsinger & Thoma, 1988), attraction—both physical and social (Christopher & Cate, 1985; Rusbult, 1980), ideological associations (Cate, Lloyd, & Long, 1988), and socioeconomic status (Blau,

As important as variables of the past are to our understanding of mate selection, if what Bowlby suggested, with regards to the role attachment plays in the process of association, with particular relevance in terms of how the various forms of attachment enhanced or impeded the process of interaction, it would behoove social science to include those variables in social science research, discussion, and development of intervention strategies.

If attachment is an “inherent” part of our development, then it follows that the associated skills, abilities, and capabilities may be acquired and enhanced as various relationship opportunities are accepted. Further, as these skills, abilities, and capabilities are enlarged upon, and there is movement in relationship involvement toward mate selection, then it follows that there will be a developmental progression in the mate selection process that moves from stranger, to acquaintance, to friend, and finally to intimate association.

While attraction is, and continues to be a key element in bringing individuals together, it is the emotional element—commonly known as “love”—that serves as a primary reason many in the United States give for engaging in a long-term relationship (Cox, 2001). With this in mind, the process of mate selection, which ultimately allows one to find the person they will “commit their love to,” is accomplished as one progresses across varying levels of dating and relationship association (Whyte, 1992).

Although critics argue that the acceptance of love as the basis for marriage or partnering ignores other significant factors of homogeny and heterogeny (e.g., social and economic levels, education, age, religion, ethnicity, prior marital experience, race),
Cox (2001) suggested that the American social system does take these characteristics and attributes into consideration, stating that "you don't fall in love with just anybody" (p. 169). Thus, his contention is that these other variables are being taken into consideration throughout the dating process, even if at a subconscious level; regardless, the ultimate outcome is love.

Each person has a field of "desirables," people to whom they are attracted. Within the field of "desirables" is a subgroup referred to as "availables," those who are free to reciprocate interest. Cox (2001) suggested that availability is propinquity based (e.g., geographical location, for instance communities that are organized into neighborhoods according to socioeconomic level, ideas and beliefs, occupations, and organizations). Propinquity refers to "nearness" in the above-listed areas, as well as others not cited. Propinquity is that variable essential to endogamy, or marrying within your own group. In general, research tends to indicate that our choice of potential mates, and ultimately our mate, is based on how similar we are to one another—homogamy, which includes socioeconomic status, mutual social and physical attraction, intellectual and ideological reciprocity, and emotional stability (Huston & Levinger, 1978).

**Internet Relationships**

Different from most research, this study involves individuals who are engaging in relationships over the Internet. More specifically, this study addresses various stages of Internet relationship development and deception individuals' use during the process of forming and maintaining these relationships. Levine (2000) compared on-
offline relationships, citing similarities and dissimilarities. Levine suggested that relationships could start any place on- or offline if there is one common factor—"attraction." Her characterization of relationships suggested four components of attraction: (a) proximity and frequency of contact, (b) self-presentation, (c) similarity, and (d) reciprocity and self-disclosure.

**Propinquity and frequency of contact associated with those who seek relationships online.** Levine (2000) suggested that in the online world, proximity—a form of propinquity—is not defined by physical location but rather by a particular chat room, message board, listserv, or type of Internet software that users have in common. Levine stated, “All that people say about buying a house is true of online flirting and attraction: There are only three things that are important—location, location, and location” (p. 566). The uniqueness of the online relationship is that there is no longer a physical space limitation and the numbers of individuals one can associate with are innumerable. Since physical space is no longer a barrier and one has the opportunity to associate and develop a relationship with many, it appears that the frequency of contact becomes an essential ingredient in the formation of an attraction. This may not be so different from attractions formed offline. The difference lies in the fact that even if two people are using the same chat room, though not at the same time, it would be difficult, if not impossible, for an attraction to develop. Levine, supportive of this notion, states, “In the virtual world, people who develop multiple attractions and relationships tend to be online at regular intervals” (p. 567).

In addition to virtual conversations in chat rooms, there is messaging software, where it is possible to track when others are online by adding them to your “buddy list.”
This software alerts whenever he or she signs onto the Internet. "Virtual frequency of contact has become even easier to track than watching one's neighbor leave for work every morning at 15 minutes to eight" (Levine, 2000, p. 567).

**Self-presentation.** Although our culture emphasizes "physical beauty," Levine (2000) noted that online one must open other avenues for developing attraction since the only aspect of "beauty" that can be relied on is that which is portrayed to the person through the online process. While this may appear to be a limitation, Levine stated that the lack of focus on "physical beauty" could be a relief to both attractive and unattractive people. The pressure often associated with finding the "perfect 10" encourages online individuals to enhance the relationship through other means. Cooper and Sportlalari (1997) stated that "self-presentation is more fluid and under one's control online; people make decisions in each situation about when, how, and if they will disclose aspects of physical appearance to the other" (p. 10). Thus, the movement away from "physical beauty" as a primary focus of attraction encourages those using the online method to form a relationship to foster communication skills in order to present themselves—their attributes and characteristics. Written communication provides an "ease of expression that encourages self-disclosure and consequently, virtual attraction" (Levine, p. 568).

Is it possible that physical beauty could be substituted by other variables associated with attraction? In answer to this question, focus is turned to Buss's (1988) study that examined the evolution of human intra-sexual competition. In this study Buss reported 10 factors judged to be the most effective in attracting opposite-sex partners for both men and women. Six of the 10 effective factors had nothing to do
with physical attributes and could easily be conveyed in an online environment to
attract someone of the opposite sex. These factors included sense of humor,
sympathetic to his/her troubles, good manners, effort to spend time together, good
communication skills, and offering help.

**Similarity or homogeneity.** In addition to those issues associated with
proximity and online relationships, a closely related area is that of similarity or
homogeneity. Levine (2000) pointed out that one reason it could be easy to meet people
online is that both parties share a similar interest in forming a relationship over the
Internet. Thus, several common interests are already present. Both individuals are
persons who own computers and use chat rooms over the Internet, particularly the same
chat room, message board, and so forth. Further, it appears that both are interested in
meeting people online and fostering a relationship—even though this may not be
intimately orientated. Finally, one must be aware that to form a relationship online
necessitates that the individuals seeking to do so needs to be a good conversationalist.
People are most likely going to be attracted to those they view as effective in their
conversations and have a style not dissimilar from their own.

**Reciprocity and self-disclosure.** In a loving relationship disclosure is rewarding
to the listener because it makes that person feel worthy of receiving intimate
information, thus enhancing self-esteem. This encourages a reciprocal offering of
information at an equal level of intimacy (Tesser & Reardon, 1981). Closeness emerges
from the sharing of life’s struggles that is often perceived as similarity, and thus
attraction. Of course, in both the online world and offline, there is room for impression
management—deciding what, when, and if one should tell intimate details about his/her
Levine (2000) stated, "self-disclosure and reciprocity take place much more quickly than in-person, and is more intimate than one would expect among people who have never met face-to-face" (p. 570). The online world allows the potential for feeling understood and accepted by another person who is viewed as being similar to themselves—a prerequisite of attraction and relationship formation.

**Relationship formation.** It has been suggested that individuals have the ability—for the most part—of developing relationships online and offline. Yet, in speaking of relationships, it is important to define what a relationship is. Webster’s Encyclopedic Unabridged Dictionary (2001) defines a relationship as “1- a connection, association, or involvement, 2- connection between persons by blood or marriage, 3- an emotional or other connection between people, 4- a sexual involvement” (p. 1626). These terms may suggest what may commonly be referred to as “intimacy.” However, there may be some question as to whether or not those forming relationships on the Internet can truly be perceived as “intimate” because they do not have the possibility—at least initially—to be in physical contact with one another. McAdams (2000), when talking about Erikson’s eight-stage theory of human development, stated that “intimacy is a quality of interpersonal relating through which partners share personal thoughts, feelings, and other important aspects of themselves with each other” (p. 118). Sternberg and Barnes (1988) used intimacy as one of the sides of the “love triangle” and defined it as follows:

Intimacy is the emotional component of love that encompasses the sense of being bonded with another person. It includes feelings of warmth, sharing, and emotional closeness. Intimacy also embraces a willingness to help the other and an openness to sharing private thoughts and feelings with the beloved. (p. 37)

Acknowledging the importance of relationships, Baumeister and Leary (1995)
concluded that the need to belong is a powerful, fundamental and pervasive motivation for people in daily life. Recognizing the importance of relationships in the lives of individuals, they proposed the “belongingness hypothesis,” which states “human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive and significant interpersonal relationships” (p. 497). They go on to say that “having some intimate bond appears to be important and perhaps even necessary for happiness.” Further, they indicated, “social isolation is practically incompatible with high levels of happiness” (p. 506). Additionally, they pointed out that “happiness in life is strongly correlated with having some close personal relationships” (p. 506). Finally, they noted that the “belongingness hypothesis” concludes, “It does not make a difference what sort of relationship one has, but that the absence of close social bonds is strongly linked to unhappiness, depression, and other woes” (p. 506).

Supportive of a hypothesis about belongingness, Maslow (1968) stated that love was a basic psychological need. He believed that the need to love and be loved had to be satisfied in order to reach self-actualization. While not all people believe the adage that “love heals all wounds,” many believe that love has healing properties. Freud (1942) wrote that as a last resort, we must begin to love in order that we may not fall ill. Finally, more recently, Dwyer (2000) found that “social relationships are a more important source of well-being than income, social status, or education” (p. 91).

Not all agree that an individual must be married in order to receive the benefits of close relationships (Anson, 1989), however, there are numerous studies that support the relationship between marriage and higher levels of physical, emotional, and psychological well-being. Coombs (1991) reviewed 130 studies comparing married
people with those who were unmarried, examining levels of well being, and concluded:

The published research on personal well-being reveals a consistent pattern: Married individuals, especially married men, experience less stress and emotional pathology than their unmarried counterparts. Studies of alcoholism, suicide, mortality and morbidity, schizophrenia, other psychiatric problems, and self-reported happiness generally support this thesis. (p. 100)

Flora and Segrin (2000) concluded from their research that loneliness is a state of emotional distress arising from a discrepancy between one’s desired and achieved level of social interaction, and that relational satisfaction is negatively associated with loneliness. Finally, Vittengl and Holt (2000) found that even a single, brief conversation is positively associated with an increase in positive emotions. Thus, while there is some research contrary to the association between relationships and well-being, it appears that the preponderance of the literature supports the association.

The formation of relationships: Stages of development. The choice an individual makes about the particular intensity of a relationship moves them through the dating stages, from acquaintance through to mate/partner. The choice of a mate/partner has been identified as one of the most important decisions one will make in their life (Knox & Schacht, 1994). When examining the data associated with the decision to form a mate/partner relationship, these data suggest that, at least in the United States, love is an essential element in choosing a partner, and that if you do not love someone you should not have to marry them (Cox, 2001). In terms of mate/partner relationships, Knox and Schacht, using the Statistical Abstract of the United States (1993, p. 2) reported that by the age of 75, 95% of females and 96% of males have married at least once. This data suggests the relative importance of relationship formation with the ultimate goal being that of forming the mate/partner relationship.
For the purpose of this study, relationship development will follow the suggestions of Cox (2001, p. 154), wherein he proposed a dating continuum that suggested the developmental process used by individuals as they move towards the mate/partner relationship. The stages are identified as:

1. *Casual recreational dating of numerous persons.* This particular aspect of relationship formation refers to the initial transition of an individual into the dating process wherein the rationale involves opportunities to engage in leisurely activities that are ends in and of themselves.

2. *Multiple dates with fewer persons.* The process of narrowing the field of eligibles as one continues to engage in casual recreational dating, though the intent now is to begin specifying criteria (e.g., ideological belief, physical attractiveness, social activities) that become functional in the mate selection process.

3. *Going steady.* The initiation of a dating process that limits itself to one person, though this may include serial monogamy. Going steady implies that one has become increasingly aware of attributes and qualities one would like in a mate. This level of dating allows one to clarify these criteria and adjust them prior to mate selection. During the going steady phase these individuals, as they adjust criteria, may move from partner to partner.

4. *Informal commitment to marriage/partner.* Informal commitment is a period of time when one implements criteria established as requisite to formalizing the mate/partner selection process, or marriage/partnering. Dating continues with increased interpersonal focus (i.e., frequency of time spent together, degree of commitment to one another, and intensity of physical, emotional, intellectual, social and spiritual
involvement) aimed at stabilizing the decision to formalize the relationship.

5. Partnering or engagement. Partnering refers to the agreement to extend the informal commitment into a living arrangement that will allow the couple to examine more closely the perceived attributes while operationalizing living skills (e.g., problem solving, sexual relations, division of labor). Engagement may be either an extension of the partnering period or flow from the informal commitment period. Regardless, it refers to that time period when the couple has committed to one another in a formal manner (e.g., engagement ring) and this commitment is now public and embedded in social interactions.

6. Final commitment and marriage. The “end in mind” (Covey, 1989) for individuals desiring a committed, long-term partnership is moving the formalized commitment into a living arrangement that is socially, religiously and legally accepted; namely, marriage.

Consistent with the logic and developmental nature of relationship development suggested by Cox (2001), Knapp (1984) added insight by indicating that relationships are developmental and may be perceived as a staircase of discrete events that escalate in depth. Altman and Taylor (1973) noted that relationships progress as a series of small, incremental stages, hallmarked by shifts in disclosure and commitment.

Deception in Relationships

Literature (Ford, 1996; Patterson & Kim, 1991) suggests that self-disclosure in relationships was most likely to be selective—especially in the initial stages. The logic for this lies in the fact that there are those who have personal insecurities, “shady”
backgrounds, or life events that may inhibit honest disclosure. The amount of self-disclosure may increase over time as the individual becomes more confident in the relationship; however, even then complete self-disclosure may not occur. Stuart (1980) asserted that most relationships, in order to maintain harmony, use “measured honesty” (p. 220) to decrease the amount of inter- and intrapersonal anxiety, as well as to lessen the impact of the information on the partner, thus, hopefully stabilizing the relationship. “Measured honesty” is defined as selectively choosing what and how much information should be disclosed to another, as well as the timing associated with the “partial” or “selective” disclosure (Stuart).

The Actualization of Deception

To examine the use of deception and/or deceit in relationships, it is critical to propose the definition of the terms. Blair, Nelson, and Coleman (2001) cited the definition of deception given by Metts (1989), as “the intentional misrepresentation of information in order to induce in another person a belief that the deceiver knows to be untrue” (pp. 57-58). Webster’s New World Dictionary (1990) defines “to lie” as “(1) to assert something known or believed by the speaker to be untrue with intent to deceive, or (2) to create a false or misleading impression” (p. 340).

Being deceptive in a relationship by telling a lie or partial truth to protect ourselves, is the antithesis of the primary goal of relationships, namely, developing a close intimate bond, in the context of integrity (which honesty and trust are part of), that facilitates communication and problem solving so that effective personal interaction—in all aspects of the relationship—can take place, regardless of the relationship stage.
While the desire may be to have full disclosure in relationships, Patterson and Kim (1991) indicated that 90% of the participants in their study admitted that they were deceptive. Patterson and Kim suggested that deception presents in the following five categories: (a) lying about one's true feelings, (b) telling lies or partial truths about income, (c) expressing the degree of one's accomplishments, (d) discussions focusing on one's sexual life, and (e) providing accurate information regarding one's age.

Not only have the most common areas of deception been identified, but also the type of lie that is most acceptable and to whom the lie is most tolerable, has been suggested. Backbier, Hoogstraten, and Meerum (1997) have suggested that the lies that are most likely to be tolerated within our culture are those that are perceived as focusing on "trivial matters." When a lie is used in a relationship, the data suggest that when an acquaintance finds out that they have been lied to, they are more accepting of the lie than are those individuals who are regarded as "best friends" (Backbier et al.). In regards to the question of, "With whom one may most effectively lie to and have that lie accepted with the least amount of distress on the relationship?" Backbier and colleagues found that when the individual, who is being lied to, perceives the benefits as being greater from the lie than the truth, the tolerability of the lie increases. On the other hand, as benefits decrease there is a proportionate decrease in tolerability.

The literature to date seems to suggest that one may expect to find some degree of deception in interpersonal relationships and that the motivation for being deceptive varies from self-protection to self-centeredness, whereas the tolerability is dependent on the amount of benefit received. Lying does seem to have a place in relationships, therefore, one must come to understand not only the character and attributes of the
individual who is being deceptive, but also those of the individual who is willing to
benefit from a lie and thus, is willing to tolerate it for personal gain.

**Characteristics of the Deceptive Person**

Whereas Feldman, Cauffman, Jensen, and Arnett (2000) characterized those
who are deceptive as being determined by gender, as well as by the “amount of self-
restraint, tolerance of deviation, and personal engagement in acts of betrayal” (p. 503).
Kashy and DePaulo (1996) suggested from their study of 77 undergraduates and 70
demographically diverse members of the community who participated in their study
about who tells lies, that people who lie are “more manipulative, more concerned with
self-presentation, and more sociable” (p. 1048). Kashy and DePaulo characterized
those who are deceptive by organizing them into two groups, namely, the
“Machiavellian, who go to great lengths to deceive in order to get their way, and the
Socially Adroit, who, while deceptive, are more restrained in their attempts to achieve
their goals” (p. 1048). On one hand, it is suggested that both the Machiavellian and the
Socially Adroit are consciously aware of how deceptive they are in their interactions
with others, recognizing their skills and abilities in the realm of deception. Kashy and
DePaulo suggested that these individuals are often sought after by opposite sex
companions who perceive them as sociable and extroverted. In same-sex relationships,
these persons perceive themselves as being less responsible, in general, and report that
their same-sex relationships are less fulfilling. Although the individuals described by
Kashy and DePaulo may be sought after as companions, this appears to be contrary to
what one may expect. What would be expected is that those who are deceptive would
not appear as emotionally attractive to one seeking a companion due to the insecurities that may be evoked in the process of interaction.

The ability to conceal deceptive behavior, in the process of forming a relationship, may be disguised through behaviors perceived by another as "self-confident," when in reality, this behavior may more than likely be "pseudo-self-confidence." Machivallian and Socially Adroit persons may be sufficiently manipulative that the partner does not recognize the deception, gains what they believe to be trust, and is willing to enter into this manipulative relationship.

Opposite from those who consciously act out deception, are those who are subconsciously or unconsciously manipulative in their relationships. These individuals, while being deceptive may employ considerable self-disclosure. In this case, deception may serve as a guard for insufficient self-esteem and provide a mechanism for the projection of insecurities upon another. If the other accepts the projection and interjects it, thus accepting the projection as true, this may perpetuate insecurity and dependency in the relationship.

In conclusion, while there are those who would be subconsciously/unconsciously deceptive, these individuals may be few. It is suggested that the greater number of those who act deceptively are conscious of their behavior. Thus, it is interesting to note that while some people lie compulsively, even when telling the truth would be more advantageous to themselves and the situation, others continue to lie even though they would much rather be honest. Despite their desire and attempts to be truthful, they continue to lie (Ford, 1996). While there are those then who, consciously seek to be deceptive, it is critical for these individuals to understand what Ford suggests,
namely, “the most common form of [deception] is probably self-deception. In fact, lying to others and to oneself are much more closely linked than one might suspect on first glance” (p. 19).

The development and maintenance of deception. Ford (1996) boldly stated, “Regardless of how brain structure may influence information processing and pathological lying in some individuals, it remains a fact that everybody lies [italics added]. As we progress through childhood, we are taught not only the skills associated with successful lying but also when and where to lie” (p. 20). He went on to indicate that there is a process by which one develops a psychology of deception, suggesting that there are different types of lies, liars, and contexts in which one may choose to lie. Ford concluded, “Every lie has a predisposing condition, and because most are perpetuated within a social situation, these social factors influence the telling of the lie, its content, and the response to it” (p. 19).

It is suggested by Ford (1996) that deception is developmental in nature and culturally biased, such that the influence of one’s sociopolitical and cultural scripts set the rules and expectations for both the development of a personal psychology of deception as well as the degree of deception one may engage in during the process of dating and mate selection. Usually the basis for lying is grounded in the act of self-preservation, which is initiated and perpetuated by emotions such as anxiety, fear or anger.

As the child grows, s/he may begin to discriminate between which lies prove successful to self-preservation and acceptable in the sociopolitical culture one lives. With the advancement of the brain from operational on through to formal operations the
individual can become more capable of engaging in acts of deception. Lies maybe, initially, undetectable to the outside person and consequently, rewarding to the deceptive person (Leekam, 1992) though that individual to whom the lie is directed may also feel benefited from the deception. As lies begin to be “rewarded” (e.g., decreased anxiety, getting what one wants, minimizing the potential impact of one’s behavior) a process of deceptive interaction emerges and skills of manipulation are formed and integrated into the process of relationship formation. As deceptive interaction skills become “fine tuned,” a reliance on acts of deception to acquire what one wants, takes on a paradigm in it’s own right. It is suggested (Lerner, 1993) that this paradigm may be altered during the course of a relationship in one of two ways. First, as the individual becomes increasingly comfortable and learns that they no longer need to inhibit self-disclosure, the need for deception becomes less. Second, the paradigm may become so solidly based by the time the relationship becomes intimate, and so much a part of the interaction style, that there is considerable need to retain this paradigm even though they are now in the intimate stage.

Deception in the formation of relationships. Because relationships serve a critical need for the majority of human beings, perhaps excluding only those with a schizoid personality disorder—who do not even need some human contact—the action of deception through lying may be related to the fact that one wants, seriously, to have a relationship and at the same time fears that self-disclosure would somehow put the relationship in jeopardy. Such individuals may resort to a variety of deceptive behaviors, overt and/or covert, to increase the likelihood that these relationships will be maintained.
"Lying to the one you love: The use of deception in romantic relationships."

This subhead is the title of an article published by Tim Cole (2001) wherein he explored the use of deception in 256 individuals (128 couples; aged 17-35 years) by having them complete questionnaires regarding their own and their partners communicative behaviors. Cole cited research by DePaulo and Kashy (1998) and Lippard (1998), which indicated that, “deception is reliably common in romantic dyads in comparison with other types of relationships” (Cole, p.108). He then turns to the work of Metts (1989), who found that deception in romantic relationships generally stems from concern for the well-being of the relationship and the other partner. The assumption that the well-being of the relationship and partner will be protected through the use of deception appears to be an oxymoron; however, this may be a strategy of rationalization and/or justification implemented by a deceptive person when his act(s) is (are) known or found out.

Cole (2001) posited that deception in romantic relationships is based upon factors such as “reciprocity, avoiding punishment, and intimacy needs” (pp. 109-112). In terms of reciprocity Cole noted in his research that individuals who believe that their partners are dishonest tended to have lower levels of commitment and satisfaction in the relationship; tend to be dishonest if they perceive their partner to be; and tend to believe their partner to be dishonest if they, themselves, are deceitful. As to the avoidance of punishment, Cole indicated that individuals are more likely to use deception out of fear of anger or aggression from their partners. If this is the case, then it is logical to assume that when an individual engages in behavior that is perceived as incompatible with what the partner would desire, use of deception may decrease the likelihood of punishment—
or at least delay its implementation. Punishment in terms of a relationship is most often noted in verbally and emotionally abusive behaviors, although physical punishment should not be ruled out. **Intimacy** is the desired state of individuals seeking out relationships; yet intimacy may evoke considerable fear and anxiety, particularly in the person who is referred to as being “avoidant.” Such individuals truly want a relationship with another and they feel considerable loneliness; however, when faced with the opportunity to foster the relationship, the level of mistrust they experience interferes with their ability to form an emotional attachment with another. Cole pointed out that deception plays a role in the attachment style (or degree of intimacy desired). He further noted that avoidant individuals often use deception as a means of keeping a potential partner at a distance. Distance is fostered through the inability to trust another as suggested by criteria associated with the avoidant personality. Even though a partner may work hard at doing what the avoidant individual wants, they never seem to quite come up to their standards in terms of trust imposed by the avoidant person. Avoidant personality based individuals are not the only persons to use deception as a means of interfering with relationship formation; anxious individuals use deception to maintain a relationship, often with negative consequences, such as constant worry that their partner will discover the truth, and decreased feelings of intimacy and understanding in the relationship (Cole).

In conclusion, Cole (2001) suggested that the habitual use of deception will eventually erode an individual’s sense of enjoyment in the relationship, which may then decrease the perceived notion of intimacy with their partner, resulting in feelings of isolation and, potentially, loss of the relationship.
Motives associated with deception. One cannot begin to imagine that deception in a relationship through the perpetuation of lies can have a positive long-term affect. Rather, it appears more reasonable to suggest that the effect, in the long-term, will be increased suspicion that will continue to foster the insecurities and need for deception, emotional distancing that negatively affects intimacy and commitment, and an increased need to engage in deception due to the desire for the relationship. When one is consciously, and to some extent even subconsciously, aware of the deceptive behavior and continues with it, disregarding the impact it may have on the other person, the question then becomes, “What is the motivation for this individual to use manipulation in the context of this relationship?”

Backbier and colleagues (1997) suggested that one motivation for maintaining a deceptive position in a relationship is that of protecting others. When the motive is that of “other-protection,” it is referred to as a “social motive.” An “individualistic motive” is aimed at protecting the self. Finally, when deception is used for the purpose of gaining an advantage over another, a third possible motive, it is referred to as an “egotistic motive” (Backbier et al., p. 1051). These three motives are logical, though it is suggested that while they may be enacted independently, it is highly likely that they are interactive. Future research will help clarify this assumption.

Gender differences in the use of relationship deception. Addressing the issue of gender seems logical, particularly since one of the significant diversity contexts is that of gender. While it is agreed that there are other contexts involving diversity (for example, SES, age, sexual orientation, religion, and power and privilege, all of which may have some relationship with deception), the key factor is that of gender. Gender
refers to the biological sex of maleness or femaleness, though in the context of this study it also includes the traits, features and characteristics of two other gender related terms, gender identity and gender role. Gender identity is defined as the psychoemotional acceptance of one’s biological sex; whereas, gender role refers to the specific behaviors associated with one’s biological sex. These roles are specified by several critical ecological contexts, for example, the family of origin, the extended family, and social mores and norms associated with the culture one lives in.

*Behaviors associated with deception and clarified by gender.* Two forms of behavior commonly associated with relationship deception, where there are gender differences, concern being “faithless to the confidences of a friend,” and “sexual betrayal.” Before indicating gender differences in these two behaviors, it is interesting to note that sexual betrayal was seen as being more acceptable than was the betrayal of a friend’s confidence by both genders (Feldman et al., 2000, p. 514). In regard to gender differences, Feldman and colleagues noted that males were tolerant of sexual betrayal perpetrated by other males, but not females, while females were intolerant of sexual betrayal by either gender. When examining the betrayal of a friend’s confidence, Feldman and colleagues indicated that there were no gender differences, with both genders concurring that betraying a friend’s confidence was wrong. More specifically, it was noted that betraying a friend’s confidence due to peer pressure or peer recognition, was inappropriate regardless of gender. While in general this was the case, there was an exception noted, namely, betraying a friend’s confidence in order to help the friend was suitable to both genders (Feldman et al., p. 512).

*Mediating factors associated with betrayal by gender.* Although sexual betrayal
is commonly seen as objectionable, the rationalizations and justifications of actions of betrayal are significant factors in determining the degree of acceptance or objection perceived by those who were betrayed (Feldman et al., 2000, p. 510). Two examples of rationalization/justification that may mediate the amount of betrayal in an acceptable direction include “[one or both] fell in love with a new person and [at least one of the two] were from a different culture” (Feldman et al., p. 510). Those rationalizations/justifications that negatively impact the relationship and are thus found as objectionable include, “they had done the same thing before and gotten away with it,” and “they were certain no one would find out” (Feldman et al., p. 510). Overall it is suggested from these studies that neither gender differed in their attitude of acceptability of using deception to initiate a date.

**Gender and self-monitoring in the use of deception.** Rowatt, Cunningham, and Druen (1998) examined the influence of self-monitoring and suggested that there were differences between high and low self-monitors in their use of deception. Snyder and Simpson (1987) defined high self-monitors as “pragmatic, adaptive, and flexible when it comes to choosing which side of their self fits the situation,” whereas, low self-monitors are viewed as “less concerned about, and pay less attention to, the situational appropriateness of their social behavior. [Further, these individuals] seek to maintain self-presentational consistency across situations” (Snyder & Simpson, p. 58).

Rowatt and colleagues (1998) reported that high self-monitors tended to change themselves in order to appeal to a prospective date more so than did low self-monitors. The expectation-discordance model of deception suggests that people are motivated to meet the expectation of other people and may use deception to avoid disappointment.
and conflict (Druen, Barbee, Cunningham, & Yankeelov, 1996). Rowatt and colleagues concluded that “some individuals, namely high self-monitors, strategically deceive a person they want to date by providing signals indicating that they are more similar to the prospective date’s ideal partner” than they truly are (p. 1234).

Summary

It is suggested that during the course of relationship formation, deception may be commonly used to provide benefit for the deceptive individual; however, it may also reward the individual towards whom the deception is focused. It appears that deception may be used differentially based on the stage of the relationship one finds himself/herself in. It may also be affected by gender and style of attachment. Relationship contacts have moved out of the traditional realm of calling an individual—usually someone you already have seen and know asking them for a date, going to their home to pick them up, and maybe meeting the parents—to Internet based relationships that, while moving across the same dimensions of a relationship, are unique in the fact that there is no initial “personal” contact outside of written communication.
Sample

A convenience sample consisting of 134 subjects was used in this study. Subjects were solicited from the Midwest (Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas), Southern (Arkansas, Louisiana, Oklahoma and Texas), and Western (Washington, Oregon, California, Alaska, and Hawaii) regions of the United States. Criteria for inclusion in the study were that the subjects were minimally 18 years of age, have been involved in at least one online relationship over the past 2 years, and at least one of the relationships had lasted a minimum of 2 months. The rationale for the 2-month minimum time frame for the relationship is supported by the following research. Parsons (1998) stated, “mate selection and relationship development include several important variables (i.e., emotional interaction, compatibility of fulfilled expectations, and attraction variables) which develop over time” (p. 5196). Rusbult (1983) suggested that looking through an investment model of relationship development and deterioration, an individual’s satisfaction in a relationship begins to increase or decrease by 8 weeks.

Subjects were conveniently selected by a solicitation over the Internet through chat rooms using procedures similar to those used by Cornwell and Lundgren (2001). Based on the work of Newman and Newman (1999), three developmental life stages were selected for categorizing participants in this study, namely, later adolescence (18-24 years of age), early adulthood (25-34 years of age), and middle adulthood (35-50...
years of age).

Although it would have been desirable to gather a national sample, this research randomly selected three of the eight regions of the United States, with one of three representing the Southern portion of the United States, one representing the Midwestern area, and one representing the Western states, including Alaska and Hawaii.

Using the three regions of the United States and developmental stages, the total sample consisted of 134 subjects being distributed as noted in Figure 1.

Procedures

Prior to the initiation of this study the researcher identified possible chat rooms where a study such as this could be completed. During November 2001, the author logged into the Yahoo chat rooms using the screen name masterstudent101. In so doing he found that there were chat rooms from each of the 50 states. These various chat rooms were logged into randomly, at different times of the day, both on weekdays and weekends. In Yahoo alone, there were hundreds of chat rooms that could be used for this study, and based on the work of Cornwell and Lundgren (2001; see also Chou,

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<td>Later Adulthood (35-50)</td>
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Figure 1. Distribution of sample according to region and developmental stage.
it was decided that an online population would work well for the proposed study. Further, personal communication with Cornwell (personal communication on February 28, 2002) confirmed the plausibility of using the Internet as a forum for sample collection.

Data Collection Procedures

The researcher utilized the following steps in the collection of the data for this study. First, the researcher logged into the Yahoo chat room using the screen name masterstudent101. This was accomplished by logging onto the Internet, then going to Yahoo’s home page. From the home page ‘Yahoo Chat’ was selected and a name and password were created as directed. The name used for this study was masterstudent101, and the password was thesis.

From the general chat room the researcher clicked on the location link, which gave a choice of countries—choosing United States gave a list of each individual state. From this point the researcher entered chat rooms from the states that fit the randomly preselected regions of the United States.

When in the desired chat room(s), a request for participation was sent to those utilizing the chat room(s). The request briefly introduced the researchers and gave potential participants a short description of the study, including the criteria for their inclusion. This message also requested that those who were willing to participate and met the criteria send a message back to the researcher. It was necessary that the researcher remain in the chat room(s) and wait for a response prior to logging off. Thus, the researcher, once the initial message had been sent, waited approximately 15 to
30 minutes before proceeding to another chat room. During the 15- to 30-minute wait; however, it was possible for the researcher to implement steps 1-3 (described hereafter) for those responding in the affirmative.

The first step, implemented after receiving a response from those indicating a willingness to participate and noting that they were eligible to do so, was the sending of the Electronic Informed Consent (hereafter referred to as the EIC, see Appendix A). Those to whom the EIC was sent were asked to read through the consent, identify questions they might have with the study and to ask any questions that they might have. Once they had determined whether they were willing to participate, they either responded in the affirmative by clicking on the hyperlink that took them to the survey, or simply chose not to participate or closed the EIC.

Those who responded to the EIC, by clicking on the hyperlink, were taken to a web site where the Internet Deception Inventory (hereafter referred to as the IDI, see Appendix B) was available for them to complete. The site, "freeonlinesurveys.com" allowed for data to be collected by the researcher. Once data collection was completed the results were made available to download to a spreadsheet. Because the data provided the researcher was a sum of the total responses to each of the individual questions confidentiality was maintained

Institutional Review Board Approval

Prior to initiating this study it was submitted to the Utah State University Institutional Review Board (hereafter referred to as the IRB) to assess its appropriateness for involvement of human subjects. Concerns raised by the IRB were
addressed and once approved, the study was initiated in June of 1993.

Informed consent. Informed consent was different for this study than in traditional research. In traditional research a “Letter of Informed Consent” (which details the nature of the study, benefits, potential risks, and so forth) is sent to potential participants prior to collecting data from them. However, in this study, the informed consent procedure followed the recommendations of Cornwell and Lundgren (2001) wherein they suggested that while in the “chat room” the researcher inform participants of the content and purpose of the survey, indicate their right to withdraw at any point, and obtain their transmitted statement of consent to participate voluntarily in the study (p. 202).

For purposes of this study, those contacted in the selected “chat rooms,” who indicated that they were willing to participate in the study, had all information electronically transmitted to them that is required to be included in a “Letter of Informed Consent.” The information included the following, and is representative of that required by the USU IRB in Letters of Informed Consent:

1. Purpose of the study,
2. Procedures to be used in collecting the data,
3. A description of the potential benefits and risks associated with participation in the study,
4. Indication that participation is voluntary,
5. Explanation as to how confidentiality will be maintained,
6. Explanation regarding the fact that the study has been approved by the Utah State Institutional Review Board,
7. Who to contact if they feel they have been harmed by participation in the study and how they can contact the person, and
8. Who to contact if they need more information regarding the study and how they can contact the Principal Investigator of Co-PI/Student Researcher.

Confidentiality. Those indicating willingness to participate in the study after reading the EIC were asked to respond, giving permission to the investigators to present them with the instruments developed for this study. All participants willing to be involved in the study indicated their willingness by electronically responding in the affirmative. While this confirmation was transmitted to the investigators, individual participants could only be identified by their chat room address. According to Cornwell,

Once I asked the person if they would be interested in participating, all I had to do was ask the potential participant to respond to a formal statement describing my intentions with the project, [and the different kind] of questions I would be asking, and how long it would take. At the end of the statement, I asked them to indicate whether they consented to the interview (and I had to ask them to confirm that they were over 18). If they responded affirmatively, I was allowed to go on. So, it was electronically transmitted consent, but there was no written record of it. (Personal communication, February 28, 2002)

Measures

Demographic Information Form

The Demographic Information Form created for this study, consisted of nine items, allowing the respondents to provide data across the following areas: age, gender, ethnicity, educational level, region of the country, income level, history of Internet relationships, and level and duration of past and present Internet relationships.

Relationship Intensity Form

The Relationship Intensity Form is a modified version of the Dating Continuum
developed by Cox (2001, p. 154). This continuum consists of seven stages of relationship formation. The stages include:

1. Casual recreational dating of numerous persons
2. Multiple dates with fewer persons
3. Going steady
4. Informal commitment to marriage
5. Engagement or cohabitation
6. Final commitment
7. Marriage

In its revised version, rather than merely describing seven areas of commitment, the researcher first eliminated “marriage” as one of the possibilities since this was not an area of focus for the study. Then, the Relationship Intensity Form items were organized into a continuum ranging from

1 = Casual recreational conversations with numerous persons online
2 = Online conversation but most specifically with only one individual
3 = An online agreement to be exclusive with one another
4 = An online agreement to become engaged
5 = An online agreement to become married/partnered

Balanced Inventory of Desirable Responding

The Balanced Inventory of Desirable Responding consists of 40 Likert items that are stated in propositional format. Participants respond to these items indicating their degree of agreement with the proposition presented. According to Paulhus (1991),
the Balanced Inventory of Desirable Responding is organized around two specific constructs: self-deceptive positivity and impression management. Self-deceptive positivity for the purposes of this study will simply be referred to as deceptive positivity, and is the tendency to give self-reports that are honest but positively biased. Impression management is deliberate self-presentation to an audience. Overall this instrument examines “exaggerated claims of positive cognitive attributes (overconfidence in one’s judgments and rationality)” (Paulhus, p. 37). An example of an deceptive positivity item would be, “My first impressions of people usually turn out to be right.” An example of an impression management item would be, “When I hear people talking privately, I avoid listening.”

According to Paulhus (1991), scoring requires reversing negatively keyed items and adding a point for each extreme response (6-7), resulting in total scores for either the deceptive positivity or the impression management ranging from 0-20.

Reliability of the Balanced Inventory of Desirable Responding. According to Paulhus (1991, p. 37) “values of coefficient alpha range from .68 to .80 for the deceptive positivity and from .75 to .86 for the impression management scale. When all 40 items are summed as a measure of deceptive positivity, the alpha is .83.” Based on analyses completed in this study, the overall Balanced Inventory of Desirable Responding alpha coefficient is .85. Further analyses examining the reliability coefficients for the separate scales, namely, the deceptive positivity and impression management found the reliability coefficients to be .76 and .85, respectively. Paulhus used a 7-point Likert scale of scoring on which he identifies three points on the Likert, those being 1 = Not True, 4 = Somewhat True, and 7 = Very True. To accommodate to
the Internet freonlinesurveys.com criteria, where the maximum number of Likert points was four, Paulhus' 7-point Likert scale was revised to a 4-point scale with the points being, 1 = Not True 2 = Somewhat True, 3 = True, and 4 = Very True.

Paulhus (1991, p. 37) reported that the "values of coefficient alpha range from .68 to .80 for the deceptive positivity and from .75 to .86 for the impression management scale. When all 40 items are summed as a measure of deceptive positivity, the alpha is .83. Based on analyses completed in this study, the overall Balanced Inventory of Desirable Responding alpha coefficient was .85. Further analyses, examining the reliability coefficients for two separate scales, namely, the deceptive positivity and impression management, found the reliability coefficients to be .76 and .85, respectively.

Validity of the Balanced Inventory of Desirable Responding. Convergent, as well as discriminate validity has been examined by Paulhus (1991). Relative to convergent validity for the self-deception scale, Paulhus (p. 38) noted that the deceptive positivity correlated positively with the following traditional measures of defense and coping: (a) Byrne's R-S scale \( r = .51 \); (b) Defense Mechanisms Inventory \( r = .34 \); and (c) ways of coping subscales, positive reappraisal, distancing, and self-controlling \( r = .44, r = .33, r = .39 \), respectively.

The General Deception Inventory

The general deception inventory is designed to "assess the extent to which people conceal information, mislead, and/or deceive their partners" (Cole, 2001), particularly when in romantic relationships. The general deception inventory consists
of 13 items, nine of which compose what is referred to as the “use of deception” scale (hereafter referred to as the general deception scale), and four create the “perceived partner deception” scale (hereafter referred to as the partner deception scale). Each item is presented as a 7-point Likert scale in which “1” represented strongly disagree and “7” represented strongly agree. An example of a general deception scale item is, “There are certain issues that I try to conceal from my partner.” An example of a partner deception scale item is, “I think that my partner tries to mislead me.” Cole used a 7-point Likert scale of scoring where he only identifies three points on the Likert, those being 1 = Not True, 4 = Somewhat True, and 7 = Very True. To accommodate to the Internet freeonlinesurveys.com criteria, where the maximum number of Likert points was four, Coles’ 7-point Likert scale was revised to a 4-point scale with the points being, 1 = Not True, 2 = Somewhat True, 3 = True, and 4 = Very True.

Reliability of the scales comprising the general deception inventory. Reliability associated with the general deception scale was found to be in the acceptable range. Cole (2001) reported .84 (alpha coefficient) with a mean of 3.31 and standard deviation of 1.42. Relative to the partner deception scale, Cole reported acceptable inter-item reliability (alpha = .80, \( M = 2.26, SD = 1.35 \)). Based on analyses completed in his study, the general deception scale had a reliability coefficient of .94 and the partner deception had a reliability coefficient of .85.

Validity of the scales comprising the general deception inventory. Cole (2001) indicated that items selected to comprise the use of deception portion of the general deception inventory demonstrated “clarity and . . . high inter-item consistency” (p. 114). No further studies were located that addressed the issue of validity of any sort relative
to this area of the instrument.

Relative to the partner deception portion of the general deception inventory, which is comprised of four items, Cole (2001) stated that the items were selected from the same pilot study the general deception items were taken from. While Cole indicated that the same criteria were used to select these items, there is no information provided as to what these criteria were or the validity assessed in the course of the pilot study. According to Cole (personal communication, 2002) there has been no further work with this instrument to determine its reliability and validity.
Use of Deception in Internet Relationships:
An Analysis of the Quantitative Data

This study examined the use of deception from three perspectives. First, the data allowed for an understanding as to whether the participants used deception, in general, when in interaction on the Internet. This area of deception, within each of the five hypotheses, is addressed through the data acquired on the general measure of employing deception scale referred to as the general deception (Cole, 2001). Next, the focus was on the biasing of information presented to individuals when one is interacting with another on the Internet. Two scales helped to clarify this area of focus. The impression management scale (Paulhus, 1991) examined the ways the participant manages how another person will view her/himself based on information presented. The deceptive positivity scale (Paulhus) complimented the impression management by focusing on items that address the tendency of one party to give self-reports that may be honest, though positively biased. Finally, the study examines whether a participant perceives that his/her partner uses deception in their interaction. This is addressed through the use of the partner deception scale (Cole).

Caveat

It is important to note that when an ANOVA test is nonsignificant, it is possible that one or more of the (pairwise) multiple comparisons generated by Fisher’s LSD test
will be significant. This is known as an unprotected LSD. Generally these significant pair-wise comparisons would be ignored, however in this study significant pair-wise comparisons will be noted, even if the overall ANOVA was not significant. The rationale for this is that to ignore the significant findings in the multiple comparisons in an exploratory study would increase the likelihood of Type II error, rejecting a true significant finding. Further research will be necessary to validate the significant pair-wise relationships reported.

**Hypothesis Number One**

This hypothesis states that there is no statistically significant difference between the level of intimacy reported by participants and the duration of the relationship engaged in on the Internet, controlling for gender. When examining this particular hypothesis (see Table 1), the analyses suggest an important relationship between the three levels of intimacy and duration of time spent on the Internet.

When closer evaluation is given, through an examination of the multiple comparisons, a significant difference exists between those in a casual relationship and those in a conversational \((p \leq .019)\), as well as with those in a mutually exclusive

Table 1

*The Relationship Between Level of Intimacy and Duration of Time*

<table>
<thead>
<tr>
<th>Variable</th>
<th>(N)</th>
<th>Mean</th>
<th>(SD)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual</td>
<td>62</td>
<td>1.37</td>
<td>.607</td>
<td>.000***</td>
</tr>
<tr>
<td>Conversational</td>
<td>36</td>
<td>1.78</td>
<td>1.017</td>
<td></td>
</tr>
<tr>
<td>Mutually Exclusive</td>
<td>21</td>
<td>2.33</td>
<td>.966</td>
<td></td>
</tr>
</tbody>
</table>
relationship ($p \leq .000$). There is also a significant difference in the amount of intimacy experienced, based on the duration of time in the Internet relationship, between those in a conversational relationship compared with those in the mutually exclusive relationships.

When examining gender, the data presented in Table 2 suggest a significant difference by gender. When examining males, based on multiple comparison data, a significant difference exists between those males indicating they are in the casual stage of relationship when compared with the conversational and the mutually exclusive respondents ($p \leq .033$ and $p \leq .020$, respectively). These findings suggest that the level of intimacy reported by males is positively related to duration of time. Relative to females, the multiple comparisons suggest a significant difference in level of intimacy between respondents in a casual relationship, when compared to those in the mutually exclusive relationship ($p \leq .000$). Further, data suggests a significant difference when comparing respondents in a conversational relationship relative to those in the mutually exclusive relationship.

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male: Casual</td>
<td>29</td>
<td>1.31</td>
<td>.660</td>
<td>.023**</td>
</tr>
<tr>
<td>Conversational</td>
<td>18</td>
<td>1.89</td>
<td>1.183</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>9</td>
<td>2.11</td>
<td>.782</td>
<td></td>
</tr>
<tr>
<td>Female: Casual</td>
<td>33</td>
<td>1.42</td>
<td>5.61</td>
<td>.000***</td>
</tr>
<tr>
<td>Conversational</td>
<td>18</td>
<td>1.67</td>
<td>.840</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>12</td>
<td>2.50</td>
<td>1.087</td>
<td></td>
</tr>
</tbody>
</table>

The Relationship Between Level of Intimacy and Duration of Time Spent Interacting on the Internet Based on Gender
exclusive relationship ($p \leq .005$).

Overall, these data, regardless of gender, suggest that the longer an individual is involved with another on the Internet, the greater the likelihood it is that they will describe themselves as transitioning from a casual stage of the relationship to that of a more intensified relationship style such as "mutually exclusive."

**Hypothesis Number Two**

Hypothesis number two states that there is no statistically significant difference in the level of intimacy and the demographic variables of the participants controlling for duration of time. Based on both ANOVA and multiple comparison results, this hypothesis failed to reject the null hypothesis at the group level, as well as when examined by gender.

**Hypothesis Number Three**

Hypothesis number three states that there is no statistically significant difference in the amount of deception reported by participants and the duration of time the participants have associated with one another on the Internet. Based on both the ANOVA and multiple comparison results, this hypothesis failed to reject the null hypothesis at the group level, as well as when examined by gender.

**Hypothesis Number Four**

This hypothesis indicates that there was no statistically significant difference between the reported type of deception (i.e., general deception, deceptive positivity, impression management, and partner deception) and the demographic variables. While
there were significant differences found (see Appendix C, tables 13, 14, 15, and 16), there is no rationale in the literature to argue that region, income, or education would make a significant difference to one's use of deception. Further, regional findings that those residing in the West were more likely to use deception than those in the Midwest was likely an artifact of this population due to the small \( n \).

**Hypotheses Number Five**

This hypothesis states that there will be no significant difference in the type of deception used by the participants in the study regardless of the level of intimacy they report. The results of the ANOVA and multiple comparisons indicated that there were significant differences between the type of deception employed and the reported level of intimacy.

An ANOVA examined the various participants grouped by level of intimacy for their use of deception. Data from this analysis (see Table 3) suggest that there was a significant difference between those involved in Internet relationships and the deception styles of general deception, impression management and partner deception.

An examination of the multiple comparisons provided a more definitive understanding of significance. With regard to general deception, there was a significant relationship between those involved in casual Internet relationships and those who assigned themselves to the conversational Internet relationship level (\( p \leq .039 \)), as well as between those reporting a casual Internet relationship and those who claim to have a mutually exclusive Internet relationship (\( p \leq .000 \)). Further, there was a significant difference in the use of general deception when evaluating those involved
Table 3

The Relationship Between Deception and the Level of Internet Intimacy

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Deception:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>66</td>
<td>18.3636</td>
<td>4.91352</td>
<td>.000***</td>
</tr>
<tr>
<td>Conversational</td>
<td>38</td>
<td>20.5000</td>
<td>5.44630</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>21</td>
<td>23.4286</td>
<td>4.55600</td>
<td></td>
</tr>
<tr>
<td>Impression Management:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>66</td>
<td>42.6212</td>
<td>8.84702</td>
<td>.032*</td>
</tr>
<tr>
<td>Conversational</td>
<td>39</td>
<td>45.3590</td>
<td>8.34294</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>21</td>
<td>48.0476</td>
<td>8.35749</td>
<td></td>
</tr>
<tr>
<td>Deceptive Positivity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>66</td>
<td>50.8939</td>
<td>6.82784</td>
<td>.384</td>
</tr>
<tr>
<td>Conversational</td>
<td>38</td>
<td>52.8684</td>
<td>7.90884</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>21</td>
<td>51.7440</td>
<td>7.88972</td>
<td></td>
</tr>
<tr>
<td>Partner Deception:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>65</td>
<td>7.7231</td>
<td>1.97253</td>
<td>.021*</td>
</tr>
<tr>
<td>Conversational</td>
<td>38</td>
<td>7.5000</td>
<td>1.76681</td>
<td></td>
</tr>
<tr>
<td>Mutually exclusive</td>
<td>21</td>
<td>8.8571</td>
<td>1.45896</td>
<td></td>
</tr>
</tbody>
</table>

In the conversational Internet relationship and those who identified with the mutually exclusive Internet relationship \((p \leq .034)\). In an examination of the means for those reporting the use of general deception it was found that when relationship intensity increased, there was a corresponding increase in the use of general deception.

When examining impression management, a significant difference between those in the casual and those in the mutually exclusive Internet relationship \((p \leq .013)\) was noted. An examination of the means suggested that for impression management there was an increase, beginning lowest with those who described themselves as being in casual Internet relationships and highest among those who indicated that they had
agreed to be in a mutually exclusive Internet relationship.

When examining partner deception, the data suggested there was a significant difference between those who were in a casual Internet relationship and those who had agreed to be mutually exclusive \( (p \leq .015) \), as well as between those who were in the conversational level Internet relationship and those who were mutually exclusive in their relationship on the Internet \( (p \leq .007) \). An examination of partner deception suggested, that when one was in an mutually exclusive Internet relationships, s/he was more likely to perceive his/her partner as being deceptive than were those involved in either the casual or conversational Internet relationship.

The data suggested that as perceived intimacy increased in Internet relationships, so did the likelihood of general deception, impression management deception and partner deception. It was suggested that the more intimate one felt the relationship to be, the greater the length they would take to protect it, even through the use of deception. This may be particularly true for Internet relationships if one was trying to cover up a perceived character flaw. An alternative explanation may be that the only relationships on the Internet that reached the higher levels of intimacy were the relationships in which one or both parties were being highly deceptive.

Of interest was whether we found deception being used more often by males or females, and if there was a particular form of deception associated with gender. An ANOVA of the data (see Table 4) indicated that males used general deception more significantly than females. Further, the multiple comparisons indicated that males increased their use of general deception when they perceived the level of intimacy to be increasing.
Table 4

*The Relationship Between General Deception, Impression Management, and Partner Deception, and the Level of Internet Intimacy by Gender*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Deception:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>17.5625</td>
<td>4.90515</td>
<td>.002*</td>
</tr>
<tr>
<td>Casual</td>
<td>19</td>
<td>21.1579</td>
<td>6.05771</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td>9</td>
<td>24.7778</td>
<td>5.1765</td>
<td>.120</td>
</tr>
<tr>
<td>Exclusive Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>34</td>
<td>19.1176</td>
<td>4.87271</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>19.8333</td>
<td>4.97346</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>12</td>
<td>22.4176</td>
<td>22.4176</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exclusive Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression</td>
<td></td>
<td></td>
<td></td>
<td>.145</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
<td>42.0938</td>
<td>10.69024</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>20</td>
<td>46.3500</td>
<td>8.54878</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td>9</td>
<td>48.4444</td>
<td>9.90090</td>
<td></td>
</tr>
<tr>
<td>Exclusive Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impression</td>
<td></td>
<td></td>
<td></td>
<td>.185</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>43.1176</td>
<td>6.80359</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>18</td>
<td>44.1667</td>
<td>8.43138</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td>12</td>
<td>47.7500</td>
<td>7.44831</td>
<td></td>
</tr>
<tr>
<td>Exclusive Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner Deception:</td>
<td></td>
<td></td>
<td></td>
<td>.058</td>
</tr>
<tr>
<td>Male</td>
<td>31</td>
<td>7.2581</td>
<td>2.39399</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>19</td>
<td>7.6842</td>
<td>1.79668</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td>9</td>
<td>9.2222</td>
<td>1.64148</td>
<td></td>
</tr>
<tr>
<td>Exclusive Male</td>
<td></td>
<td></td>
<td></td>
<td>.135</td>
</tr>
<tr>
<td>Partner Deception:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>8.1471</td>
<td>1.39550</td>
<td></td>
</tr>
<tr>
<td>Casual</td>
<td>18</td>
<td>7.5556</td>
<td>1.46417</td>
<td></td>
</tr>
<tr>
<td>Conversational</td>
<td>12</td>
<td>8.5833</td>
<td>1.31137</td>
<td></td>
</tr>
</tbody>
</table>

With regards to females the data suggested a significant ($p < .041$) relationship in general deception between those in casual relationships and those in committed relationships. When examining the relationship between casual and committed
relationships, with partner deception being the variable under investigation, a significant relationship was noted ($p \leq 0.018$).

A Qualitative Understanding of the Use of Deception in Internet Relationships

The qualitative aspect of this study attempted to provide increased understanding as to how and when individuals may choose to be deceptive in their Internet relationships, as well as what they choose to be deceptive about. It also examined the point in time when those involved in Internet relationships choose to be honest and when they do, how they presented the information to their partner after having been deceptive. The final question asks participants at what point they decide to make the transition from an online relationship to a face-to-face one. The n in each of the categories is different because not all people answered every question.

Caveat

First, it should be noted that the n, for much of what is to be presented in the qualitative section, was small and as such, the ideas expressed, suggestions made, or conclusions drawn, must remain in the context of sample size.

A second caveat has to do with the presentation of the information in the tables. At times (e.g., Table 5) percentages will initially reflect-as in this case-the percentage of those who indicated that they were totally honest and those who stated that they were deceptive. These data will be presented in bold type. However to the area of deception, since those who responded provided variety of rationales, subcategories were created.
Subcategories percentages were calculated from the $n$ of those who indicated that they were deceptive.

*How and When do You Choose to be Deceptive in an Internet Relationship?*

When asking respondents about how and when they choose to be deceptive in their Internet relationships the results indicated 45% of the respondents perceived themselves as being honest, whereas the majority of those reporting indicated that they were deceptive (55%; see Table 5). In that those who presented as deceptive did so in a variety of ways, the data were organized according to subcategories of deception to explicate the many types of deception presented by the respondents.

There are seven subcategories of deception derived for those reporting that they were deceptive in their Internet relationships (see Table 5, italicized), namely, *boundary*

Table 5

*Percentage of Respondents Indicating Honesty Versus Deception* in Their Internet Relationships

<table>
<thead>
<tr>
<th>Category</th>
<th>$n$</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally honest</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>Total Deceptive</td>
<td>52</td>
<td>55</td>
</tr>
<tr>
<td><em>Boundary positioning</em></td>
<td>14</td>
<td>27</td>
</tr>
<tr>
<td><em>Expedient deception</em></td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td><em>Favorable impression</em></td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td><em>Game playing</em></td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td><em>Partner mistrust</em></td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td><em>Chronic deception</em></td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td><em>Rejection avoidance</em></td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

* Deception was calculated for the total $n$ as well as being broken down into subcategories based on the rational provided by the respondents.
positioning, expedient deception, favorable impression, game playing, partner mistrust, chronic deception, and rejection avoidance.

“Boundary positioning” accounted for 27% of the respondents. Boundary positioning refers to the use of deception to set or maintain some boundary around oneself as was expressed in the following statements; I am deceptive when “people begin to ask too many personal questions” or “they ask about my marital status.” Additionally, some may choose to set boundaries when they want to “keep it casual and friendly” or want to remain anonymous as expressed in, when I “do not [want to] disclose my ID or location.”

“Expedient deception,” the second most common form of deception, appeared to occur when there was an ulterior motive and it was “expedient” for the person to be deceptive. “Whenever I feel like it, when it is to my advantage,” “I will say anything to get them,” and “any time [I] deem it necessary” were examples of such respondents who comprise 24% of the expedient deceptive group.

“Favorable impression” was the next most common form of deception and suggested that the individual was making a concerted effort to present him/herself in a positive light. In this study, 15% reported using some deception for the purpose of appearing more favorably than they might otherwise have been. An example of such a statement made by a respondent was “when [I] first meet someone to impress them.”

Next, “game playing,” taken from Eric Berne’s (1964) “The Games People Play,” suggests that individuals engaged in deceptive behavior suggestive of a game. Participants involved in this form of deception made statements such as, “when I want
to PLAY,” “at any time if I think it’s what they want to hear,” and “I tell men what they want to hear.” In a more serious vein, game playing involved those who felt they had been deceived and were wanting to “get back at” the other person, as suggested in, “if I find out things about the person that contradict what he said. [Then] I avoid telling them the truth to get even with them. An eye for an eye.”

A fifth form of deception was titled, “partner mistrust,” suggesting that an individual was being deceptive when they perceived or knew that their partner was being deceptive (9%). Statements related to this category of deception included, I am deceptive when “I feel the other person is deceiving me,” and “I don’t trust the person and want them to know very, very little about me, (then) I create fictitious information so they can’t find me.”

“Chronic deception,” which refers to those individuals who show no hesitation or remorse relative to lying to those with whom they were involved with on the Internet. Individuals comprising this group (9%) provided statements such as, “I lie from the first hello. How? It’s easy, people will believe anything” and I “always lie.”

The final subcategory, comprising 4% of the respondents was that of “rejection avoidance.” Individuals engaged in this form of deception felt like they were going to be abandoned. Those using this form of deception responded to the question with I am deceptive so that I do “not scare them away.” They were also included in the subcategory when they felt that they possessed a quality or trait that would decrease the possibility of enhancing their relationship. For example, one individual stated, I am deceptive “if I know the person will not tolerate a person who smokes at all, I say I don’t smoke but, in reality I do.”
When You Choose to Use Deception, What Do You Choose to be Deceptive About?

As with the data previously presented those who indicated they were honest in their interaction on the Internet (24%) was less that one fourth of those who indicated that they choose to be deceptive (76%; see Table 6). Statements from participants reporting that they were honest in the relationships included, “nothing to lie about, [I] don’t really know them” and there is “no danger on the Internet,” meaning that there was no real reason they could not be honest. When investigating what they choose to be deceptive about, the responses formed three subcategories, namely, personal information, intimacy, and expedient deceit.

The subcategory entitled, “personal information,” was formed from statements of those participants who indicated that they were deceptive when they were being asked about personal information (57%). This grouping consisted of those individuals

Table 6

Percentage of Individuals According to Whether They Lie About Personal Information, Sex and Past Relationships, or About Everything in Their Interactions on the Internet

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Respondents</th>
<th>Percent of the Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Honesty</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Deceptive</td>
<td>72</td>
<td>76</td>
</tr>
<tr>
<td>Personal Information</td>
<td>41</td>
<td>57</td>
</tr>
<tr>
<td>Intimacy</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Expedient Deception</td>
<td>13</td>
<td>18</td>
</tr>
</tbody>
</table>

b When further examination was given to those who indicated that they were deceptive, the responses formed three subcategories namely Personal Information, Intimacy, and Expedient Deception.
who reported they used deception when asked information about themselves, such as looks, weight, money, where they lived, and their age. Responses reflective of this category included, “my weight,” “diets,” and “money problems or debt.” One individual indicated that he/she would take “a couple years off [his/her] age or a couple of pounds off of [his/her] weight.” The second, subcategory, “intimacy” accounted for 25% of the respondents. Those in this subcategory indicated that they were deceptive when they were questioned about issues of intimacy that was primarily associated with sexual behavior. Statements made by these respondents included topics such as, “what I am doing or what I would be willing to do sexually,” “how many people I have slept with,” and “my sex life and past relationships.”

The final subcategory was that of “expedient deception.” This term was introduced earlier and refers to the fact that these individuals were deceptive whenever it fit them or served their own purpose(s). Data indicated that 18% of the respondents were expediently deceptive. These individuals made comments like, “I am deceptive about almost everything and anything if I think it will get me what I want,” I am deceptive about “anything and everything [that has to do with] what I [am] like and what kind of person I am,” and I lie about “anything that makes me look better than I am.” These respondents indicated that they would lie about anything they felt would be helpful, not necessarily for the betterment of the relationship, but rather to further their own agenda in the context of the relationship.
At What Point in the Relationship Do You Choose to Become Honest About that Which You Have Previously Been Deceptive?

If individuals were going to be deceptive and there were motives for being deceptive, it would be hoped that at some point in time they would choose to be honest with their partner. As such, this question asked the respondents to share when they would be honest, assuming that they had been previously deceptive. The data, as noted in Table 7, reflected that about an equal number of the respondents indicated that they were always honest (32%) in comparison with those who indicated that they would never reveal that they had been deceptive (35%). With regards to being deceptive, as with previous questions, two forms of deception emerged, chronic deception and expedient deception. As previously noted, chronic deception (36%) refers to those who were deceptive regardless, whereas expedient deception (64%) was self-serving.

Table 7
Percentage of Individuals According to When they Choose to Become More Honest in Their Internet Relationships

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
<th>Total</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total honesty</td>
<td>30</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Deception</td>
<td>33</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Expedient deceit</td>
<td>21</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>Chronic deception</td>
<td>12</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Desceptive to Honest</td>
<td>30</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Relationship evolution</td>
<td>13</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>Extended relationship</td>
<td>9</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Sense of trust</td>
<td>7</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Fear of loss</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
Of interest was the understanding as to what would influence their decision to be honest if they had been previously dishonest. In this category, 32% indicated that they would, at some point in time, reveal their deception. Four subcategories evolved from the answers of those who indicated that they would be honest at some point in time, namely, *relationship evolution, extended relationship, sense of trust,* and *fear of loss.*

Statements from those who became honest as the *relationship evolved* (43%), as represented, when “I get to know them for real,” or “I know them better and know that they are not being deceptive,” suggested that it was important for the relationship to have moved sufficiently forward so that there was a desire to be honest. This seemed to be supported by the next group (30%) who indicated that they would be honest if the relationship was extended, *extended relationship.* The motivation behind this particular area seemed to present when the participants had committed to extend the relationship and maybe have moved into the mutually exclusive stage or were going to have a face-to-face meeting, as indicated in the statements, “when I see its going to be a longer term and off the net relationship,” and “if they would like to meet me.” The third subcategory was comprised of those who become truthful when they knew that the other person was being honest with them (*sense of trust,* 23%). Statements reflecting this subgroup included, when “I can trust [the other person],” or when the “other person has come clean first,” and “if that person can be honest with me.” While relatively small in percentage (3%), there were those who indicated that they would be truthful if they feared that by not being so they would negatively interfere with the relationship (*fear of loss*). The individual who respond in this subcategory indicated that they became honest when they were afraid that they might lose the relationships as suggested
in “When it (be)comes important... honesty or losing them.”

How Do You Present the Information Truthfully To Your Partner When You Have Previously Been Deceptive?

In that there were those who did indicate that they wanted to be honest, it seemed logical to ask about how they went about transitioning from being deceptive to honest, which was the basis of this question. The results are presented in Table 8. The number of respondents who reported that they were totally and always honest was 29%, whereas those who indicated that they were dishonest in the relationship at some point comprised 71% of the participants.

Altering the deception referred to the deceiver using some method to reverse the deception and make it clear to the other individual that they had been deceptive. When choosing to alter the course of their deception, participants indicated that they used one

Table 8

Categories Associated With Telling the Truth to One’s Partner After Having Lied

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
<th>Total</th>
<th>Percent of the total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totally honest</td>
<td>21</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dishonest</td>
<td>52</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altered deception</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style of presentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Just tell them or bluntly tell them</td>
<td>28</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Cautiously or manipulatively</td>
<td>11</td>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Admit or apologetically approach</td>
<td>8</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Let them find out</td>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Altered perception</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
of four basic methods. The largest of the categories representing, 54%, indicated that they either “tell it the way it is,” or “bluntly” tell that they have been lying. The second category consisted of those who “cautiously” told their partner, or waited for example, “for the right time” or “when they are fighting” to share the truth (21%). The next subcategory included those who willing admitted to, “I have lied to you...” or apologizes then tells the partner that they have been lying (15%). The final subcategory was those who waited until the other person had “found out that they lied” (4%).

Altered perception referred to the dishonest person being caught in the deception or the dishonest individual bringing the other to believe that their perception was correct. While this would not necessarily be considered becoming honest, those who responded indicated that they felt that if the other believed them or came to their opinion that they were honest. In the three cases that responded in this manner (6%), these individuals indicated that they would send a picture to the partner. This suggested that the deception had to do, most likely, with some aspect of their physical appearance. When looking back at these individuals’ previous responses, this suggestion seemed consistent with what they indicated they would lie about.

At What Point and How Do You Decide to Make the Transition From an Online Relationship to a Face-To-Face Relationship?

Assuming that individuals would, at some point, move their relationship from that of an Internet to that of a face-to-face relationship, this particular question asked those participating in the study to indicate how and when they choose to make the transition from an online, Internet relationship to that of a face-to-face contact. Based
on responses, seven categories were identified as depicted in Table 9. The most common response had to do with when the individual felt they were comfortable with the person who they were interacting with. Statements reflecting this position included, “when things feel right,” “when we have entered our comfort zone,” “I ask her to meet when we are comfortable,” and “when I feel comfortable with the person.” The next most common response had to do with when they felt it would be mutually beneficial. Some of the responses from respondents included, “When enough of an interest is established that both people can mutually benefit from a face to face hang out,” or “When we both feel it is ok to meet person to person.” The third category of responses, entitled, “When I get to know them” included statements such as, “when he knows the back of my hand by heart,” “when I trust them,” and “when I feel safe.” This groups of respondents comprised of the overall sample. Next was the group of respondents who indicated that time in some way or another played a role in their face-to-face meeting. This was a varied group with a wide range of responses including, “from the

Table 9

Percentage of Individuals According to When They Decide to Meet Face to Face

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of respondents</th>
<th>Percent of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am comfortable</td>
<td>37</td>
<td>40</td>
</tr>
<tr>
<td>Mutually beneficial</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Know them</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Length of time</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>If interested in me</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>If interested in them</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Varies with the person</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
beginning,” “as soon as possible,” to more definitive statements such as, “after a month,” “when we have talked online for a few months and then spent ample time talking over the phone and I feel comfortable with who the person is and who I am as a ‘real’ friendship,” and “after a long time.” In one case the amount of time was based on money, “whenever the money is available for them to come to where I am.” The fifth category addressed the interest the other person “has in me.” These individuals made statements such as, “if the person shows interest in me,” “when she is willing to meet,” and “when they say yes.” On the other hand, 7% indicated that they wanted to have interest in the person first as indicated by the statements, “if I feel that I am interested in the person I talk to,” or “when the person says that they would like to meet me anytime.” The last subcategory suggested that there were those who would meet but there were moderating conditions or mediating factors as noted in “it varies,” and “if they are hot.”
CHAPTER V
DISCUSSION

Relationships

In reviewing the literature three conclusions can be drawn pertaining to involvement in relationships across the life cycle. First, most all Americans involve themselves, at one time or another, in an intimate relationship (e.g., Knox & Schacht, 1994). Next, although there is variability, relationship formation appears to follow a developmental course progressing from a state of acquaintance on through to enhanced levels of intimacy including mate selection/partnering (Cox, 2001). Finally, as noted by Coombs (1991) when comparing married and unmarried individuals, those who were involved in an ongoing, stable and satisfying relationship demonstrated more positive physical and mental health, as well as greater social relatedness regardless of the stage of the life cycle.

While these conclusions are helpful, and certainly enlightening as to the importance of relationships across the life cycle, none of them address the role deception plays in the formation and maintenance of relationships across time. This thesis specifically addressed the use of deception at varying points in time according to relationship status, but does so with particular attention on a new variant of relationship, namely, that which is fostered through the cyber network known as the Internet. Using a cross-sectional, convenience sample, participants in the study were evaluated for their use of deception at various stages of relationship development. These analyses examined not only the use of deception by grouping males and females together, but
also analyzed them from the perspective of gender. Finally, open-ended questions were presented to participants in an attempt to better understand the use of deception by this specific population of participants.

Limitations

One of the limitations of this study has to do with the fact that the findings of this study can not be adequately integrated into attachment theory. As noted in the Review of Literature there were assumptions associated with relationship development and attachment; primarily that couples relationships were enhanced if they were able to foster a secure attachment through the process of dating, courting, engagement and on through the marriage. Underlying this assumption was a secondary assumption that there would be relationship variables that would interplay with the process of attachment that would either enhance or negate the emotional bonding associated with attachment. The variable of interest in this study was deception. It was theoretically hypothesize that deception would interfere with the attachment process and honesty would be related to reports of more satisfaction in the relationship. The findings of this study were sparse and provided little direction to make any logical or theoretical connections between attachment and deception and as such, the discussion does not include a focus on attachment.

With regards to the quantitative portion of this study, the limitations were attributed to sampling and measurement. With regards to sampling, the first limitation has to do with sample selection. While using chat rooms was certainly a practical method of obtaining respondents, the study was limited to only 45 of thousands of
possible Internet chat rooms. The selection process by which the chat rooms were selected was another limitation. While the selection was focused on what would appear to be appropriate sites, there was not a true process of randomization utilized. Next, having to do with selection of respondents, was the fact that only three of eight regions of the United States was used. While these regions were randomly selected, it is not clear as to how one region is really different from another and as such, drawing any conclusion based on region would be merely a “guess.” Third, respondents composed a convenience sample. Such a sample does not reflect the population at large, but rather the findings are only valid for those of this particular sample. Finally, there may have been problems associated with sample size. The number of respondents selected into this study was relatively small and this could have been a basis for not finding significance in the analyses; although it must be remembered that merely increasing sample size may also artificially inflate significant findings.

In terms of measurement, it was initially assumed that the instruments selected for this study would have credibility for those in relationships on the Internet as they do for those in face-to-face relationships. The findings of this study make it clear that one of two issues, or both, interfered with these measures being sufficiently credible so as to produce findings that were adequately interpretable; namely, either the sample—for the reasons discussed above—did not allow for interpretable findings, or the instruments themselves were not adequately designed for an Internet population.

Deception

While it may be assumed that deception can be found in most any relationship,
with Ford (1996) indicating that it is prevalently used by all, there has only been one research study to date that has addressed deception as it presents in individuals who make relationships via the Internet (Cornwell & Lundgren, 2001). The current study builds upon Cornwell and Lundgren’s work by examining four types of deception—grouped into three categories—as they may present in Internet relationships. Methods of deception in this study included: one measure of general deception, two addressing positive self presentation (impression management and deceptive positively), and one measure that examined whether a partner perceived their partner as being deceptive (partner deception). These scales were not exclusively Internet deception scales, since none to date have been developed; but rather they have been used in the testing of deception in general. As such, prior to this study it was uncertain as to whether or not these scales would provide any useable information with regards to deception as it presents in individuals involved in Internet relationships. The findings suggest that while some of these types of deception may have relevance to Internet relationships, further investigation is warranted. As such, the conclusions and discussion to follow must be taken with caution in mind.

Motivations for Being Deceptive

The motivation for being deceptive varies from self-protection to self-centeredness, whereas the tolerability of deception is dependent on the amount of benefit received. Lying does seem to have a place in relationships both on and offline, therefore, one must come to understand not only the character and attributes of the individual who is being deceptive, but also those of the individual who is willing to
benefit from a lie and thus, is willing to tolerate it for personal gain. Ford (1996) concluded “Every lie has a predisposing condition, and because most are perpetuated within a social situation, these social factors influence the telling of the lie, its content, and the response to it” (p. 19). Though not looked at in this study, it would seem that the cultural and social contexts of relationships developing online would play a major role in the amount and types of deception used in Internet based relationships. Cole posits that deception in romantic relationships is based upon factors such as “reciprocity, avoiding punishment, and intimacy needs” (Cole, 2001, p. 109-112). The interaction of deception and Internet relationship is interesting in that, as noted, reciprocity and self disclosure (part of intimacy) takes place at an accelerated pace online, and it is suggested that this increased rate of disclosure may also increase the felt ‘need’ to use deception in order to keep pace and gain what is sought for in the relationship.

Use of the Deception in Internet Relationships

The Internet is widely used, with an estimated number of users as of May 2004 of 945 million people worldwide http://www.clickz.com/stats/big_picture/geographics/article.php/151151, and it is estimated that in the year 2005 there will be 1.1 billion users. In the United States alone it is estimated that there are 144.4 million users of the Internet in 2004. While not all of those who log onto the Internet interact with others, for those who do, they have the possibility of meeting hundreds of thousands, if not millions of people, and thus effectively enlarging their possible pool of eligibles. While computers and access to the Internet is not yet as common as the Television is in U.S.
homes, almost everyone has access to the Internet whether that be at their home, school, work, or the public library. If one does decide to enter into chat rooms, there is an extremely wide variety of chat-rooms to select from. There is a chat room for nearly any subject or topic. Ranging from location, language, personal hobbies, as well as those designed solely to meet other individuals, such as in Yahoo’s chat rooms named “single lounge,” “20’s,” or “married and flirting.”

Quantitative Instrument Weakness, in the Context of Internet Relationships

Of importance, be it a face-to-face or online relationship, are the questions about how and when one chooses to be deceptive, and what they choose to be deceptive with. It was hoped that the quantitative data would provide researchers with some basic understanding about deception, at least whether or not those on the Internet choose to be deceptive. Three types of deception were looked at general deception, were they deceptive in a general way, impression management and deceptive positively, did they socially bias information in their favor, and partner deception, were they skeptical about the information provided to them by another. As previously noted in the results section in Tables 1, 2, 3, and 4 (see pages 43, 44, 47, and 49, respectively) very little information was gleaned about the use of deception; although what was found, was of interest and may be of value to future research. There were two possible reasons for why so few significant findings were found. One may have to do with the sample size, which has previously been noted as a limitation. If we greatly enlarged the sample size, perhaps we would have found significance in the areas of investigation, however caution must be taken in that increased sample size may lead to significant findings that
may be an artifact of the large sample. On the other hand, the issue may not have had anything to do with sample size but rather, be related to the fact that the instruments do not measure the types of deception that is being used by those who are developing relationships on the Internet. Even though sample size could certainly have something to do with the findings, it would seem logical that if the measures were Internet credible, that even with the sample derived for this study, more areas of significance, if only clinically or theoretically significant, would have been found.

An examination of the overall significant findings demonstrates the concerns with regards to the measures utilized in this study. First, the greatest number of significant findings, though limited, were associated with general deception (see Table 10) and perceived partner deception (see Table 11). Next, there were only a minimal number of findings with regards to impression management (see Table 12). Finally,

Table 10

An Examination of Findings Based on the General Deception Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA</th>
<th>Multiple comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>West vs. Midwest</td>
<td>.047</td>
<td>.014</td>
</tr>
<tr>
<td>Female vs. Male</td>
<td>.018</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Casual vs. conversational</td>
<td></td>
<td>.039</td>
</tr>
<tr>
<td>Casual vs. exclusive</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Conversational vs. exclusive</td>
<td></td>
<td>.034</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>Female vs. male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Casual vs. exclusive (female)</td>
<td></td>
<td>.041</td>
</tr>
</tbody>
</table>
Table 11

An Examination of Findings Based on the Impression Management Scale

<table>
<thead>
<tr>
<th>Variable</th>
<th>ANOVA</th>
<th>Multiple comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>West vs. Midwest</td>
<td>.040</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td>.032</td>
<td>.013</td>
</tr>
<tr>
<td>Casual vs. exclusive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 12

An Examination of Findings Based on the Partner Deception Scale

<table>
<thead>
<tr>
<th>Income</th>
<th>ANOVA</th>
<th>Multiple comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000 - $20,000</td>
<td>.015</td>
<td>.026</td>
</tr>
<tr>
<td>$20,000 - $40,000</td>
<td></td>
<td>.054</td>
</tr>
<tr>
<td>$40,000 +</td>
<td></td>
<td>.004</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>male v. female</td>
<td>.045</td>
<td></td>
</tr>
<tr>
<td>Intimacy</td>
<td>.021</td>
<td></td>
</tr>
<tr>
<td>Casual vs. exclusive</td>
<td></td>
<td>.015</td>
</tr>
<tr>
<td>Conversational vs. exclusive</td>
<td>.007</td>
<td></td>
</tr>
<tr>
<td>Casual vs. exclusive (Male)</td>
<td></td>
<td>.018</td>
</tr>
</tbody>
</table>

there were no significant findings related to the deceptive positivity, and thus no table was created. While sample size may be a contributing factor as to why so few significant findings were noted, it is also possible that the significant findings that were found may merely be artifacts. This being the case, while additional research would help delineate the reasons for why the measures were not more productive in providing results about Internet deception, it appears that the more logical conclusion is that the
instruments utilized in this study were not measuring the art of deception as it appears in relationships associated with the Internet.

Another plausible explanation as to why so few significant findings may have been found may have to do with the rate of relationship development across the stages of the life cycle. If this is the case, it may be that the accelerated rate of relationship development by those using the Internet may lead to different kinds of deception and as such, the instruments may not be sensitive to these changes.

Thus, when examining deception among Internet users, based on the above conclusions, it may be that what is needed is an instrument that is not only specifically oriented to deception as it appears in Internet relationships, but is also sensitive to the accelerated pace that couples move through the stages as they interact on the Internet.

Implications for Marriage and Family Therapy

The uniqueness of marriage and family therapy is that it examines relationships in given systemic contexts. Relative to this study, the focus has been on relationships within the context of the Internet. Examination of the findings suggest relevance to marriage and family therapy in several areas, namely premarital psychoeducation, marital therapy, and marriage enrichment. In facilitating satisfaction in relationships, there are a variety of variables that are relevant to increasing the likelihood of satisfaction and the overall relationship quality and stability (e.g., communication, affection, conflict management, and so forth; see Lewis and Spanier, 1979). The effectiveness of each of these variables is dependent on a variety of factors, for example skill implementation. In regards to skills, it is critical that those in relationships have
sufficient skills to carry out the art of communication, manage conflict through problem-solving, or satisfactorily display affection. However, as important as skills are to relationship outcome, there must be an inherent integrity built into the couple’s interaction so that the demonstrations of behavior are truly honorable in their intent. Integrity, for the purpose of this study is defined as the understanding and belief that what one says or does can be depended on as being true and accurate across time. If it can be assumed that trust is an essential factor in the application of skills associated with relationship formation and maintenance, especially as it pertains to satisfaction, quality and stability; then it may be concluded that deception would undermine integrity and lead to relationship disillusionment and dissatisfaction.

Although Ford (1996) indicated that deception is a characteristic common to human beings, and it appears that in many relationships, deception can be found in the initial phases of development (Christopher & Cate, 1985). However, if being deceptive is not replaced with integrity it would be anticipated that deception would have deleterious effects on the relationship across time (Cole, 2001), particularly as it might relate to attachment style. Although there have been no studies comparing face-to-face relationships with individuals who form their relationship on the Internet, at least in terms of deception, this study assumed that couples using the Internet would employ deception in the initial phases and then gradually decrease their use of it as they became more familiar. However, contrary to this assumption, data from the study indicated that as the reported level of intimacy in the relationship increased from casual on through to mutually exclusive, there appeared to be a corresponding increase in the use of general deception. One possible explanation for this contrary finding may be that couples on
the Internet foster their relationships more rapidly than those in face-to-face associations. It is possible because of this increased rate of relationship development that individuals use an increased amount of general deception to hide some general personal flaws.

Most likely, however, is that this finding is an artifact of the sample and measures. There does not appear to be any systematic findings with other areas of deception, as investigated in this study, to support the assumption that Internet relationships show an increase in deception. However, there is reason to believe that the sample may be problematic, due to size, sampling procedure, etc., and this may in fact be attributing to why it appears that general deception is manifesting an increase in presence as the relationships intensify. Further, there is reason to believe the measures in this study did not accurately measure Internet deception because they were developed for face-to-face relationships. This being the case, while the finding is interesting and cannot totally be ruled out, it does behoove the therapist-researcher to examine this finding either to establish its credibility and provide appropriate explanations or demonstrate that this is indeed an artifact.

**Conceptualizing and Operationalizing Deception in Internet Relationships**

One of the concerns noted was the fact that there was minimal, if any research focusing on the issue of deception on the Internet; however, in daily clinical practice deception is frequently manifested in conversations with couples who report being disillusioned in specific areas of their relationship (e.g., communication, sexual infidelity, financial instability, etc., see Lewis and Spanier, 1979) or their relationship in
general. Most often the dissatisfaction expressed by those presenting in the office (face-to-face relationships) has to do with integrity violations. Issues involving integrity (which includes trust and honesty) seem to be related to deception.

Marriage and family therapists are in a unique role to begin facilitating the conceptualization of deception as it relates to individuals forming relationships on the Internet. This may begin by examining couples presenting in the office who have formed relationships initially on the Internet and are now experiencing relationship distress or desire relationship enhancement. In these situations it is possible for clinicians to do in depth case studies focusing on how deception was manifest during the course of their relationship on the Internet. In these cases the clinician could begin to foster, through case study methods, a conceptualization of the role deception has played and the areas of the relationship in which deception has been most commonly used. With this information in mind, the clinician could organize the various forms of deception into categories, which may include both general deception and specific areas of deception, as well as deception that is perceived in the other. While this certainly cannot be concluded to demonstrate conceptualization per se, it is a beginning. For those therapists who feel the responsibility to contribute to the field, they can continue their case studies and theorization, publishing the results so that others can read, seek to understand in their own practices, and contribute in a like manner.

While most clinicians are not well versed empirically, they certainly have sufficient knowledge of research methods and statistics to make a contribution. Clinicians who are more academically inclined may, for example, then take information from case studies and begin the process of operationalizing the concept, developing
measures that can specifically address those areas of deception being presented to clinicians, and testing these measures in a empirical manner. The operationalization of deception necessitates that measures developed are valid and reliable in the context of the populations for whom they are intended. Once such measures have been developed, they will serve as potentially critical instruments for the acquisition of information that can be used in a variety of clinical settings to ameliorate deception, enhance integrity and ultimately impact satisfaction, quality, and stability.

This study not only encourages clinicians to become actively involved in the process of conceptualization and operationalization, but to be aware of the fact that little, if anything is known about deception—at least at this writing—as it is found among couples on the Internet. In that there appears to be an increasing number of couples using this modality as a means of finding their partner, it behooves clinicians, clinically as well as ethically, to become better acquainted with the process and pertinent variables associated with Internet relationship selection. Only with accurate information can effective and efficient interventions be formulated.

Conclusions and Recommendations Associated with the Quantitative Findings

1. It can be concluded that the quantitative findings provided little if any pertinent information with regards to the style of deception that was used by couples on the Internet. As such, it is recommended that attention be given to the conceptualization of the concept, referred to as deception, in the context of Internet relationships.

2. Once Internet deception has been adequately conceptualized then the focus can turn to the operationalizations so that instrument development can begin that
accurately looks at deception as it presents in Internet relationships.

3. It is insufficient for academicians to take full responsibility for this task. It truly necessitates a concerted and integrated effort between those in the field, working in harmony with those in academics.

Qualitative Findings, Conclusions and Recommendations

The qualitative findings provide some interesting information that may be relevant as one examines the issues of deception as it presents in Internet relationships; namely, the high number of individuals that reported using deception in their relationships, the continued use of deception even after the relationship had increased in intimacy, and the different motivations for using deception in the development of their Internet relationships. From the qualitative data we learn, though recognized as exploratory and in need of more study, that while individuals may present as honest, there are also a large number of those presenting who are and continue to be deceptive in their relationships. In all of the qualitative questions asked, that gave the opportunity for respondents to report if they were honesty or deceptive, in all cases, being deceptive was greater than honesty (see Tables 5-8). The highest percentage of deception was illustrated in Table 6. In this table 76% of the respondents indicated that they were deceptive in their Internet relationships. This is relevant in that it suggests that there was a large amount of deception used in Internet relationships that was not picked up by the quantitative measures.

The qualitative questions allowed the researchers to examine specifics about deception (e.g., when used, type of deception, and transition from being deceptive to
honest) in Internet relationships. Results suggested that even when given a chance to become honest through continued involvement in the relationship across time, 35% (see Table 7) indicated that they would continue to be deceptive. As before mentioned, it would seem that if deception was not replaced with integrity that the relationship would suffer.

The qualitative analysis also allowed the researchers to begin looking at a variety of motivations for being deceptive according to those who responded to the qualitative question, “How and when do you choose to be deceptive in an Internet relationship?” (see Table 5). It would seem prudent that, in conceptualizing and operationalizing deception, the process take into consideration research findings in devising measures appropriate to Internet relationships. Not only were various motivations noted in the responses of the participants, but it may also be possible to sort the responses into various categories realizing that the “n” for some categories may be small. If marriage and family therapists could begin to examine these motivations suggested, and others that may be presented in their own practices, such an endeavor would help the process of conceptualization by clarifying what promotes or encourages deception by individuals who form Internet relationships use deception. These clinicians, as previously noted, could use their personal cases to contribute to the literature by providing feedback with regards to the validity of the suggested motivations as it appears in their personal practices. Further, more in depth investigation on a empirical basis could then proceed helping to add, eliminate or clarify the categories as suggested in this study. These responses, when pooled together as presented in the Tables 5 - 9, appear to be important findings upon which
Use of the Findings as They Pertain to the Clinical Practice of Marriage and Family Therapy

When one realizes that deception is prevalent in relationships, in particular those relationships that are distressed, it becomes evident that clinicians working with couples as they engage in premarital or marital/couples therapy will need to become increasingly aware of the “arts” of deception used when one does not engage in face-to-face interaction. Three areas of possible clinical relevance that were suggested based on the data from this study, where as marriage and family therapists may begin to focus their concentrations include, premarital psychoeducation, marital therapy, and marital enhancement.

Qualitative findings and clinical practice. Assuming that the concept has been adequately conceptualized and operationalized, it would seem that marriage and family therapists would be in a unique position to develop psychoeducational interventions or strategies to decrease the use of deception and/or help one become increasingly aware of the use of deception, particularly as they make a transition from the Internet to face-to-face relationship. In this regard, data indicated that the movement from an Internet to a face-to-face relationship took place in a variety of ways. For example, in Table 9 there were seven different rationales given by respondents relative to when they would be willing to make a transition into a face-to-face relationship. A psychoeducation intervention could address these areas, facilitating the transition by providing skills that would be appropriate to the given rationale. Further, an area that could be addressed...
through the use of psychoeducation could be associated with skills that would help couples become honest in their relationship, after having been deceptive. Table 8 indicates that 71% indicated that they had been deceptive. It is further suggested by these data that when they choose to be honest, they will do so in a variety of ways. When examining the methods they choose to make this transition, only one of the methods appeared to be partner sensitive. Thus, it seems that skills development oriented towards those wanting to make this transition after having been deceptive would be an appropriate topic for psychoeducation, particularly if it were to include skills that enhance communication, empathy, respect, and sensitivity. Should clinicians choose to be involved in psychoeducation, their interventions could be developed for face-to-face audiences or designed as a presentation through an online course.

When couples present with the intention to marry, an understanding of deception could help the clinician facilitate openness of communication, particularly if s/he were aware of, for example, certain motivations for deception that may continue to present, but may be specific to those involved through the Internet. Data from this study indicated that a majority of individuals (93 out of 134, see Table 9) reported that they eventually meet in face-to-face relationships. As such, it can be assumed that they view the Internet relationship as significant and meaningful. Cornwell and Lundgren (2001) note that those involved in online relationships, when compared with those in face-to-face relationships demonstrated no difference in their reported level of relationship satisfaction, thus they move from online to face-to-face. However, just because they make this transition does not mean that they remove themselves from being deceptive. In fact, data from this study suggested that of those responding to the qualitative
questions about moving from being deceptive to honest in the relationship, a large percentage (35%, see Table 7) of them reported that they would continue to be deceptive. Of those who indicated they would remain deceptive, 36% were identified as chronic in their use of deception, whereas 64% would use deception in an expedient manner, in other words, when they felt it was in their best interest. If these data are suggestive of the fact that there were individuals, more than one-third, who form relationships on the Internet and bring this aspect of behavior into the relationship, then it seems logical that clinicians would want to understand this dynamic and develop strategies to both assess it in Internet relationships, and intervene to eliminate its presentation.

Finally, in terms of marital enhancement, it seems logical that those arts of deception that may have been employed while fostering a relationship on the Internet may continue to present after a marriage has taken place. Marital enhancement could be specifically designed for those who have developed a relationship on the Internet and directed to those types of deception most commonly recognized as associated with Internet relationships. Obviously, these possible interventions would necessitate a clearly conceptualized and operationalized understanding of deception, such that, when compared with deception associated with face-to-face relationships, similarities and differences can be identified.

Conclusions associated with the qualitative analyses. Assuming that the qualitative analyses had credibility, recognizing the previously mentioned limitations. It is suggested that the qualitative data were more helpful in understanding Internet deception, as it presents in Internet relationships, than were the quantitative data. From
these data it was concluded that:

1. The majority of those responding were deceptive during some portion of their relationship on the Internet and that some would remain deceptive regardless of their association with one another (chronic deception).

2. There were varying rationales or motives for being deceptive.

3. When one wanted to make the transition from being deceptive to honest, that most used ineffective methods to make this transition.

4. When individuals chose to become more honest, the majority indicated that they were interested in extending the relationship.

5. It is highly likely that those who were chronically deceptive in the Internet relationship would continue to do so even though they reported that their relationship intimacy level had increased.

It is suggested that while this information is exploratory, that it that could be used by clinicians, at least to derive hypotheses from. These hypotheses could then be used to compare and contrast against the experiences of individuals who present to their practices and have fostered their relationship on the Internet.

Finally, the use of the Internet as a medium to develop relationships is, like most things dealing with computer technology, changing at a very rapid pace. One thing that is effecting how Internet relationships are formed and the types and possible effectiveness of deception is that of TeleVideo and web cams because it brings back the visual aspect of the relationship. As they become more advanced and common, TeleVideo and web cams may change the dynamics of relating with another via the Internet by limiting what aspects an individual may be deceptive about. It is hoped that
this study may increase the understanding and desire to further study the effects that deception plays in the development of Internet relationships.
REFERENCES


Appendix A

Informed Consent
Informed Consent

The Role of Deception in Mediating Relationship Involvement
Of Couples Interacting on the Internet:
Stages of Intimate Formation

Introduction/Purpose
The purpose of this study is to investigate the role deception plays in the development of Internet relationships. Specifically we are investigating those Internet relationships for persons who are 18 years of age and older, and have been in an Internet relationship for 2 or more months.

Procedures
We realize your time is important and have, therefore, created an inventory of questions that should take about 10 minutes to respond to. If, after reading the Electronic Informed Consent (hereafter referred to as the EIC), you are willing to participate, click on the hyperlink at the bottom of this page. In so doing, you will be taken directly to the Inventory. The Inventory you will be completing has the following sections:

- **Section One: Demographic Information.** You will be asked to provide basic demographic information about yourself that will include: age, gender, region of the United States where you live, approximate yearly income, and education level.

- **Section Two: Internet Relationships.** This section will ask you to list how many Internet relationships you have been involved in during the past five years? This section will also ask you to share the length of time you have been in the most recent Internet relationship.

- **Section Three: Stage of Internet Relationship.** This section of questions focuses on your perception of what stage of relationship you are in with the most recent Internet relationship. This means you will be asked to identify whether you consider your present Internet relationship as: Casual recreational conversations with numerous people, conversations with multiple but selected people, conversations with usually one selected individual, an online agreement to become engaged, or an online agreement to become married.

- **Section Four: Perceived use of deception in the relationship.** This section will ask you to answer questions about your perception as to whether you use deception in relationships when you are on the Internet. In specific, this will focus on the most recent Internet relationship.

- **Section Five: Perceived use of deception by the other party in the relationship.** This section will provide questions with regards to whether you perceive your most recent partner to have been or is now being deceptive in the Internet relationship.
Section Six: Written questions regarding deception. This section will be helpful to the researcher to gain a better understanding about how those involved in Internet relationships view what is going on. This section will invite you to share in writing thoughts and opinions about the following questions:

- How and when do you choose to be deceptive in an Internet relationship?
- When you choose to use deception, what do you choose to be deceptive about?
- At what point in the relationship do you choose to become honest about that which you have previously been deceptive?
- How do you present the information truthfully to your partner when you have previously been deceptive?

Risks

There are minimal risks associated with this study. The research asks if you indicate a willingness to participate, to provide general information about how you may or may not have used deception in the formation of your past, and current Internet relationships. Further you will be asked to share your perception as to whether you believe you have been or are being deceived by those you have had an Internet relationship with.

Benefits

Benefits that may be associated with this study, and you may obtain a copy of, include:

- an understanding of the types of relationships people form on the Internet,
- whether people use deception when forming an Internet relationship, and
- whether one party perceives the other as using deception when involved in a relationship on the Internet.

These questions are important for social scientist to answer so that they can provide you with information to help you make an informed choice about, if you choose to form an Internet relationship, the type of relationship you would like to have and the likelihood of whether you,
or the party with whom you are associating, may be using deception. If deception is being used, an understanding as to what type of deception you might encounter may help you both address this is you choose to make the relationship more intimate.

**New Findings**

You will be notified if risks or benefits change during the study. This is so that you can choose whether or not to continue participating. In that your identity will be protected and there is no way that we will be able to trace back to you, if the study ever changes in a way that affects you, we will provide information on the Internet chat room site where you have identified much the same as this, which you are now reading, is being placed.

**Explanation and Offer to Answer Questions**

The EIC has explained this study to you. If you have questions, you may contact Dr. D. Kim Openshaw at (435) 797-7434 or at opie@cc.usu.edu.

**Voluntary Nature of Participation**

Your participation in this study is voluntary. After reading the EIC, you choose to either participate or withdraw. Further, if during the course of answering the questions you choose to withdraw, you may do so without any adverse consequence.

**Confidentiality**

Your confidentiality is important to us. In as much as you will be giving informed consent through electronic means, there will be no informed consents that will be provided to the researchers. As such, your confidentiality, as related to the informed consent is protected in this manner. Further, there is no way in which the EIC can be linked to the Inventory should you choose to participate. Next, the demographic data is general and there is no way in which this data could be used to identify you. Finally, all data will be group analyzed and if reported through publication or presentation, will be done so as group data.

**IRB Approval Statement**

The Institutional Review Board (IRB) at Utah State University has approved this project. If you have any questions or concerns about this approval, you may contact the USU IRB Office at (435) 797-1821.

**Copy of Consent**
Informed Consent

The Role of Deception in Mediating Relationship Involvement
Of Couples Interacting on the Internet:
Stages of Intimate Formation

Investigator Statement

"We certify that the purpose of this research study, and possible risks and benefits associated with taking part in this study, have been explained to the individual through the EIC. Further it is certified that we, as the investigators, have provided the individual opportunity for clarification of information they may not understand by contacting us through the use of our phone number or email addresses, both of which are contained on the EIC. Individual's are encouraged to have any questions answered before clicking the hyperlink that will take them into the Inventory."

Signature of Principle Investigator and Student Researcher

D. Kim Openshaw, Ph.D., LCSW, LMFT
Dustin W. Edgerton, BS, Masters Degree Candidate in Marriage and Family Therapy
(435) 797-7434
(801) 625-3716
opie@cc.usu.edu
mftedge@yahoo.com

Signature of Participant

By my clicking on the hyperlink and completing the Inventory, I indicate my willingness to participate in this study as it has been explained to me. Further I certify that any questions that I may have had prior to completing the Inventory have been answered by contacting either of the investigators by phone or email.

http://FreeOnlineSurveys.com/rendersurvey.asp?id=35663
Appendix B

Internet Deception Inventory
For each question select the answer that best fits your situation.

What is your current age?
- 18-24 years old
- 25-34 years old
- 35-50 years old
- 51-Older

What is your gender?
- Male
- Female

How would you classify your nationality?
- Caucasian (White)
- African American
- Hispanic/Latino
- Native American
- Asian
- Pacific Islander
- Other

What is your education level?
- Less than a High School Diploma
- High School Graduate/GED
- Some College
- College Graduate
- Advanced Degree

What region of the United States do you live in?
- Southern
- Midwestern
- Western

What is your average income level?
- Less than 10,000/year
- 10,000-20,000/year
- 20,000-40,000/year
- 40,000-60,000/year
- 60,000-or more/year

How many Internet relationships have you been in?
- 1-5 relationships
- 6-10 relationships
What best describes your current/last Internet relationship?
- Casual relationship with many people
- Multiple relationships with fewer people
- Exclusive relationship with one person
- Engagement

What is the duration of your current/last Internet relationship?
- Less than 6 months
- 6 months-1 year
- 1 year-2 years
- 2 years-3 years
- 3 years or more

Choose the answer that best fits your current or last Internet Relationship?

1 = Casual recreational conversations with numerous persons online
2 = Online conversation but most specifically with only one individual
3 = An online agreement to be exclusive with one another
4 = An online agreement to become engaged
5 = An online agreement to become married/partnered

Please evaluate the extent to which you agree with the following statement using the following scale:

1-----------------------2--------- ----- -- ---------3 ------------
Not True Somewhat True True Very True

I sometimes find myself lying to my partner about things I have done.

I disclose everything to my partner, both good and bad.

I tell my partner the complete truth, even things he/she does not want to hear.

I think that my partner withholds important information from me.

There are certain issues that I try to conceal from my partner.

I think my partner is very honest with me.

I think that my partner tries to mislead me.

There are certain things I try to mislead my partner about.
I try to hide certain things that I have done from my partner.

I sometimes lie to my partner.

When I don’t live up to my partner’s expectations, I always tell him/her what I have done.

My first impressions of people usually turn out to be right.

It would be hard for me to break any of my bad habits.

I don’t care to know what other people really think of me.

I have not always been honest with myself.

I always know why I like things.

When my emotions are aroused, it biases my thinking.

Once I’ve made up my mind, other people can seldom change my opinion.

I am not a safe driver when I exceed the speed limit.

I am fully in control of my own fate.

It’s hard for me to shut off a disturbing thought.

I never regret my decisions.

I sometimes lose out on things because I can’t make up my mind soon enough.

The reason I vote is because my vote can make a difference.

My parents were not always fair when they punished me.

I am a completely rational person.

I rarely appreciate criticism.

I am very confident of my judgments.

I have sometimes doubted my ability as a lover.

It’s all right with me if some people happen to dislike me.
I don’t always know the reasons why I do the things I do.  
I sometimes tell lies if I have to.

I never cover up my mistakes.

There have been occasions when I have taken advantage of someone.

I never swear.

I sometimes try to get even rather than forgive and forget.

I always obey laws, even if I’m unlikely to get caught.

I have said something bad about a friend behind his or her back.

When I hear people talking privately, I avoid listening.

I have received too much change from a salesperson without telling him or her.

I always declare everything at customs.

When I was young I sometimes stole things.

I have never dropped litter on the street.

I sometimes drive faster than the speed limit.

I never read sexy books or magazines.

I have done things that I don’t tell other people about.

I never take things that don’t belong to me.

I have taken sick-leave from work or school even though I wasn’t really sick.

I have never damaged a library book or store merchandise without reporting it.

I have some pretty awful habits.

I don’t gossip about other people’s business.
Fill in the blank.

Estimate the number of times you think your partner lies to you during the course of a week? (Please provide a number)

Please estimate the number of times you lie to your partner during the course of a week? (Please provide a number)

Short Answer

1. How and when do you choose to be deceptive in an Internet relationship?

2. When you choose to use deception, what do you choose to be deceptive about?

3. At what point in the relationship do you choose to become honest about that which you have previously been deceptive?

4. How do you present the information truthfully to your partner when you have previously been deceptive?

5. At what point and how do you decide to make the transition from an online relationship to a face-to-face one?
Appendix C

Tables
Table 13

The Relationship Between the General Use of Deception (General Deception) and Demographic Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Deception</td>
<td>48</td>
<td>18.7292</td>
<td>4.97970</td>
<td>.098</td>
</tr>
<tr>
<td>High school or less</td>
<td>66</td>
<td>20.0242</td>
<td>5.69212</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>24</td>
<td>20.000</td>
<td>4.96947</td>
<td></td>
</tr>
<tr>
<td>College degree or more</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Deception</td>
<td>24</td>
<td>20.1667</td>
<td>5.56125</td>
<td>.595</td>
</tr>
<tr>
<td>$10,000 or less</td>
<td>33</td>
<td>19.6061</td>
<td>5.03698</td>
<td></td>
</tr>
<tr>
<td>$10,000 to $20,000</td>
<td>50</td>
<td>19.9600</td>
<td>5.05060</td>
<td></td>
</tr>
<tr>
<td>$20,000 to $40,000</td>
<td>28</td>
<td>21.3571</td>
<td>5.49218</td>
<td></td>
</tr>
<tr>
<td>$40,000 +</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Deception</td>
<td>45</td>
<td>18.6222</td>
<td>5.55260</td>
<td>.047*</td>
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<tr>
<td>Midwest</td>
<td>43</td>
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<td>4.71855</td>
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<tr>
<td>South</td>
<td>45</td>
<td>21.4222</td>
<td>5.63467</td>
<td></td>
</tr>
<tr>
<td>West</td>
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Table 14

The Relationship Between the General Use of Deception (General Deception) and Demographic Variables by Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Education: Male</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or less</td>
<td>30</td>
<td>18.267</td>
<td>4.78455</td>
<td>.188</td>
</tr>
<tr>
<td>Some college</td>
<td>31</td>
<td>20.612</td>
<td>6.21652</td>
<td></td>
</tr>
<tr>
<td>College degree or more</td>
<td>7</td>
<td>21.429</td>
<td>6.16055</td>
<td></td>
</tr>
<tr>
<td><strong>Education: Female</strong></td>
<td></td>
<td></td>
<td></td>
<td>.364</td>
</tr>
<tr>
<td>High school or less</td>
<td>18</td>
<td>19.500</td>
<td>5.3384</td>
<td></td>
</tr>
<tr>
<td>Some college</td>
<td>35</td>
<td>21.200</td>
<td>5.24012</td>
<td></td>
</tr>
<tr>
<td>College degree or more</td>
<td>17</td>
<td>19.412</td>
<td>4.47296</td>
<td></td>
</tr>
<tr>
<td><strong>Income: Male</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10,000 or less</td>
<td>20</td>
<td>19.900</td>
<td>5.62794</td>
<td>.629</td>
</tr>
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<td>$10,000 to $20,000</td>
<td>17</td>
<td>19.882</td>
<td>4.67550</td>
<td></td>
</tr>
<tr>
<td>$20,000 to $40,000</td>
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Table 15

The Relationship Between the One Partner Perceiving the Other as Being Deceptive (Partner Deception) and Demographic Variables

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<th>SD</th>
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Table 16

The Relationship Between the One Partner Perceiving the Other as Being Deceptive (Partner Deception) and Demographic Variables by Gender

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