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Sexual Orientations and Perceptions of Jealousy

Evanie Eve Atencio
Walden University

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Walden University

College of Social and Behavioral Sciences

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Dr. Michael Johnson, Committee Member, Psychology Faculty

Dr. Stephen Rice, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

Sexual Orientations and Perceptions of Jealousy

by

Evania Atencio

MAED, University of Phoenix, 2007

MBA, Regis University, 2002

BS, University of Phoenix, 1998

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

This study examined the participants' level of jealousy towards their significant other and how it affects the longevity and commitment of their respective relationships. Based on a review of the literature, the research filled the gap of explaining the factor that affects the level of jealousy in monogamous relationships, particularly gender, and sexual orientation. Attachment theory was the theoretical construct that informed the research that addressed the gap in the literature. The research employed a quantitative method that used Rubin's Love Scale, Hendrick's Relationship Assessment Scale and Pfeiffer and Wong's Multidimensional Jealousy Scale. Self-reporting questionnaires and surveys were used to measure the attachment process of all participants who are involved in a romantic, close relationship. Participants were assessed using 2 different methods to determine their level of relationship satisfaction and perceived jealousy they exhibit. The dependent variables were the level of relationship satisfaction and jealousy while the independent variables were gender and sexual orientation. It was hypothesized that gender and sexual orientation can be main determinants to understand the dynamics of jealousy and relationship satisfaction in monogamous relationships. The sample of the study was 132 individuals who were currently involved in a romantic, close monogamous and committed relationship in Colorado. The data from this study were analyzed using MANOVA, correlation analysis, and central tendencies. The results indicated that heterosexual samples had the highest level of relationship satisfaction, and the lowest levels of jealousy. In contrast, the bisexual samples had the highest level of jealousy. Homosexual samples had the lowest level of jealousy and had significantly greater levels of relationship satisfaction. These results and the limitations of the study are discussed.

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Dedication

This is dedicated to my Heavenly Father above for the strength and courage to finish this program, to my father and "hero," Macedonio Trujillo, who always, always believed in me (August 7, 1917- January 12, 2014). Also to my husband, Thaddius J. Atencio, Sr., and my precious little son, Thaddius J. Atencio, Jr., who encouraged me to never give up on achieving this dream. I couldn't have done this without all of them.


I love each of you with all my heart . This final one's for me because so many said, "*I never could.*"

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Chapter 1: Introduction to the Study

Background of the Study

Jealousy is one of the most intense feelings experienced in any relationship (Aune & Comstock, 1991). Jealousy is believed to be a complicated emotional experience affected by multiple variables. The study of jealousy has become more common since the mid-1980s (Buunk, 1981; Guerrero & Eloy, 1992). The objective in studying jealousy from a psychological perspective is to develop better ways to reduce conflicts that develop in a monogamous relationship due to jealousy. Through the reduction of conflict, it is likely that a monogamous relationship experiences an increased sense of relationship awareness, resulting in higher levels of commitment, happiness, and love (Graham & Christiansen, 2009). The reduction of jealousy in a monogamous relationship is challenging as jealousy is affected by gender roles and cultural perceptions (Eagly & Wood, 1999). Jealousy is one aspect of cultural norms concerning social relationships that is triggered depending on context (Buss, Larsen, & Westen, 1996; Dougosh, 2000; Jones, Peterson, & Harris, 2009). Factors triggering jealousy are its causative factors. Intensity of triggers determines the level of jealousy experienced by individuals. It is important to first analyze the problem of jealousy through the perspective of attachment theory, which will be used as the guiding theory in evaluating existing studies. This importance is likely due to the theory bridging the research gap between how parental behavior influences an individual's personality development through the lifespan process. The initial hypothesis for this study states that individuals who have higher levels of attachment to their partners will experience higher levels of jealousy in this study. An attempt to discover factors that cause jealous experiences and resulting behaviors in relationships will be made. It will determine if relational jealousy is affected by sexual orientation. In doing this, I hope to establish the underlying factors likely to

incite relational jealousy across gender. Holistically, this exploration may be important in establishing consistency of the jealousy patterns depending on the gender identities.

A Definition of Jealousy

Jealousy is defined as an emotion that pertains to fear, anxiety, and insecurities surrounding the loss or perceived loss of something of high value (Wood & Eagly, 2002). It is important to first analyze the problem of jealousy through the perspective of attachment theory in order to bridge the research gap between the influences of parental behavior on an individual's personality development as one develops through the lifespan process.

Jealousy is considered a socially constructed norm created out of the sex differentiated reactions of a threat to a valued relationship. There are significant differences in how men and women experience jealousy (Wiederman & Allgeier, 1993). This difference can be explained by the separation of the male-female/productive-reproductive domain in society that is reproduced through socialization or rather society and culture. The attachment theory was first recognized around 1930 by John Bowlby, then jointly collaborated, and better defined with Mary Salter Ainsworth during the late 1950s. Bowlby believed that infants and children had a need to attach to a secure base to receive care, attention, and safety. However, Bowlby began to realize attachment styles displayed during infancy were not the same as those displayed in adulthood. A change to the attachment theory was then initiated during the late 1980s, which included attachment in romantic relationships. This addition included four styles of attachment known as secure attachment, anxious-preoccupied attachment, dismissive avoidant attachment, and fearful-avoidant attachment which more closely explored the impact of attachment within a relationship dynamic (Bretherton, 1992). As a result of Bowlby and Ainsworth's findings, this led to the belief that early attachments do have a serious impact on relationships created later on in life.

Jealousy is a complex psychological process that is provoked by threats to a committed relationship (Daly & Wilson, 1983). Attachment and jealousy are triggered by perceptual cues that impact how attachment functions within a relationship (Sharpsteen & Kirkpatrick, 1997). According to research conducted by Bevan (2004), jealousy is associated with relationship uncertainties once it is expressed by either the man or the woman in any given monogamous relationship. The expression of jealousy can manifest itself either through nonverbal visual cues or verbal spoken word cues, which can then be classified as either healthy or unhealthy jealousy depending on the degree of reaction expressed by the person experiencing the jealous behavior and how this behavior affects the individual's daily function in life. Bevan (2004) further indicated that relationship uncertainty exists after jealousy expressions are displayed in partnered relationships

According to Buss (2000), jealousy can be described as challenging and detrimental emotional state that is an adaptive reaction to a threatened fidelity usually caused by the introduction of a third party in any given relationship. Jealousy can be thought of as an anticipatory response or a strike whenever one of two parties in a relationship is exposed to sex differentiated key triggers. On the other hand, researchers have also shown that there is a positive link between jealousy and relationship satisfaction. In other words, the greater the relationship satisfaction, the lesser degree a partner will experience a heightened sensitivity to the triggers of jealousy or insecurity that will occur (Buss, Larsen, & Westen, 1996). Jealousy can also develop when a relationship becomes exclusive and more serious and depends on the attachment of the two-partnered individuals, suggesting that jealousy may sustain and encourage long-term love affairs (Mathes, 1986).

Statement of the Problem

Jealousy is an unavoidable common feeling, which is a complex emotion that is necessary for normal human development. According to Buss (2000), jealousy is conceptualized as an adaptive reaction to a threatened fidelity, which links attachment styles to relationship satisfaction. Its inevitability lies in the fact that jealousy is often a misunderstood adaptive reaction that in turn causes unfavorable relationship outcomes. Researchers have indicated that the lack of gender differences in jealousy is based on studies that only assess general degrees of jealousy, but ignore specific circumstances, such as gender relationships, and sexual orientation, that arouse jealousy itself and its potential to disrupt relationships (Widerman & Allgeier, 1993). In this study I seek to deeply analyze and understand jealousy, therefore I will analyze these perceived weaknesses by evaluating all circumstances that may elicit jealousy across relationships. As part of these specific circumstances, I will explore the role of gender differences and sexual orientation as factors that influence jealousy. Previous researchers have concluded jealousy is well-defined by sexual dimorphism through the use of the force-choice method of research (Desteno, Bartlett, Braverman, & Salovey, 2002). However, questions remain regarding jealousy and how it is developed in gender differences, which can be found in cultural or social influences. This study will make use of a between-subjects design, with sexual orientation as the independent variable and level of jealousy, relationship satisfaction, and jealousy as the dependent variables. The between-subjects design will be used in this proposed study as it aims to determine differences across the different levels of a subject variable, which in this case, would fall under sexual orientation. The problem of jealousy in monogamous relationships can be resolved by identifying the underlying factors and objective conditions that allow jealousy to exist within a committed relationship. It appears that jealousy becomes

problematic once it becomes classified as unhealthy jealousy, which may disrupt normal daily life not just the person experiencing it but the person to which the emotion is channeled upon (Bevan, 2004).

Significance of the Study

One of the most important contributions of this particular study to the research gap is its ability to describe the phenomenon of jealousy and its effects exclusively to monogamous relationships. The research also focuses specifically on bisexual, lesbian, and gay male relationships and how specific gender identities reduce or increase the frequency of jealousy. In addition, it examines the separate effects of unhealthy and healthy jealousy types. As gathered within the literature review, most researchers have not focused on specific circumstances such as relationships, gender, and sexual orientation, which all are determinants of jealousy. This study offers an improvement to these studies and seeks to bring forth the contributions of these specific factors to jealousy. It is hoped that through a thorough understanding of jealousy or at least significant knowledge of the same it would be easier to handle different types of relationship problems and dynamics. To psychologists and counselors, it provides another dimension with which to examine different marital problems or problems arising from committed relationships. Overall, the study contributes to a better understanding of one of the intrinsic feelings that determines our behavior and approach toward others.

Research Questions and Hypotheses

In this study I seek to explore the connection between sexual orientation, gender, level of the relationship satisfaction, and jealousy levels in the average relationship. I will conduct a quantitative comparative factorial research design using multivariate analysis of variance (MANOVA). The independent variables are the sexual orientation and gender while the

dependent variables are the level of relationship and jealousy in an average monogamous relationship.

The following research questions guide this study:

Research Question 1: To explore the interconnection between gender, sexual orientation, level of relationship satisfaction, and level of jealousy; and

Research Question 2: To identify the effects of sexual orientation and gender on the level of relationship satisfaction and level of jealousy in a monogamous relationship.

Furthermore, the following are the hypotheses that will be tested to address the research questions:

H₀₁: There are no significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H₁₁: There are significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H₀₂: There are no significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H₁₂: There are significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H₀₃: There are no significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

H₁₃: There are significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

H₀₄: There are no significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

H₁₄: There are significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

H₀₅: There is no significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship.

H₁₅: There is a significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship

The instruments applicable in this study are interviews, questionnaires, and tests as these are the most viable for ensuring the validity of the exercise. The Investment Model Scale is a dependable and suitable measure of satisfaction and commitment. The main reason for such validity is that the scale is significantly linked to dyadic adjustment, trust, and love. More importantly, the scale is weakly correlated to personal characteristics, which suggest that it is only a reflection of the respondents' relationship and not their respective personalities (Gomillion, 2009).

The research will make use of the attachment theory in order to explain the dynamics of long-term or monogamous relationships and how jealousy results from childhood experiences.

Definition of Terms

Attachment theory: A psychological theory that attempts to describe the mechanisms of long-term relationships established during childhood (Wood & Eagly, 2002).

Attachment disorder: Also known as reactive attachment disorder this refers to a higher degree of unhealthy jealousy that involves a variety of clinical disorders (Wood & Eagly, 2002).

Ethology: The scientific study of animal behavior. It is utilized by attachment theory to explain the feeling of jealousy as an adaptive response to increase the chances of infant survival (Wiederman & Allegeier, 1993).

Gender identity: An individual's sense of being either a man or a woman or the genders in between (Case, 1995).

Jealousy: An emotion that is largely associated with the insecurity, inferiority, inadequacy, and self-pity (Pistole, Roberts, & Mosko, 2010). Jealousy can be classified into two types: (a) healthy jealousy and (b) unhealthy jealousy (Bevan, 2004).

Monogamous relationships: A relationship wherein an individual commits to one partner at a time (Wojtyla & Willetts, 1993).

Polygamous relationships: The opposite of a monogamous relationship. It is used to describe relationships wherein an individual (usually the male) is committed to multiple affairs.

Polyamory: The state of a person who is capable of loving multiple individuals at the same time and at the same degree. Polyamory is different from polygamy in the sense that polyamory requires multiple relationships to consist of romantic feelings whereas polygamy does not (White, 2012).

Secure base: The parental archetype/figure to which an infant returns to when it learns how to walk. It also refers to the individual with whom the infant has shared an intimate connection. This is used in attachment theory to describe referential individual to which a partner feels jealousy (Bretherton, 1992).

Secure base distortion: This term is connected to *attachment disorder* as a clinical concept used to describe invalidated diagnoses and is mostly related to caregiver traumatization.

Sexual orientation: A recurring pattern of an individual's attraction to a specific sex or gender (Case, 1995).

Hendrick's Relationship Assessment Scale (RAS)

Hendrick's (1988) Relationship Assessment Scale (RAS) is a seven-point measurement

scheme that attempts to quantify relationship satisfaction through examining aspects of monogamous relations such as disclosure, sexual attraction, commitment, and investment in the relationship.

The scale is noted for its high reliability and is used by various clinical psychologists to determine the factors that make a relationship last. In relation to the this particular research, the RAS provides a new dimension in analyzing how jealousy can be avoided in relationships through practice full self-disclosure, investing time and emotion, and practicing appropriate sexual attitudes (Hendrick & Hendrick, 1995).

Assumptions

One of the primary assumptions of this research is the applicability of attachment theory in understanding and explaining jealousy as an adaptive response to relationship threats. This assumption largely depends on the evolutionary tenet of attachment theory, which maintains that the feeling of jealousy is to secure the chances of survival of infants when their parental archetype is not visible. Specifically, the detailed assumptions for this particular research are that in order for a human being to develop normally in terms of emotional and social interaction, one must have at least a single parental archetype or an individual to establish some type of a connection with during the life span process.

This assumption is integral in proving the validity of attachment theory as the connection between jealousy and upbringing would not be established without the presumption that normal development requires a parental figure. It is further assumed that the participants have experienced normal social and emotional development. In order for normal social and emotional development to occur, the participant is assumed to have had a connection with a parental figure during infancy.

Limitations

The study is limited within the framework of jealousy among monogamous relationships. While it encompasses lesbian and gay male relationships, heterosexual and bisexual relationships altogether, it is assumed that the participants to the study are monogamous. This is essential to prove the point of the research as polygamous relationships would have a different dynamic in terms of key triggers to jealousy despite the fact that they are exclusively sex differentiated.

One of the potential weaknesses of this study is its inability to explain or to apply attachment theory to polyamorous or polygamous relationships. Monogamous relationships are limited to one secure base only whereas polygamous affairs can provide a number of reference points, which thereby decreases the likelihood for jealousy to occur. While it applies for all monogamous relationships and takes into account the existence of lesbian and gay male relationships and bisexual relationships, it may lack focus in discussing heterosexual monogamous relationships. Another area that the research can be limited and can take on to further study is in the aspect of gender identity in terms of understanding the dynamics of jealousy in the relationship. Furthermore, being a quasiexperimental study this research is limited in fully randomizing the participants into groups as the researcher do not have the full capability in dictating as to what should be sexual orientation and gender of the selected participants. This limitation is a threat to internal validity in a way that the true randomness in categorizing is not achieved. More so, the convenience sampling selected for the study affects the external validity of the study in which the generalization of the insights gained from this study is limited to the group of participants selected for the study.

Delimitations

The study will only cover the effects of sexual orientation and gender on the levels of jealousy and relationship satisfaction in a monogamous relationships. As such, discussion regarding the effects of jealousy and relationship satisfaction to polygamous and/or polyamorous relationships will be limited. In addition, the results will not generalize over all gender identity brackets, as I will employ a convenience sampling technique as a data collection method. In addition, since the researcher is delimited in randomizing the participants, the choice of apply quasi-experimental approach is also considered as one of the delimitations.

The research will not be concerned with causes of relationship conflicts other than jealousy. Aside from this, the survey results lack the capacity to generalize the conditions for all kinds of relationships. The specific causes of conflict among monogamous relationships even if it concerns jealousy shall not be discussed in the paper without the consent of the participant, as the information is both sensitive and personal information. Lastly, the issues of jealousy and relationship satisfaction and its effect to monogamous relationships can only be seen from the perspective of clinical psychology and therefore, perspectives of other fields of study shall be limited.

Chapter 2: Literature Review

Jealousy is considered a complex and painful emotion that many individuals experience beginning in early childhood throughout adulthood, creating positive as well as pathological responses to life events. Researchers have attempted to understand what stimulates jealousy in people or what motivates complex emotions of jealousy. Jealousy is directly related to envy, because it is easy for an individual to envy the positive experiences of another individual. Jealousy can also develop out of a fear resulting in some type of significant loss of something that is deeply valued by the individual, or it may derive itself from an individual's poor connection to a partner or relationship creating a lack of security (Anderson, 1987). Jealousy is labeled as either a positive or a negative experience because both the perpetrator and the recipient of jealousy can experience negative consequences, which often includes anger and aggression in a committed or partnered relationship. According to Buss, Larsen, Westen, and Senmelroth (1992) jealousy is thought to be universal with little attention given to its unconscious roots, but there is a definite link to jealousy and relationship satisfaction. However, emotions, social reactions, and biological responses can occur simultaneously resulting in the phenomenon known as jealousy. These responses create emotions that can seriously affect the quality of a relationship leading to physical or emotional distress and anxiety of the individual experiencing it. Evolutionary psychologists have distinguished between two types of jealousy: emotional and sexual. Sexual jealousy is evoked by a perceived threat of a partner's infidelity, whereas emotional jealousy tends to stem from a perceived threat of a partner's emotional infidelity. Researchers have identified that an individual's sexual orientation will affect how the individual reacts in a situation that may provoke jealousy (Ambwani & Strauss, 2007). Conflict will definitely arise between genders due to the different types of mating strategies between each

gender. One difference is in how each sex experiences jealousy in response to an individual's age, culture, gender, ethnicity, and personality within a committed relationship. Culture does play a degree in how and to what extent jealousy is manifested (Neto, 2007). For example, when the threat is thought to be great, the potential for jealousy to be experienced is significantly raised. Women tend to be more jealous than men because they are more in touch with how they feel and tend to be more expressive of honest emotions. However, it appears the triggers that elicit jealousy for both men and women are the same as both genders do become jealous at the thought of losing or risking someone or something of value to them (Barrett, Frederick, Haselton, & Kurzban, 2006). Sex differences in jealousy can also be rooted in social and economic structures and the associated internalization of and adherence to gender roles (Eagly & Wood, 1999). In this case, the independent variable will be the perceived and actual infidelity resulting in jealousy, while jealousy itself will be the dependent variable. This literature review includes writings about heterosexual, bisexual, lesbian, and gay male relationships and how each population experiences jealousy based on their gender and sexual orientation. The attachment theory will be used as a framework for this discussion.

Attachment Theory within Relationships

Attachment theory can be described as a wide-reaching theory that encompasses psychology, evolutionary science as well as ethological theory. The theory was pioneered by John Bowlby after WWII left millions of homeless and orphaned children. Bowlby observed the difficulties these children were experiencing and in the process was able to formulate a working theory of attachment. The attachment of infants or children to the parental archetype depends on the responsiveness and sensitivity of the parental character in meeting the demands of the infant or child (Wood & Eagly, 2002). The process of attachment, according to Bowlby, begins when

the infant learns how to crawl or walk and in the course of learning this skill, infants necessarily associate a parental figure to which they can return to once they reached a certain distance through crawling or walking. This association becomes the foundation of the child's capacity to explore and thereby acquire more knowledge about the world he or she lives in. As the child develops, a deeper connection to the parental figure continues. This development entails the establishment of an internal working model that guides the child in inducing or deducing the value system it has learned, is learning, and will learn (Eagly & Wood, 1999).

Attachment theory assumes that for a human being to develop normally, he or she must establish a connection with at least one parental character. This connection determines the emotional and social development of the human psyche and essentially shapes how a person behaves in society. During this period of development, the child acquires sex-differentiated customs and norms from daily practice and with it are implied values carried over until adulthood. These implied values in turn are identified as key elements in the triggering of jealousy and the feeling of insecurity (Bevan, 2004).

According to the evolutionary tenet of attachment theory, the feeling of insecurity we feel when our relationship with another person is threatened is an adaptive response since it increases the chances of the child to survive. This adaptive response is carried over to adulthood in the form of jealousy. Adults who experience jealousy can be compared to infants whose attachment to their parental figure is threatened. Adults who are committed to a monogamous relationship perceive their relationship partners as their significant other or a reference point if compared to the state of insecurity they felt when they were infants (Eagly & Wood, 1999). The degree of jealousy is further determined by the level of attachment an individual has invested on the partner or reference point meaning that the higher the attachment, the unhealthier the type of

jealousy can potentially become. Unhealthy jealousy is commonly associated with self-pity, lying, threats, and feelings of inferiority, insecurity, and inadequacy. Healthy jealousy on the other hand pertains to the response of the jealous individual that can be characterized as efforts to guard territory. Healthy jealousy is also found out to increase the sincerity between the partners and strengthens the commitment between each other (Wood & Eagly, 2002).

Jealousy and attachment are two factors triggered by perceptual cues that help to identify how attachment itself functions within a relationship dynamic, which links attachment styles to relationship satisfaction (Sharpsteen & Kirkpatrick, 1997). Research indicates relationship uncertainty exists after jealous expressions are displayed in partnered relationships (Bevan, 2004). The attachment theory by John Bowlby posits unique forms of attachments that are formed early in the life by an individual and are based on the relationship that the person had with their primary caregiver or caregivers. The experiences a person has with their primary caregiver may act as a reference point for the individual as an adult when developing new relationships to include romantic ones (Levy & Kelly, 2010). Attachment styles are mainly attributed to experiences within a close relationship of an adult person.

Levy and Kelly (2010) showed attachment played a key role in the evolution of emotional infidelity and sexual infidelity of an individual. Using older adults and college students as the respondents, the authors found male students are more likely to be associated with sexual infidelity, while females are more likely to be distressed with emotional infidelity. It should be noted that the Levy and Kelly study was of qualitative and quantitative in nature and the attachment theory used for this research is derived from previously held literatures. In this study they measured the college students' infidelity levels, and the results were associated with how attachment theory might affect the levels of jealousy between men and women.

Over time, an individual may experience feelings of insecurity, anxiousness, avoidance or fearfulness, which will have lasting and enduring effects as the individual proceeds through the lifespan process (Levy & Kelly, 2010). As a result, this will define the type and nature of attachment the individual will experience in an adult romantic relationship. Research has also associated stalking behavior, rape, and partner abuse, to thoughts of jealousy exhibited within partnered relationships. The differences in the levels of jealousy between the genders of male and female are a function of particular attachment styles (Levy & Kelly, 2010). However, the theory acknowledges the difference owes its origins to biological, social, and evolutionary explanations and evaluations of how men and women are different.

According to Weiderman and Allgeier (1993), there is a gap existing in the literature regarding the actual factors that could change an individual's attachment pattern. There is inadequate information explaining the effects of gender differences on jealousy. The main reason for this inadequacy is the fact that most related studies have failed to look deeper into specific aspects of jealousy and underlying factors choosing to only focus on jealousy as a general feeling. In doing this, specific circumstances arousing jealousy and its potential destructiveness in relationships are ignored. This showed how attachment theory elicits infidelity and jealousy differences between men and women. The authors used a quantitative method among college students in a randomized control trial. Results of this study allege that college men elicit greater levels of infidelity, whereas women are more inclined towards jealousy. These two reactions, however, are differentiated by their attachment patterns during the early stages of development. This evolutionary perspective of attachment patterns is shown to affect the emotions of individuals at later stages of life (Wiederman & Allgeier, 1993).

The use of the attachment theory in understanding intimate relationships between adults has been acknowledged as helpful in understanding and predicting expected behaviors to include jealousy. In addition, the overall jealousy levels reported between adult relationships to include the emotional versus sexual responses have shown an impact with the attachment theory (Edlund & Sagarin, 2009). One of the most important things adults need to establish and maintain in their lives is a secure emotional bond or attachment with someone else who is close to them. The ability to sustain the relationship is dependent on a framework built from a secure attachment as a child. Intimate relationships between adults are viewed as attachment bonds and each relationship may have different characteristics depending on the attachment that was witnessed in childhood. As a result, people seek attachments in adulthood that are similar to those they may have had as children (Edlund & Sagarin, 2009). Therefore, an individual's capacity to trust and his or her level of concern with bonding are two of the most common conceptualizations of the attachment theory.

The type of attachment an individual had in childhood will reflect in the individual's adulthood. For example, instances of infidelity will either confirm an individual's suspicion or completely surprise or shatter the individual's initial perception leading to attachment injury. A secure attachment in childhood is characterized by a child being able to trust and depend on the adults in one's life, while having a strong perception of self. In adulthood, these individuals have relationships that are based in trust (Sagarin, 2005) Children who are avoidant seldom protest separation and reunion with caregivers. These children deactivate their feelings or attachments when they perceive threats because they were discouraged from displaying them as children. As adults, they will be affected less by emotional disappointment and therefore will seldom display jealousy. Children with ambivalent attachment cannot be calmed down by the return of a

caregiver since the relationship is unpredictable and inconsistent. As an adult, ambivalent attachment creates a feeling of fear or anxiety that one's partner is not able to reciprocate the necessary feelings, which often leads to breakups within a relationship leaving the individual feeling cold, distant and quite distraught. These types of individuals usually display more jealousy as adults and have feelings that are excessive filled with anxiety and low self-esteem (Mikulincer & Nachshon, 1991).

Attachment and Evolutions

Differences in reactions exist based different evolutionary specifics and varying mating strategies of each gender as well as different experiences in childhood. The differences in childhood attachments are tied to evolution, as parents will raise their children with attachment bonds that are specific to the beliefs of their generational era. However, universal, sexual infidelity or the thought of it often indicates betrayal, while emotional infidelity gestures denial or withdrawal where a partner is unable to commit as expected and participate wholeheartedly in strengthening the relationship (Shackelford, Goetz, Guta, & Schmitt, 2006). Additionally, the term *swinging* is also related to jealousy, as this often constitutes to the consensual mutual involvement of an extradyadic relationship. Through the use of qualitative methodology, DeVisser and McDonald (2007) pointed out the level of jealousy in swinging couples have been an interesting area for social research because it is an acceptable and common response to jealousy, especially in an imagined or real infidelity situation. In this study, the authors found swinging couples associated jealousy with an increase in arousal and sexual activities, as jealousy is always associated with either sexual or emotional infidelity cases or intimate relationships (DeVisser & McDonald, 2007). Underlying concepts and emotions presented by sexual or emotional infidelity are important in understanding the gender differences that exist

between male and female individuals as they pertain to jealous behaviors. One of the effects that gender differences have on jealousy is in differentiating the issues that trigger higher levels of jealousy in men and women (Vandello, Cohen, & Ransom, 2008). The hypothesis that has been put forward by evolutionary psychologists had been supported greatly by many research practices that followed its conception. However, there has been some criticism from others especially in challenging its roots as it pertained to its conception and pragmatic foundation. Humans display jealous responses that are mechanisms characterized by evolution and are considered sexually dimorphic. Every person who has ever been in a relationship with another individual probably has firsthand knowledge of how threats to the emotional state of partners affect the relationship (Espejo, 2007). This is to say that emotional distress in a relationship may be caused by one or both parties in the relationship perceiving some form of threat within the relationship leading to the belief that this perception precedes jealousy. The suspicion that a partner may have or may be developing a romantic interest in someone else instigates jealous feelings in both male and female individuals (Brown, Palameta, & Moore, 2003).

Heterosexual Individuals in Relationships

Jealousy is characterized by anger, insecurity, sadness, anxiety or hurt feelings that are often expressed physically. The negative feelings that develop in an individual are often determined by the nature of the partner's past, imminent infidelity, or suspected infidelity (Russell & Harton, 2005). Evolutionary theorists have concluded that jealousy is a feeling set apart for human beings over the course of evolution because those who perceived such threats and managed to prevent them before they happened ended up with higher success rates in reproduction (Miller & Manner, 2009). From an evolutionary perspective, we can deduce that the male and female response to jealousy have evolved overtime to help them better deal with the

predicaments, as well as the reproductive challenges they encounter. These two responses can be categorized into partner acts of infidelity. For example, the first category is where one's partner engages in sexual activities with others and the second category is emotional infidelity, where one's partner is involved with falling in love with others. Specifically, men will tend to be more wary of sexual infidelity, while women will tend to be more affected by emotional infidelity. However, it is important to note these variations are relative because they are not completely non-existent in the other partners, but rather of lower levels (Green & Sabini, 2006). This is one of the attempts made to try to explain the differences that exist in jealousy between both males and females. Other theorists have suggested there could be more explanations, which may be cultural or social in nature.

The social aspect is highlighted by Rudman and Glick (2008) who observe that the evolutionary approach is of the view that paternity uncertainty translated to evolved tendencies across men who seek to exercise greater control over sexual relations and tend to experience overwhelming sexual jealousy. On the other hand, women have evolved the tendency to experience jealousy only when their male partners seem to invest resources elsewhere (Rudman & Glick, 2008).

The cultural view of jealousy underlines that in all cultures jealousy is roused by perceived violations of marriage rules, and by actual happening in the social world. Therefore, on this basis, jealousy is determined by the cultural view of how important relationships are both within and beyond a marriage (Stets & Turner, 2007).

Irrespective of the cultural or social view, the bottom line is that jealousy in both men and women is different and it is manifested in different ways (Sabini & Green, 2004). In addition, it is triggered by different expressed at different levels established by intensity of a relationship and

contact among individuals and is dependent on the situation or the context, and thus, making individual differences a factor for having different responses to jealousy and infidelity (Miller & Manner, 2009).

The basis of evolution and its differential effects on males and females is developed around the framework that such evolutionary processes had different effects and took different paths for both men and women. The pressures that individuals face as they evolve along with environmental factors often results in differences in mating mannerisms for both men and women (Barrett, Frederick, Haselton, & Kurzban, 2006). Differences in psychological propensities and preferences in males and females are a testimony to the different effects of pressures that they may face (Lishner, Nguyen, Stocks, & Zilmer, 2008). One of the most common of these differences is that women are often more attracted to signs of long-term provision and dominance in the social arena, while men appear to be more attracted to women who have preferable physical attributes and the capability of bearing children. From this perspective, it is evident that the issues surrounding the effects of gender on levels of jealousy stem from gender differences that have been cultivated in cultures through evolutionary practices and the reinforcement of some of these practices are witnessed in decision making models that both genders employ in a partnered relationship or mating practices (Harris, 2003). According to Miller and Manner (2009) who discussed the reaction to gender differences in emotional versus sexual infidelity have considered jealousy as a predisposing factor. For example, a man who had been involved in an intimate sexual relationship with a woman can have a greater level of distress when a partner engages in sexual infidelity. In comparison, men who have not been involved in any sexual intimate relationships may elicit a different response to a partner's sexual infidelity.

Pressures that have resulted from evolution and childhood attachment are not only present in the differences of attraction to the opposite sex, but also in the tactics that the sexes may use to employ or preserve the relationship to ensure that they get the end results that are closest to what initially attracted the person to them in the first place (Desteno, Barlett, Braverman, & Salovey, 2002). Both men and women have developed sensitivity to different cues in any relationship that would warn them of a threat or impending threats. Often these cues initially trigger jealousy in both men and women in partnered relationships. Following this is the basis of the idea that gender differences within an evolutionary framework results in men and women having different levels of jealousy that are supported. Men are thought to be more passionate about the certainty that their paternity which can be determined without a doubt (McDonald, 2010). Most species that reproduce through internal fertilization are often faced with the reproductive dilemma that the males have developed tactics to ensure that the offspring produced in the relationship are undoubtedly theirs. However, human beings are relatively monogamous in nature bearing the significance that males invest more time and resources towards their selected mate. As such, unfaithfulness for a male is thought to be a costly thing causing a male to safeguard himself against unfaithfulness possible through the development of his abilities to spot potential threats within an existing relationship and attempts to prevent the threat from occurring (Miller & Manner, 2009).

From these points, it can be considered that the individual responses to jealousy vary from one person to another. Although most people may ideally share their general concerns regarding the protection of their long-term partner from the possibilities of romantic rivals, there is still a possibility among these individuals that such incidents may occur. In addition, individuals may also worry and think about potential infidelity issues, experiences of heightened

emotional reactions to potential infidelities, as well as display strong behaviors constituting the protection of an existing partner (Miller & Manner, 2009).

According to Edlund and Sagarin (2009), it is particularly difficult when a male realizes that his energy and resources are going towards raising an offspring who is not in possession of his biological genes. It follows that men who have developed a higher sensitivity to their mates, believe that straying could be further successful in transferring their genes than those who do not mind if their mates decided to pay sexual attention to another male. On the other hand, women do not have to deal with this type of uncertainty or emotional pressures as they definitely have a 100% sure way of knowing whether the offspring they produce is theirs and so this does not present a problem, issue, or concerns in a partnered relationship. Therefore, women will have relatively lower levels of jealousy if their mate were to have a sexual interest in other partners outside a committed relationship (Edlund & Sagarin, 2009). The consequence of a woman not being sure of her offspring's genes is that she has to raise the child regardless of who the partner is who helped create the child. Therefore, a female is much more passionate about having access to provisions that ensure their offspring are raised comfortably. Therefore, it is more likely that a female would be more successful through the lifespan process if she were certain that her male companion was emotionally invested in her and her offspring. This essentially means that the male would provide for both his female partner and her offspring until the offspring reached adulthood. For these reasons, support and protection are deemed to have relatively more worth to a woman than any other aspect within a partnered relationship (Edlund & Sagarin, 2009). As long as a male is willing to share and provide resources with the opposite sex, there is likelihood that the strain of sexual infidelity in the relationships would be properly addressed. In addition, women who showed vigilance in identifying signs of their mates potential straying showed

strong abilities in foreseeing a potential problem and displayed the ability to prevent the incident from occurring are in a better and more advantageous position compared to those women who were unaffected by their partner's acts of infidelity (Wade & Walsh, 2008). However, because of male partner straying, women showed higher levels of jealousy than men did if their mates were found to be emotionally unfaithful to them.

These two scenarios present a context for the logic of the evolutionary theory of jealousy and the gender differences that exist within its context. Any form of infidelity, be it sexual or emotional are often believed to occur simultaneously. However, males are thought to be more upset by their partner's sexual infidelity, while women are thought to be more affected by their partner's emotional infidelity (Murphy, Vallacher, Shackelford, Bjorklund, & Yunger, 2006) The difference in the levels of jealousy is often supported by the actions or the types of infidelities evoked within the individual. For example, statistics revealed that the response to spousal abuse, homicide, and morbid jealousy are rated much higher for those men who suspect or were sure of a partner's sexual infidelities than for those men who had no thoughts or suspicion of a partner's infidelity (Boyle, Whitted, & Coulter-Kern, 2010). In addition, women showed a stronger interest in their partner's emotional investments and used the criteria of emotional investment to assess their potential partners. However, women who have made the decision to engage in sexual activities without any emotional investment on the part of their partners were thought to be relatively more distressed and anxious.

Despite the fact that there are plenty of research areas that support the evolutionary basis of gender effects on the levels of jealousy, it is important to note that there could be other factors in reactions people exhibit in their jealous tendencies (Espejo, 2007). It is a statistical fact that men are more prone to committing violent acts in response to sexual infidelity than women.

However, these reactions may be the result of biological dispositions according to meta-analytical reviews of research studies conducted by Espejo (2007) which showed individuals who are morbidly jealous or those who have had homicidal tendencies as a result of partnered jealousy may be representative of extreme or mental cases. Conclusions and observations that have been made from extreme cases in a population may not be the best context in which to base predictions and conclusions about species characteristics. However, these are not enough to dismiss the entire idea of evolutionary effects on the levels of jealousy between genders, as there have been studies that have been designed specifically for the purpose of coming up with conclusions about the different levels of jealousy arising out of different life situations (Sagarin, Becker, Guadagno, Nicastle, & Millevoi, 2003)

Some of the studies yielded physiological evidence that support the evolutionary theory and support differences between genders. Men and women are physiologically different, but pinpointing the exact difference that makes men or women more susceptible to higher levels of jealousy in certain situations is vital to understanding these differences (Hall & Fincham, 2006). Men exhibit higher instances and levels of electro dermal activities (EDA) and higher pulse rates as well when they imagine sexual infidelity. The same type of imagination had the opposite effect in women. It is also important to note that these differences can occur across cultures and in many different scenarios. The most common variables and the most influential ones are male and female differences in evolutionary processes and the different pressures each face in choosing mates will lead to different results. In addition, in the context of attachment, men are often closer to the male child, and women are more often attached to the female child. Much of this relationship is hedged on familiarity and understanding due to similar physical and emotional cues and is often characterized by such factors as confinement (Hayes, 1997). This

leads to the belief that attachment styles are developed in early childhood and are a disposition to jealousy, which is acquired by the child imitating their respective parents' behavior (Espejo, 2007).

According to Hall and Fincham (2006), even in different scenarios and in various cultural or social dispositions, men are more often jealous of sexual infidelity, while women continue to be more jealous of emotional infidelity. Another approach to levels of jealousy is identifying what type of infidelity males and females in a partnered relationship are willing to forgive. It appears that more women are likely to forgive sexual infidelities, while men are more likely to forgive emotional infidelities. It should also be taken into account that there are other factors that have changed the viewpoint of men and women over the last few decades, especially owing to matters such as technology, globalization, and exposure to different cultures. Percentage of men becoming more upset over emotional infidelities and women becoming more upset over sexual infidelities is becoming increasingly higher (Hall & Fincham, 2006).

Another interpretation of the evolutionary theory shows similar results in that people are likely to be jealous of a situation that they believe carries more than one type of infidelity. For example, women are relatively more confident that emotional infidelity will happen alongside sexual infidelity (Hall & Fincham, 2006). Therefore, if a man loves or is emotionally invested in another woman, chances are that he is engaging in a sexual relationship with that woman. It is more probable that a man would have a sexual relationship with another woman without being in love with her (Harris, 2000). In addition, men believe that a woman can have an emotional investment in someone without having a sexual relationship with that person, but if she is having a sexual encounter with that person; it is believed that she is in love with that person. Therefore, gender is a definite variable that does affect jealousy (Buss, 2000).

According to Neumann (2008), the principle that pertains to sexual and natural selections have presented researchers with both useful and effective established models, which speak to human behavior in the social context as well as the cognition and cognitive processes. From an evolutionary base, the things individuals gain from having a partner in one's life is important in determining the type of infidelities one may engage in and the different reactions both men and women are more likely to have within a partnered relationship. Some of the things people hope to gain when entering into a relationship are companionship, emotional support and financial support. Some evolutionary theorists have argued that sometimes it is a wise choice to stray from a partner if one is to achieve set desired goals as stipulated by previous evolutionary practices (Neumann, 2008). From an evolutionary perspective, males are perceived to be successful based on the number of offspring they produce. In contrast, women are more attracted to strong and physically fit men passing on their strong genetics and genes to their offspring. This is based on the assumption that human beings are destined to reproduce as much as possible (Edlund & Sagarin, 2009). It is more likely that a man will have offspring if they are with as many females as possible, while women tend to have the belief that they will benefit from straying if the other man presents a better pool of genes than their current companion does.

The belief is that while jealousy sometimes has dire consequences, not having a jealous tendency means risking the chance of losing what the individual desires most in their companions. Since men are drawn to women who look fertile and healthy, while women are more attracted to men who have more resources and can provide for them adequately, jealousy will be sparked on both sides at higher levels if each partner perceives the things they like most about their companions are at risk of being taken away or belonging to someone else (Edlund & Sagarin, 2009). For women, it is harder to care for one's self and a child especially if a partner is

absent from the family dynamic and unable to share some of the responsibility. The impact of gender on romantic jealousy is vast and varied depending on the situation and the evolutionary stage of an individual.

Women view their partners as being more deserving of guilt if they engage in infidelity (Edlund & Sagarin, 2009). This is specific to the scenario of emotional infidelity because the guilt suggests that females in a relationship will place a much higher importance on emotional infidelity and will therefore become more upset at hearing of a partner being in love with someone else, which leads to strong issues of jealousy. This occurs because women are thought to be more sensitive and have a greater recognition of emotional variations such as withdrawal that warn them or inform them of indiscretions on behalf of their partners (Gangestad & Simpson, 2000). Their capacity to read from these indiscretion cues represent greater sensitivity, at least as compared to their male counterparts (Abramowitz, Deacon, & Whiteside, 2011). Indiscretions represent truancy in relationships and are often represented by partners beyond the mainstream relationship.

Hormonal Factors and Past Experiences

From a different perspective, hormones have also been researched in the explanation of gender differences and their effect on the levels of jealousy (Edlund & Sagarin, 2009). The relationship that exists between sex hormones and the responses that individuals have to infidelity of their partners shows that there are conclusive results similar to the evolutionary standpoint in that men are more distressed by sexual infidelity, while women are more distressed by emotional infidelity. Another important note is that the standard sex difference in relationships is based on jealousy and that more mates are prone to show differences in gender based decision-making based on relationships and the things that may trigger hostile reactions

such as in cases of infidelity. Essentially, there are two types of infidelity, either physical or emotional. However, it is thought that more feelings of jealousy are believed to be experienced by women and are directed towards emotional infidelity as continued studies have indicated that research has documented the use of artificial hormone use by women has shown to alter the focus of jealous feelings in women with a direct link to their emotional jealousy (Edlund & Sagarin, 2009). For example, women who are making use of hormone-based birth control pills are prone to display higher levels of jealousy in cases where their partners are sexually or physically unfaithful. Research found these levels are not higher than the levels of men, but they are relatively higher than those of other women. These research findings imply dispositions in women are evolved, behavioral, affective or psychological, and some intervening external factors like taking hormone replacement supplements, such as estradiol and other synthetic hormones, moderates these dispositions (Maner, Gailliot, Rouby, & Miller, 2007)

Women of the human species compete over paternal investments in different ways that could also alter their levels of jealousy towards different situations. For the sake of gaining competitive advantage, women try to do the best that they can so the qualities that attract men to women such as fertility are kept at an all-time high in an effort to prevent potential infidelity in their male companions. As such, women who may view their fertility cycles as being lower or slower than expected will seek help or assistance from other areas such as fertility hormones, which may also affect their levels of jealousy (Boyle, Whitted, & Coulter-Kern, 2010). In essence, emotional jealousy may result in women taking fertility hormones to regain their male companion's emotional investment in them and in the process, but more of their jealous tendencies will be directed at sexual infidelity owing to the hormonal changes.

Past experiences also affect how men perceive and react to infidelity (Edlund & Sagarin, 2009). For example, men who are involved in relationships have a tendency to become more jealous and upset if their partner is sexually unfaithful, because of the perception involving their partner's possibility to react to the same situation where emotional unfaithfulness or jealousy is present. These explanations posit that men are more reactive to jealousy when sexual infidelities are involved (Edlund & Sagarin, 2009). Unlike men, women's reactions to jealousy are more emotional than men because of their perceptions to jealousy do not constitute sexual infidelity alone, but rather a deeper bond on long-term relationship commitments. Thus, perceptions and reactions to infidelity in men appear to differ from those of women.

Reactive Jealousy

Another area of interest is the feelings that jealousy evokes and how these feelings differ between men and women. In most cases, jealousy that has come to be because of a sexual or physical infidelity arouse feelings of rage, anger, betrayal, and vengefulness, while emotional infidelity tends to spark feelings of fear and sadness (Schützwohl, 2008b). Generally, rage, anger, and vengefulness are feelings that lean more towards men, while fear and sadness lean more towards women. Exhibition of these extreme emotions often translates to anxiety in relationships. Abramowitz, Deacon, and Whiteside (2011) indicate that often it is relationship dissatisfaction that predicts the expression of anxiety and depression. Thus, when anxiety sets in it is very much an indication of a waning relationship and therefore each gender maybe prompted to act in extremity, which highlights exhibition of the highlighted emotions indicating higher levels of jealousy. This has also been used to explain the initial reactions individuals have when they find out that their partners have been unfaithful. For instance, it is more likely that if a man finds out his partner has been physically unfaithful; he will react by hitting something or by

using some other form of violence. However, if a woman finds out that her male companion is in love with someone else, she will usually resort to emotional crying. Results that have been obtained regarding gender differences and their effects on feelings and levels of jealousy were all obtained from the perspective of forced choices where people were asked what would upset them most in a hypothetical unfaithful situation. However, this method has been criticized for lacking realistic foundations of empirical results (Edlund & Sagarin, 2009). Humans are thought to be very dynamic beings who tend to seek out happiness and pleasures in places they have experienced. This makes everything that interacts with people more prone to alterations. Therefore, relationships are just one example of these types of expressions that will have an impact on the levels of jealousy in same-sex relationships. The definition of jealousy contains aspects of behavior and cognition, and the effects have been examined in analyzing the levels of jealousy in same-sex and bisexual relationships (Sender, 1997).

Bisexual and Same Sex Individuals in Comparison to Heterosexuals

Another area of research to examine is the different dispositions of women and men towards infidelity in same sex relationships. It is believed that individuals in a lesbian relationship will be more upset over sexual infidelity rather than emotional infidelity, while it is thought that gay male couples will become more upset if their partners are involved in emotional relationships with other men (Boyle, Whitted, & Coulter-Kern, 2010). The difference that may exist is gay males are thought to experience lower levels of romantic jealousy than heterosexual males based on level of masculinity. Research remains inconsistent for individuals in same sex relationships who are thought to experience lower levels of emotional and cognitive jealousy than those who are in opposite sex relationships based on the individuals identified type of gender identity. This is to say that levels of jealousy may be higher in heterosexuals than in gay

men and lesbian women based on the individuals selected gender identity (Pietrzak, Laird, Stevens, & Thompson, 2002). There have been studies carried out with the purpose of finding out the differences that exist between same-sex and heterosexual relationships. One of the results concluded that men and women who are in heterosexual and gay relationships are more likely to use manipulation in response to jealous feelings as opposed to those individuals with lesbian partners. In addition, males in gay relationships are thought to communicate at lower levels of violence in response to jealousy than men who are in heterosexual romantic relationships (Gomillion, 2009). In other words, gay males tend to express their feelings and communicate about the jealousy they are feeling more than heterosexual males though heterosexual males are more likely to act out in violent jealous rages (Edlund & Sagarin, 2009). The general overview of the results and research that has been carried out is still inconsistent, but one factor has shown to be evident which is that jealousy does affect men more than it does women (Maner, Miller, Rouby, & Gailliot, 2009) This conclusion may also owe its nature to the fact that men are more likely to make it known that they are jealous from their actions, while women may be more silent about such feelings. As a result, heterosexual and gay male relationships may appear to have higher incidences of manipulation and revenge in response to jealous behavior as opposed to lesbian relationships. However, studies have been inconclusive and further research is needed (Beevan & Samter, 2004).

If a situation that is similar to a heterosexual relationship is applied to a same sex relationship, this creates a scenario that one of the women in this type of relationship becomes masculinized; although this is not always the situation in a lesbian relationship (Yeniceri & Kökdemir, 2006) Women were found to be more affected by sexual infidelity than men, and men were more upset over emotional infidelity. The paternal issues that men have that lead to higher

levels of jealousy over sexual infidelity are partly responsible for the differences in levels of jealousy. In the situation where the evolutionary theory is tried out in a lesbian romantic relationship and one of the females is considered the male in the relationship, the findings show that there is blindness to gender when it comes to jealous behavior (Edlund, Heider, Scherer, Fare, & Sagarin, 2006). This further reinforces the aspect of gender differences affecting levels of jealousy in that the two women in the relationship are female and thus their reactions may not be similar to one another. This is due to the fact that evolutionary and childhood experiences cannot be reversed nor done away with by sexual orientations, as the choices of sexual orientation are also evolutionary based.

Another area that has been researched is the level of jealousy that a man will experience if his partner is involved with another female and not a male. The feeling that has been explored is how a man would feel if his wife were found to be bisexual. Sexual infidelity is thought to have two approaches; a female could be with another male or with another female. The sexual orientation of a woman in this case is thought to lower the level of jealousy relatively or in other cases, the jealousy is thought to be nonexistent. However, female to female sexual infidelity between two women mostly has the effect of arousing men, and thus may even be acceptable to some males if their partner engages in such activities (Rohrbaugh, 2006) However, for a female to discover that her partner is involved in same sex relations with another man, the emotional damage may be the same or it could become worse as the other male is perceived as competition for their companion's emotions. Generally, the belief is that types of infidelity have less emotional damages to men (Rohrbaugh, 2006). As much as men accept same sex betrayal, it is found to be both surprising and unexpected when it occurs. Individuals who are bisexual tend to experience different levels of jealousy determined by the sex of their partners and the situation at

hand (Denes, 2006). For example, a bisexual man will be more upset by his female partner's having a sexual relationship than his male partners having an emotional relationship while a bisexual woman will be more upset and jealous over their female partner's having a sexual relationship and their male partner's having an emotional relationship. The stimuli that elicit feelings of jealousy in individuals tend to be linked to sex and stand on their own regardless of the sexual orientations that, the person has. This means that the evolutionary effects that are in men and women, when it comes to jealousy, will be carried on to relationships of any nature. It is the difference of the nature of the relationship that will lead to different reactions and responses to jealousy being witnessed (Mint, 2010) on the socio-cultural point of view, the differences in experiences of jealousy between men and women are because of the differences that gay men, lesbian women, bisexuals, and heterosexuals have as it pertains to these areas. For instance, the belief that men believe that having offspring is the ultimate indicator of success in a relationship drives them to invest into choosing a mate, partner, or companion that is healthy, physically fit, and in possession of other enviable physical attributes that will technically belong to them as companions. For this reason, the thought of another man getting or wanting to get what belongs to them will trigger higher levels of jealousy. Men also invest in their offspring with passion because of the gender roles that evolution and other social circumstances gave them to be the heads or leaders in a family (Taormino, 2008). From a traditional perspective, women have always been the nurturers. Women bring children into this world. As a result, there is a higher emphasis placed on women to keep themselves healthy, and maintain the original attributes that originally attracted her spouse. Females do this with the aim of keeping and maintaining the emotional investment that her companion has on her and subsequently on her children.

In addition, men and women in same-sex relationships tend to experience higher levels of distress and jealousy in emotional infidelity as opposed to heterosexual men. Gay individuals experience distress when their partners engage in emotional infidelity or the potential threat of something like this happening. This contradicts what the evolutionary perspective of the levels of jealousy that men display as originally indicated, but supports that sexual orientation does affect the level of jealousy that the individual will display. The mating psychology of lesbian and gay male relationships and bisexuals is significantly different from that of heterosexual couples and research again shows that gay men tend to have higher levels of jealousy in cases of emotional infidelity just as lesbian couples also exhibit higher levels of jealousy in cases where there has been sexual infidelity (Edlund, 2011). This is relative to the levels of their heterosexual counterparts. Further analysis has shown that the co-occurrence of sexual and emotional infidelity leads the individual holding the belief to experience higher levels of jealousy over the infidelity or perceived infidelity.

Gay men and lesbian women have differing responses in terms of infidelity choices. The perceptions whether or not these two groups lack differing choices in terms of infidelity issues show an existing gap on the certain level of tolerance towards jealousy, which questions their ability to react over such events. This means that gay men and lesbian women may neither see nor perceive that risks are involved when investing in same sex relationships. This psychological mechanism hinders some individuals from putting much investment in children or adults who are not genetically related to them (DeSteno, 2010). However, the relationship will be at risk if their companions emotionally invest in someone else or fall in love with someone else. Lesbian women tend to have the belief that sexual infidelity also implies that their partner is engaging in emotional infidelity as well, while gay men do not believe in the existence of any correlation

between the types of infidelity. However, it is believed that there is a known correlation between emotional infidelity and sexual infidelity in that emotional infidelity ultimately leads to sexual infidelity (Schützwohl, 2008a). This should also be properly identified in the gender differences between lesbian women and gay men.

Based on the research that had been done about evolutionary theory, its interpretations and the study of jealousy in same sex relationships, the choice of the infidelity type that will elicit higher levels of displayed jealousy is based on the sex of one's partner and not that of the individual. Gender does affect levels of jealousy, but it is the gender of the partner that is considered in determining what type of infidelity would be more distressing than another. People are more sensitive to what the gender of their mate's mean in a situation of infidelity and they judge the situation or potential situation using this criterion (Denes, 2006).

Literature and research on the effects of gender and sex orientation on the levels of jealousy has tried to explain gender differences and how these differences affect jealousy. Individuals should be jealous of potential or actual infidelity and especially in the case of a male's emotional infidelity and a woman's sexual or physical infidelity. Something worth noting is that the differences in gay men and lesbian relationships were only evident in couples that were in a committed relationship (Levy & Kelly, 2010). When their relationship was not a committed one, there was no difference in the type of infidelity that was considered worse than another was. Jealousy in same sex relationships is activated only when there is the potential of a long-term commitment between mates. However, for heterosexual relationships, jealousy in both genders is triggered as soon as the two become companions of some kind.

Studies about Relationships, Gender, Jealousy, Infidelity, and Neuroticism

Yeniceri and Kökdemir (2006) utilized an Infidelity Questionnaire (also known as INFQ)

to explore the perceptions and explanations between sexual and emotional infidelity among university students. Accordingly, the INFQ was patterned to a standardized questionnaire for assessing infidelity and its relationship with jealousy. In this study, the variables used were identified under six categories namely seduction, social background, sensation seeking, legitimacy and normalization. Similar to the discussions in this paper, Yeniceri and Kökdemir (2006) found men are more attached to sexual infidelity, while women are more associated with emotional infidelity. Although different in terms of gender, both parties experience jealousy once infidelity is present in a relationship (Yeniceri & Kökdemir, 2006).

Wade and Walsh (2008) also conducted a quantitative study about how romantic jealousy and personal experiences differs in terms of gender. Using two studies to explore the variables, the authors used the Big-Five model of personality to evaluate their assumptions. While the first study examined the interpersonal jealousy levels and personality dimensions, using the Big-Five, interpersonal jealousy scale, and social desirability scale, the second study explored the reactions to sexual and emotional infidelity as related to the Big-Five personality dimensions. Results of Wade and Walsh's study (2008) revealed extraversion, openness, and neuroticism are the main predictors for jealousy, which in turn, varies in terms of gender. Although the first study showed personality alone is not a predictor of jealousy, the second study found that commitment to either emotional or sexual infidelity is a significant predictor for jealousy. In terms of gender, there were no exact and significant explanations reported by the authors. In this study, the author has revealed infidelity is a stronger predictor for jealousy as compared to interpersonal relationship and personality (Wade & Walsh, 2008). Similar to the study of Yeniceri and Kökdemir (2006), Wade and Walsh (2008) found a relationship between infidelity and jealousy, but they had no definite explanation as to how these two variables are associated with gender differences.

Sharpsteen and Kirkpatrick (1997) explained how attachment and jealousy are, at least, part of the threats to a relationship. While the first and second study focused on how jealousy and infidelity can be related with each other, the authors focused more on revealing how emotional, attachment, through attachment theory, affects the levels of jealousy. Reviewing previously held literatures; the authors explained that individual differences are patterned from the attachment style of a person, which, in turn, affects his/her perception of jealousy. Content analysis of literatures conducted by the authors showed cognitive, behavioral and emotional attachments are the three main determinants for romantic jealousy in a relationship. Thus, it should be noted that the differences in the attachment styles of a person affects the way they view relationships, as well as how jealousy differs from one type of relationship to another (Sharpsteen & Kirkpatrick, 1997).

The differences in the attachment styles have also been related to how neuroticism differs between men and women. The role of gender and sexuality as pertaining to sexuality directly influences the role of neuroticism (Duemmler & Kobak, 2001). In a quantitative study conducted by Elphinston and Feeney (2005), they explored how neuroticism differs between men and women, as the relationship becomes more serious. Short-term relationships elicit more incidence of jealousy, which pave way for neuroticism. College women were included in the study in which questionnaires were served to explore the perceptions of women in terms of relationship. Results found lower levels of jealousy are associated with steady relationships, while short-term relationships elicit higher jealousy levels (Elphinston & Feeney, 2005). In addition to this Precher (2002) conducted a similar qualitative study and found that low jealousy levels are associated with low neuroticism and increased self-esteem, while high neuroticism and decreased self-esteem are associated with higher jealousy levels. In other words, women in short-term

relationships have higher incidences of neuroticism as compared to women who are involved in steady, serious relationships (Elphinston & Feeney, 2005; Sprecher, 2002).

Challenges and Conclusions

Gender will determine if a significant difference does exist in how patterns of jealousy are displayed. Examining a person's reaction to expressions of jealousy will help provide critical insight into the personality of jealousy in monogamous relationships. Attachment theory will cultivate more understanding that attachment has on how individuals express levels of jealousy. Bevan (2004) indicates that identifying gender differences or similarities among gender and sexual orientations will identify patterns of healthy and unhealthy types of jealous behaviors. Researching jealousy in committed or partnered monogamous relationships will allow a more precise conceptualization of levels of jealousy in close relationships.

The challenge for many research areas, has been to determine whether the responses to infidelity and the relatively higher levels of jealousy in emotional and sexual situations in women and men respectively, is due to the tendency that women have to report and make their emotions more known than men, and the tendency of men to report instances of sexual infidelities of their partners. The hope is to strengthen this area through the incorporation of data in this study. Although the area of jealousy, monogamy and sexual orientation is yet to be independently studied, women are theorized to be affected more by jealousy than males, regardless of sexual orientation. Given how there is a restriction on the possibilities that are available for carrying out research into these areas, using hypothetical scenarios is a defensible and reasonable approach to finding out the effects of gender and sexual orientation on the levels of jealousy. Research has been both consistent and inconsistent in its finding that gender differences and sexual orientation do affect levels of jealous behavior.

Chapter 3: Research Methodology

Introduction

The purpose of this quasiexperimental quantitative study was to identify if there are significant differences between the dependent variables of level of relationship satisfaction and jealousy levels and independent variables of gender (male and female) and sexual orientation (heterosexual, homosexual, and bisexual) in monogamous committed relationships. Attachment theory bridges the research gap between the influences of parental behavior to an individual's personality development and to that individual's behavior or affective experiences (e.g., jealousy) as an adult. In this case, the current study will involve an individual's attachment style. The attachment styles of an individual will be operationalized accordingly to the independent and dependent variables selected for the study. As mentioned, the study seeks to identify differences among the relationship satisfaction and jealousy levels (dependent variables) across gender and sexual orientation (independent variables) in monogamous committed relationships.

The section on methodology seeks to outline the research objectives aims of this study, hypotheses, data collection methods, and the methods of analyses to be used. This chapter will also include the limitations and the ethical considerations of conducting the proposed study. A summary of the general methodology to be used for the proposed study will conclude the section.

Research Questions

Research questions help guide a study's methodology. For this study, the main research question is: To what extent do level of relationship satisfaction and level of jealousy differ across gender and sexual orientation in monogamous committed relationships?

Research Hypotheses

Following a detailed review of literature, some issues particularly stood out that further raise the need for investigative study. These issues led to the formulation of the following hypotheses:

H₀1: There are no significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H₁1: There are significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H₀2: There are no significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H₁2: There are significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H₀3: There are no significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

H₁3: There are significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

H₀4: There are no significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

H₁4: There are significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

H₀5: There is no significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship.

*H*₁₅: There is a significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship

Research Design

A quantitative approach is chosen as the research method for the proposed study because this would give an understanding of the population being studied through testing the differences of the variables involved in a monogamous committed relationship (Creswell, 2009). Specifically, this study will employ a quasi-experimental research design. Quasi-experimental design was chosen because the researcher has the inability to randomly assign the participants in groups, which is a key ingredient for a true experiment (Creswell, 2009). This research consists of a number of quantitative scales that will identify participants' levels of jealousy and how those levels relate with the level of relationship satisfaction. The research employs a quantitative method that uses Hendrick's (1988) Relationship Assessment Scale (RAS) to measure level of relationship satisfaction and Pfeiffer and Wong's (1989) Multidimensional Jealousy Scale (MJS) to examine the participants' level of jealousy. Both survey instruments use Likert-type scales so the data to be generated will be quantitative in nature.

Harwell (2010) outlined some of the benefits of using quantitative research. He noted that the quantitative method is reliable and provides objectivity. As such, the quantitative data generated from the survey instruments to measure the variables of the study will be used. Another advantage of using quantitative approach is that it can be used to restructure the study to receive the minimal number of variables sufficient for the study. The main reason why this approach is preferred for this study is that it focuses wholly on analyzing the impact of independent variables to the dependent variables. Specifically, this study aims to investigate how gender and sexual orientation affects the levels of relationship satisfaction and level of

jealousy in a monogamous relationship. Using quantitative data will also help in the process of testing the hypotheses outlined above. The assumption of this approach is that the participants will include representatives of the entire population of interest (couples involved in an intimate romantic relationship).

Babbie (2009) regarded the advantage of quantitative research to be the provision of data in descriptive form. This allows readers to have an overview of the user population even though there may be challenges in data interpretation. Researchers can use numbers to measure attitudes and behavior that can easily be translated into other forms that are quantifiable like graphs and pie charts. The challenge with this approach is that it requires a relatively large sample, whose response can be used to generalize on the whole population. The logistical operations to organize a large sample group may thwart the efforts of the research study. The cost of working with a larger sample group is also very high. When the research is handled with no proper approach, there are high chances of encountering errors in the statistics. This can eventually affect the accuracy levels of the findings.

Target Population and Sample Size

The target population for this study will be those individuals who are currently involved in a romantic, close monogamous and committed relationship in Pueblo, Colorado located in the United States of America. A priori power analysis was conducted in order to determine the minimum number of required sample size for this study and the results determined that the minimum number of individuals to sample is 128 participants. The computation is based on four factors to include the type of analysis to be conducted, the effect size, the power, and the level of significance of the study (Moore, McCabe, Craig, 2012). The value selected for the effect size is 0.25 that refers to a medium effect size, 80% for the power of the test, while 0.05 for the level of

significance. For the analysis, an ANOVA was selected with a maximum of two groups representing the gender of the participants. Thus, at least 64 participants should be recruited for each group in order to balance out the distribution of the 128 participants across the two groups. The computation was done through using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009).

Methods of Data Collection

To establish communication with the potential participants who are involved in a romantic, close monogamous and committed relationship, the researcher will do two approaches. The first approach is to make contact and ask for help in disseminating the survey to the Denver, Colorado organization known as LEAGUE – Lesbian, Gay, Bisexual, and Transgender. Paper-based surveys will be mailed to LEAGUE and once the surveys are complete surveys will then be mailed back to the author's P.O. Box. LEAGUE is an organization that reaches out to all lesbians, bisexual, transgender and gay male individuals in the Colorado area to offer support services or crisis intervention assistance.

The second approach is to make the link of the online survey available in social media such as in Facebook and LinkedIn. For the online survey, data will be collected through the use of Survey Monkey. There will be four sections present to gather relevant data that will be used for analysis.

First, a consent form needs to be completed by all participants upon entering the Survey Monkey link and confirming eligibility to complete the study. Eligibility means, the individual completing the survey is currently involved in a romantic, close monogamous, and committed relationship. Eligible participants who have completed the consent form will then be directed to the next section of the survey. However, for non-eligible participants an exit button will be provided and marks the end of the survey for the non-eligible individual. The second section of

the online survey includes the questionnaire utilized for this particular study. The questionnaire will include survey items to collect the demographic information of the participants.

Specifically, the participants will be asked for their age, gender, sexual orientation, and years in current relationship. The third section of the survey is the Hendrick's (1988) RAS scale, which will be used to measure level of relationship satisfaction. The RAS instrument is a seven-item scale designed to assess general relationship satisfaction of people currently in a relationship. Respondents are asked to respond to each item using a 5-point Likert-type scale ranging from *low satisfaction* (1) to *high satisfaction* (5). The fourth section of the survey is the Pfeiffer and Wong's (1997) Multidimensional Jealousy Scale (MJS) to examine the participants' level of jealousy. MJS employed a 5-point Likert-type scale ranging from *never* (1) to *always* (5) across the eight survey items.

The data collection period (for both paper-based and online survey) will span for one month or four weeks in order to provide sufficient time to reach the required number of participants of 128 individuals who meet the research eligibility criteria. Given that online survey is to be conducted, a convenience sampling technique will be used to gather participants for the study. According to Teddlie and Tashakkori (2009), convenience sampling is significant because of the accessibility of each participant on the online survey. Participants in this study will include those individuals who are involved in a romantic, close monogamous and committed relationship who fittingly want to participate in the survey and has internet access. Convenience sampling is considered as the best way to collect online data, as it is easy and will likely yield higher response rates and allow the researcher to collect data in a timely manner.

After the data collection period, the information collected through the paper-based survey and online survey will be transferred in SPSS 18.0 ® for data analysis. The information

collected from the surveys will then be coded with a unique identification number to preserve the anonymity of each participant (Cozby, 2009). The identification number will help the researcher to identify and cross check data corresponding to the participants in the study. All encoded data will be stored in a thumb drive and shall be stored in a personal filing cabinet and personal computer of the researcher only to be access by the researcher (Creswell, 2009). Participant's personal information will be kept confidential to ensure the study meets the ethical considerations mandated in any research and by the university. The data will be kept on file for a period of five years and will then be destroyed according to the American Psychological Association (APA) Standards and deleted from the thumb drive and hard drive of the researcher's personal computer.

Instrumentation

The survey questionnaire used in this study consists of three parts to include: Hendrick's (1988) Relationship Assessment Scale (RAS), Pfeiffer and Wong's (1989) Multidimensional Jealousy Scale (MJS), and the self-developed demographic questionnaire. The demographic questions will consist of items used to gather participants' age, gender, sexual orientation, and years in current relationship. The demographic questionnaire will require participants to choose from multiple-choice options to describe which best represents their characteristics. For instance, for the age item, participants will have to choose from five options which are 18 – 25 years old, 26 – 35 years old, 36 to 45 years old, 46 to 55 years old, and 56 years old and above. Meanwhile, the RAS uses a five-point Likert scale, which ranges from *low satisfaction* (1) to *high satisfaction* (5) while the MJS uses a five-point Likert scale, which ranges from *never* (1) to *always* (5). The participants will take about 5 to 10 minutes to complete the whole survey questionnaire.

Hendrick's (1988) RAS primarily measures general relationship satisfaction. The questionnaire consists of seven questions using a 5-point Likert-type scale. According to Hendrick, such questionnaire is suitable in assessing relationship satisfaction among couples involved in an intimate relationship whether married, cohabitating, engaged, or dating couples. Hendrick (1988) tested the psychometric properties of the scale and found out that the alpha coefficient for all the survey items was 0.85. This indicates that RAS can be appropriately used to measure general relationship satisfaction among couples involved in an intimate relationship.

On the other hand, Pfeiffer and Wong's (1989) MJS generally measures jealousy as a multidimensional construct. These constructs are compounding cognitive, emotional, and behavioral domains. The questionnaire consists of eight questions per construct using a 5-point Likert-type scale. The questionnaire was tested and validated for the Portuguese population. There were 1,169 participants that were involved in the study and the Cronbach's alpha results revealed the following: 0.87 for emotional jealousy; 0.92 for cognitive jealousy; and 0.90 for behavioral jealousy. Overall, the whole instrument registered a Cronbach's alpha of 0.86 for all scales. This indicates that the scale showed good psychometric characteristics and thus can be used in measuring the multidimensional construct of jealousy.

Data Analysis Technique

All statistical tests to analyze the information gathered from the participants will be conducted using SPSS version 18.0 software for Windows. Statistical analyses to be conducted are descriptive statistics and inferential statistics, such as the multivariate analysis of variance (MANOVA) and correlation analysis (George & Mallery, 2010). Descriptive statistics will be presented through frequency and percentages of demographic variables (i.e., age, gender, sexual orientation, and years in current relationship). In addition, central tendencies of dependent

variables gathered from the RAS and MJS will be presented to describe the level of relationship satisfaction and level of jealousy, respectively. The central tendencies will be measured through the mean, standard deviation, and range (maximum and minimum values).

MANOVA test will be conducted, to assess whether there are significant differences between the level of relationship satisfaction and level of jealousy across the different groups based on gender and sexual orientation. To test the hypothesis for this study, MANOVA will be used to test differences of male and female's level of relationship satisfaction and jealousy and of homosexual, bisexual, and heterosexual's level of relationship satisfaction and jealousy. By using MANOVA, Type I (alpha) error can be controlled which indicates higher probability of detecting significant differences among the participants and variables under study. Where significant difference existed, Bonferonni post-hoc comparisons will be utilized to determine which specific pair-wise comparisons were significant (Creswell, 2009).

Reliability, Validity and the Concept of Representativeness

Interreliability has been described as the level to which the findings of a research study remain consistent with the initial data provided in the sample population of the study. Similar results could be attained, if the study is conducted again (Dekkers, von Elm, Algra, Romijn, & Vandenbroucke, 2010). In such cases, the instruments used in the research study are considered as reliable since all items have a Cronbach's alpha greater than 0.70. This implies that the results could be replicated and repeated. In this quantitative study, the reliability, validity, and repeatability will be ensured through the use of validated instruments (reliability and validity information are discussed in the instrumentation section) such as Hendrick's (1988) Relationship Assessment Scale (RAS), Pfeiffer and Wong's (1989) Multidimensional Jealousy Scale (MJS).

Furthermore, to ensure that the data to be collected will not become irrelevant, all analyses shall be conducted in a timely manner (Cohen, Manion, & Morrison, 2013). The collections of data through the survey questionnaires will remain anonymous and confidential, consequently avoiding the probability of any external influences. In addition, informed consent, confidentiality, and the protection of all data gathered will be considered to ensure that participants would not be affected by biases in rating responses. Such instruments will preserve the credibility and interval validity of the research (Cohen et al., 2013). Furthermore, using random sampling technique threats to external validity are greatly reduced. On the other hand, the choice of a quasi-experimental design create threats to the internal validity of the study as the random assignment of participants into group is lacking. Because randomization is absent, some knowledge about the data can be approximated, but conclusions of causal relationships among the variables are difficult to determine due to a variety of exogenous and confounding variables that may interplay.

Ethical Considerations

Ethics represent the standards of conduct that have to be implemented in research to prevent violation of the laws (Resnik, 2011). Various reasons are given for the importance of adhering to the ethical rules and regulations in a research study. To begin with, ethics promotes the successful completion of the research project, including the key aims. This is because it prevents errors and promotes transparency in the whole process of the study. Ethical considerations will lead to prevention of false information that may be given by the participants who may intentionally fabricate data and eventually misrepresent the findings. The ethical considerations also promote the development of core values like trust, transparency, and accountability that eventually boost the nature of research work that has a collaborative

approach. This is because the research process involves working with various people from different disciplines. The other importance of ethics in research is that it helps those involved in conducting research studies to be held accountable to the members of the public. In addition, these ethical norms help the public to support the process of research and embrace the findings. Resnik (2011) observed that members of the public are more likely to accept the integrity of a process whose ethical aspects were approved. Polonsky and Waller (2010) outlined the six critical elements of ethical considerations in a research process including; anonymity and confidentiality, informed consent, participation that is voluntary in nature and how the findings or the outcomes will be communicated as well as the potentials of being harmed in the research process.

The aspect of confidentiality and anonymity is especially critical in the process, for the benefit of the participants. This research study will give assurance to all participants that the information they will provide will be highly confidential and used only for the purpose of this study. All data will be completely confidential and safeguarded according to the American Psychological Association (APA, 2012) ethical standards 9.04. This code of ethics requires psychologists to share confidential information, often referred to as the test data, upon receiving permission from the client or during their presence (APA, 2012). The challenges that are likely to be faced by the researcher in this case are the difficulty in knowing the boundaries of anonymity practice. This is because the findings of this study will be disseminated to various targeted audiences, some of whom will be from the same community with the participants. The respondents may also have diverse opinions on how they would want their identities to be concealed, especially when dealing with the bisexual issues thus presenting a dilemma or situation to the researcher. To encounter this, this researcher will develop uniform measures to

control levels of confidentiality and anonymity to all participants who participate in this research process.

Drummond (2009) noted that voluntary participation demands that people should be willing to take part in research studies and not be coerced into participation. In this study, this will involve describing to participants what the study entails, how the findings will be used and what the participants' role is in the research process. Participants will then be allowed to make a decision on whether to participate or not to participate in the process. This is especially important in a study that has a sensitive nature, due to the discussions involving sexual orientation. The concept of the Informed Consent is also essential in ethical considerations to ensure that all participants will be advised on all risks that could be encountered in the study process. This study for instance will discuss with participants the possibilities of social harm that may come because of revealing one's sexual orientation, especially for lesbians and gay individuals. Only those individuals who will give consent by agreeing to sign the designed Informed Consent will be allowed to take part in the survey process.

Limitations of the Research

This study assumes that all participants who voluntarily expressed their intention in participating in the study will give honest responses and has the appropriate eligibility for the study. The number of samples to be collected for this study may be a form of limitation and the way some of the data is to be collected which is through Survey Monkey. The data collection method, that is the online survey, can affect the type and kind of participants who will participate. Only those individuals who meet eligibility and who have access to the Internet will be allowed an invitation to participate in the actual survey.

Summary

This proposed quantitative study has the objective in exploring the interconnection between gender, sexual orientation, level of relationship satisfaction, and level of jealousy and to identify the effects of sexual orientation and gender on the level of relationship satisfaction and level of jealousy in a monogamous relationship. The independent variable is the gender (male and female) while the dependent variables are the level of relationship satisfaction and level of jealousy. In addition, the covariate variable is the sexual orientation that can be either homosexual or heterosexual. There are three instruments to be used to gather information to include: Hendrick's (1988) RAS, Pfeiffer and Wong's (1989) MJS, and a demographic questionnaire. Descriptive statistics and inferential statistics, specifically MANCOVA and correlation analysis will be conducted to analyze the data. This chapter also included the discussion on data collection procedures, limitations, and ethical issues of the study. Chapter 4 will present the findings of the study while Chapter 5 will present the discussion of the findings and recommendations.

Chapter 4: Results

Introduction

The purpose of this quasi-experimental quantitative study was to identify if there are significant differences between the dependent variables of level of relationship satisfaction and jealousy levels and independent variables of gender (male and female) and sexual orientation (heterosexual, homosexual, and bisexual) in monogamous committed relationships. Chapter four describes the result and analysis using MANOVA and Pearson correlation analysis to address the research objectives of the study. The following research question and hypotheses guided the analysis for this study:

Research Question 1: What are the effects of gender and sexual orientation on level of jealousy in a monogamous relationship?

Research Question 2: What are the effects of gender and sexual orientation on level of relationship satisfaction?

Research Question 3: What is the relationship between level of relationship satisfaction and level of jealousy in a monogamous relationship?

Furthermore, the following are the hypotheses that will be tested to address the research questions:

H_01 : There is no significant effect of gender on the level of jealousy in a monogamous relationship.

H_11 : There is a significant effect of gender on the level of jealousy in a monogamous relationship.

H_02 : There is no significant effect of sexual orientation on the level of jealousy in a monogamous relationship.

*H*₁₂: There is a significant effect of sexual orientation on the level of jealousy in a monogamous relationship.

*H*₀₃: There is no significant effect of gender on the levels of relationship satisfaction in a monogamous relationship.

*H*₁₃: There is a significant effect of gender on the levels of relationship satisfaction in a monogamous relationship.

*H*₀₄: There is no significant effect of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

*H*₁₄: There is a significant effect of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

*H*₀₅: There is no significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship.

*H*₁₅: There is a significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship.

The purpose of this chapter was to provide explanation of the results of the analysis using MANOVA and Pearson correlation analysis to address the purpose of the study. IBM[®]SPSS[®] Statistics Version 22 was utilized to conduct the data analysis. To end the chapter, this chapter presented the summary of the results of the analysis to address the objective of the study.

Data Collection

The sample of the study consisted of a total of 132 individuals who are currently involved in a romantic, close monogamous and committed relationship in Colorado located in the United States of America. However, there are only 117 (88.6%), 111 (84.1%), 104 (78.8%), and 118 (89.4%) complete responses in each of the survey measuring level of relationship satisfaction,

level of jealousy measure for cognitive, level of jealousy measure for emotional, and level of jealousy measure for behavioral. Those participants with missing responses were removed by SPSS in the data set to be used in the analysis. There were discrepancies in data collection from the plan presented in Chapter 3 since the final total number of samples of 104 to 118 was less than the minimum sample size requirement of at least 128 individuals based from the power analysis.

Table 1 summarized the demographic information of the 132 individuals who are currently involved in a romantic, close monogamous and committed relationship in Colorado located in the United States of America. All 132 individuals were at least 18 years of age or older. Almost all (126; 95.5%) except three of the individuals have been in a committed relationship at least 3 months or longer. For gender, more than half or 85 (64.4%) out of the 132 individuals were females. For the sexual orientation of the samples, more than half or 90 (68.2%) out of the 132 individuals were heterosexual, 22 (16.7%) were homosexual, and 20 (15.2%) were bi-sexual.

Table 1

Summaries of Demographic Information

	Frequency	Percent
Are you at least 18 years of age or older?		
Yes	132	100.0
Have you been in a committed relationship at least 3 months or longer?		
No	6	4.5
Yes	126	95.5
Gender		
1 Female	85	64.4
2 Male	47	35.6
Sexual Orientation		
1 Bi-sexual (You prefer men and women)	20	15.2
2 Heterosexual (One male and one female)	90	68.2
3 Homosexual (Gay or Lesbian)	22	16.7

Results

Results of descriptive statistics analysis. Descriptive statistics analysis was conducted to summarize the scores of the dependent variables of level of relationship satisfaction and level of jealousy. This summarized the scores in the Hendrick's (1988) Relationship Assessment Scale (RAS), Pfeiffer and Wong's (1989) Multidimensional Jealousy Scale (MJS). Reverse scoring was conducted on items 4 and 7 in the RAS before scoring the level of relationship satisfaction to align the measures. Table 2 summarized the descriptive statistics of the dependent variables by gender and Table 3 summarized the descriptive statistics of the dependent variables by sexual orientation.

Based from gender comparison, the male samples have a mean level of relationship satisfaction of 4.17 ($SD = 1.56$) while the female samples have a mean level of relationship satisfaction of 4.09 ($SD = 1.59$). The higher the score, the more satisfied the respondent is with his/her relationship. For level of jealousy measure for cognitive, the female samples have a mean level of jealousy in terms of cognitive of 1.61 ($SD = 1.38$) while male samples have a mean level of jealousy in terms of cognitive of 1.41 ($SD = 1.17$). For level of jealousy measure for emotional, the female samples have a mean level of jealousy in terms of jealousy of 2.27 ($SD = 1.75$) while male samples mean level of jealousy in terms of jealousy of 1.89 ($SD = 1.52$). For level of jealousy measure for behavioral, the male samples have a mean level of jealousy in terms of behavioral of 1.82 ($SD = 1.54$) while female samples have mean level of jealousy in terms of behavioral of 1.64 ($SD = 1.41$).

Based from sexual orientation comparison, the heterosexual samples ($M = 4.40$; $SD = 1.33$) have the highest score on level of relationship satisfaction while bisexual samples ($M = 2.80$; $SD = 1.88$) have the lowest level of relationship satisfaction. For level of jealousy measure for cognitive, the bi-sexual samples ($M = 2.37$; $SD = 1.11$) have the highest level of jealousy in terms of cognitive while heterosexual samples ($M = 1.36$; $SD = 1.11$) have the lowest level of jealousy in terms of cognitive. For level of jealousy measure for emotional, the bi-sexual samples ($M = 2.61$; $SD = 1.84$) have the highest level of jealousy in terms of emotional while homosexual samples ($M = 1.81$; $SD = 1.48$) have the lowest level of jealousy in terms of emotional. For level of jealousy measure for behavioral, the bi-sexual samples ($M = 2.78$; $SD = 2.05$) have the highest level of jealousy in terms of behavioral while heterosexual samples ($M = 1.25$; $SD = 0.80$) have the lowest level of jealousy in terms of behavioral.

Table 2

Descriptive Statistics Summaries of Level of Relationship Satisfaction and Level of Jealousy by Gender

Gender		Level of relationship satisfaction	Level of jealousy (Cognitive)	Level of jealousy (Emotional)	Level of jealousy (Behavioral)
1 Female	Mean	4.09	1.61	2.27	1.64
	N	75	78	73	80
	Std. Deviation	1.59	1.38	1.75	1.41
2 Male	Mean	4.17	1.41	1.89	1.82
	N	42	33	31	38
	Std. Deviation	1.56	1.17	1.52	1.54
Total	Mean	4.12	1.55	2.16	1.70
	N	117	111	104	118
	Std. Deviation	1.57	1.32	1.69	1.45

Table 3

Descriptive Statistics Summaries of Level of Relationship Satisfaction and Level of Jealousy by Sexual Orientation

Sexual Orientation		Level of relationship satisfaction	Level of jealousy (Cognitive)	Level of jealousy (Emotional)	Level of jealousy (Behavioral)
1 Bi-sexual (You prefer men and women)	Mean	2.80	2.37	2.61	2.78
	N	17	17	17	18
	Std. Deviation	1.88	1.81	1.84	2.05
2 Heterosexual (One male and one female)	Mean	4.40	1.36	2.12	1.25
	N	82	76	73	80
	Std. Deviation	1.33	1.11	1.69	0.80
3 Homosexual (Gay or Lesbian)	Mean	4.11	1.59	1.81	2.54
	N	18	18	14	20
	Std. Deviation	1.71	1.39	1.48	1.95
Total	Mean	4.12	1.55	2.16	1.70
	N	117	111	104	118
	Std. Deviation	1.57	1.32	1.69	1.45

Results of MANOVA test. MANOVA was conducted to assess whether there are significant differences between the level of relationship satisfaction and level of jealousy across the different groups based on gender and sexual orientation. To test the hypothesis for this study, MANOVA was used to test differences of male and female's level of relationship satisfaction and jealousy and of homosexual, bisexual, and heterosexual's level of relationship satisfaction and jealousy. A level of significance of 0.05 was used in the MANOVA.

MANOVA results were presented in Table 4. The MANOVA results showed that the level of relationship satisfaction ($F(2, 81) = 8.83, p < 0.001, \eta^2 = 0.18$) and level of jealousy measures

of cognitive ($F(2, 81) = 3.84, p = 0.03, \eta^2 = 0.09$) and behavioral ($F(2, 81) = 5.43, p = 0.01, \eta^2 = 0.12$) were significantly different across the individuals with different sexual orientation. This was significant because the p -values were less than the level of significance value of 0.05. On the other hand, the level of relationship satisfaction and level of jealousy were not significantly different across the individual with different genders.

Table 5 showed the post-hoc test results of differences of level of relationship satisfaction and level of jealousy in terms of cognitive and behavioral. Post-hoc test result using Bonferroni post-hoc comparisons showed that the heterosexual samples have significantly greater levels of relationship satisfaction (Mean difference = 2.02) than bi-sexual samples while the homosexual samples have significantly greater levels of relationship satisfaction ($M = 1.90$) than bisexual samples. This is graphically illustrated in Figure 1. Heterosexual samples have significantly lesser levels of jealousy in terms of cognitive (Mean difference = -1.35) than bi-sexual sample. This is graphically illustrated in Figure 2. Heterosexual samples have significantly lesser levels of jealousy in terms of behavioral (Mean difference = -1.57) than bi-sexual sample. This is graphically illustrated in Figure 3.

With these results, the null hypothesis 2 “There are no significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship” and null hypothesis 4 “There are no significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship” were rejected. Instead, the alternative hypothesis 2 “There are significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship” and alternative hypothesis 4 “There are significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship” were supported. The null hypothesis 1

“There are no significant differences between the effects of gender on the level of jealousy in a monogamous relationship” and null hypothesis 3 “There are no significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship” were not rejected.

Table 4

MANOVA Results of Differences of Level of Relationship Satisfaction and Level of Jealousy by Gender and Sexual Orientation

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Level of relationship satisfaction	51.85 ^a	5	10.37	5.42	0.00	0.25
	Level of jealousy (Cognitive)	20.05 ^b	5	4.01	2.17	0.07	0.12
	Level of jealousy (Emotional)	21.33 ^c	5	4.27	1.43	0.22	0.08
	Level of jealousy (Behavioral)	29.47 ^d	5	5.89	3.85	0.00	0.19
Intercept	Level of relationship satisfaction	605.00	1	605.00	315.99	0.00	0.80
	Level of jealousy (Cognitive)	149.42	1	149.42	80.75	0.00	0.50
	Level of jealousy (Emotional)	212.79	1	212.79	71.24	0.00	0.47
	Level of jealousy (Behavioral)	160.64	1	160.64	105.03	0.00	0.57
Gender	Level of relationship satisfaction	0.77	1	0.77	0.40	0.53	0.01
	Level of jealousy (Cognitive)	0.00	1	0.00	0.00	0.98	0.00
	Level of jealousy (Emotional)	0.26	1	0.26	0.09	0.77	0.00
	Level of jealousy (Behavioral)	0.05	1	0.05	0.03	0.86	0.00
Sexual Orientation	Level of relationship satisfaction	33.83	2	16.91	8.83	0.00*	0.18
	Level of jealousy (Cognitive)	14.22	2	7.11	3.84	0.03*	0.09

	Level of jealousy (Emotional)	6.47	2	3.24	1.08	0.34	0.03
	Level of jealousy (Behavioral)	16.60	2	8.30	5.43	0.01*	0.12
Gender *	Level of relationship satisfaction	7.22	2	3.61	1.89	0.16	0.04
Sexual Orientation	Level of jealousy (Cognitive)	0.32	2	0.16	0.09	0.92	0.00
	Level of jealousy (Emotional)	7.48	2	3.74	1.25	0.29	0.03
	Level of jealousy (Behavioral)	1.70	2	0.85	0.56	0.58	0.01
Error	Level of relationship satisfaction	155.09	81	1.92			
	Level of jealousy (Cognitive)	149.87	81	1.85			
	Level of jealousy (Emotional)	241.94	81	2.99			
	Level of jealousy (Behavioral)	123.89	81	1.53			
Total	Level of relationship satisfaction	1693.36	87				
	Level of jealousy (Cognitive)	398.59	87				
	Level of jealousy (Emotional)	717.35	87				
	Level of jealousy (Behavioral)	375.59	87				
Corrected Total	Level of relationship satisfaction	206.93	86				
	Level of jealousy (Cognitive)	169.92	86				
	Level of jealousy (Emotional)	263.28	86				
	Level of jealousy (Behavioral)	153.36	86				

a. R Squared = 0.25 (Adjusted R Squared = 0.20)

b. R Squared = 0.12 (Adjusted R Squared = 0.06)

c. R Squared = 0.08 (Adjusted R Squared = 0.02)

d. R Squared = 0.19 (Adjusted R Squared = 0.14)

Table 5

Significant Post-Hoc Test Results of Difference of Level of Relationship Satisfaction and Level of Jealousy by Sexual Orientation

Dependent Variable	(I) Sexual Orientation	(J) Sexual Preference	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Level of relationship satisfaction	1 Bi-sexual (You prefer men and women)	2 Heterosexual (One male and one female)	-2.02*	0.42	0.00	-3.06	-0.99
		3 Homosexual (Gay or Lesbian)	-1.90*	0.55	0.00	-3.26	-0.55
	2 Heterosexual (One male and one female)	3 Homosexual (Gay or Lesbian)	0.12	0.44	1.00	-0.95	1.19
Level of jealousy (Cognitive)	1 Bi-sexual (You prefer men and women)	2 Heterosexual (One male and one female)	1.35*	0.42	0.01	0.34	2.36
		3 Homosexual (Gay or Lesbian)	1.19	0.55	0.10	-0.14	2.52
	2 Heterosexual (One male and one female)	3 Homosexual (Gay or Lesbian)	-0.16	0.43	1.00	-1.21	0.89
Level of jealousy (Behavioral)	1 Bi-sexual (You prefer men and women)	2 Heterosexual (One male and one female)	1.57*	0.38	0.00	0.66	2.48
		3 Homosexual (Gay or Lesbian)	0.94	0.50	0.18	-0.27	2.15
	2 Heterosexual (One male and one female)	3 Homosexual (Gay or Lesbian)	-0.63	0.39	0.34	-1.58	0.33

Based on observed means.

The error term is Mean Square (Error) = 1.53.

*. The mean difference is significant at the level of significance of 0.05

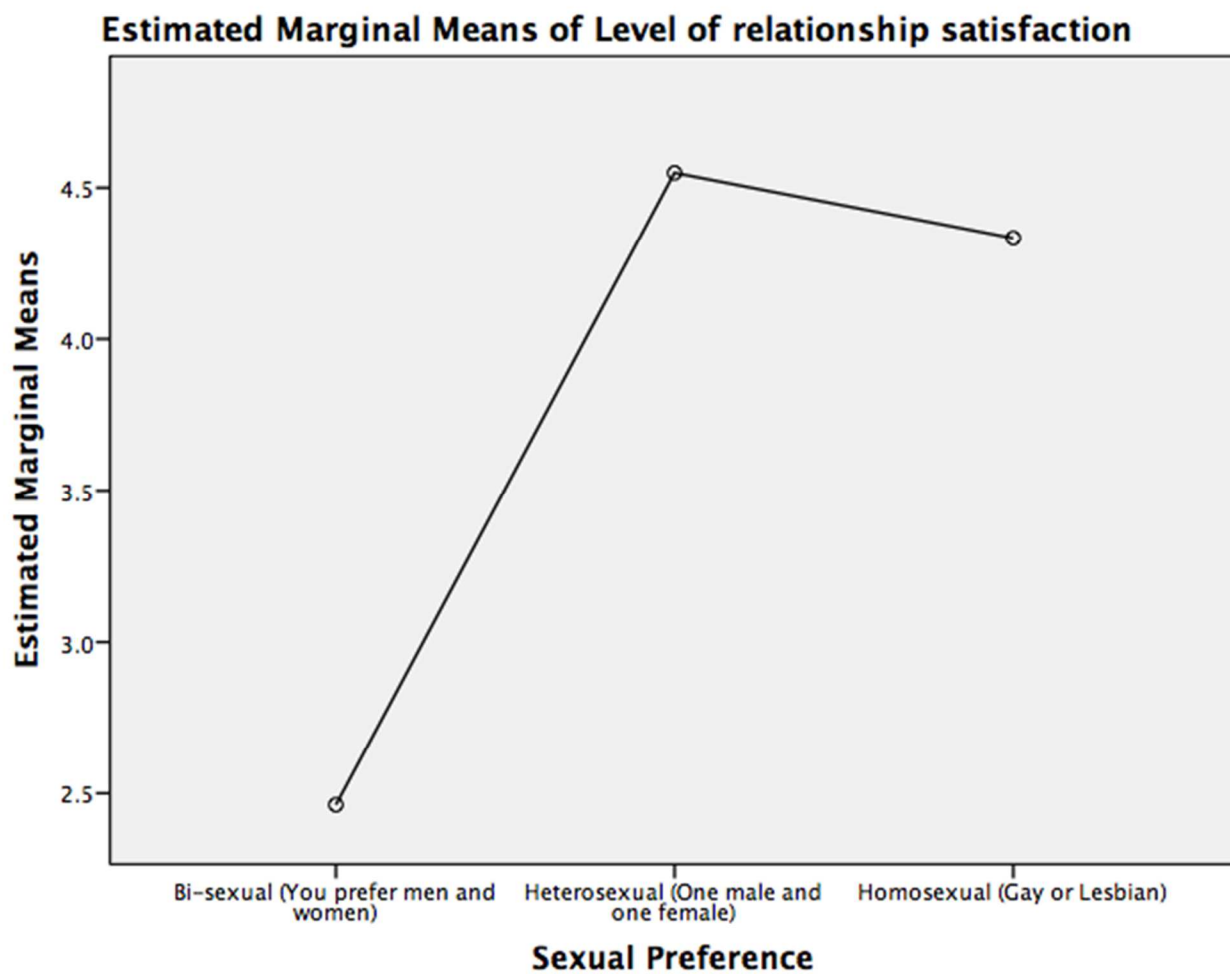


Figure 1. Level of relationship satisfaction by sexual preference.

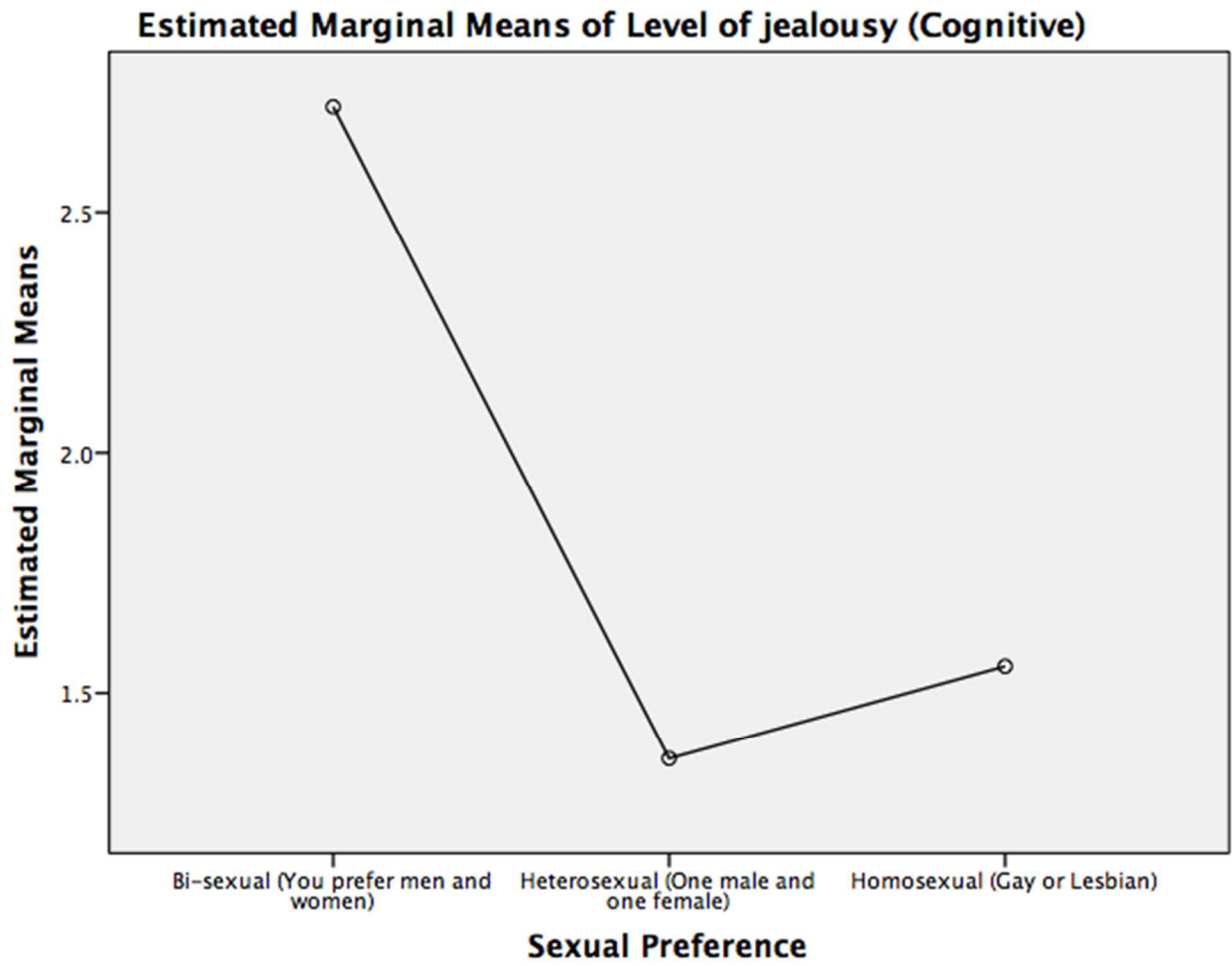


Figure 2. Level of jealousy (cognitive) by sexual preference.

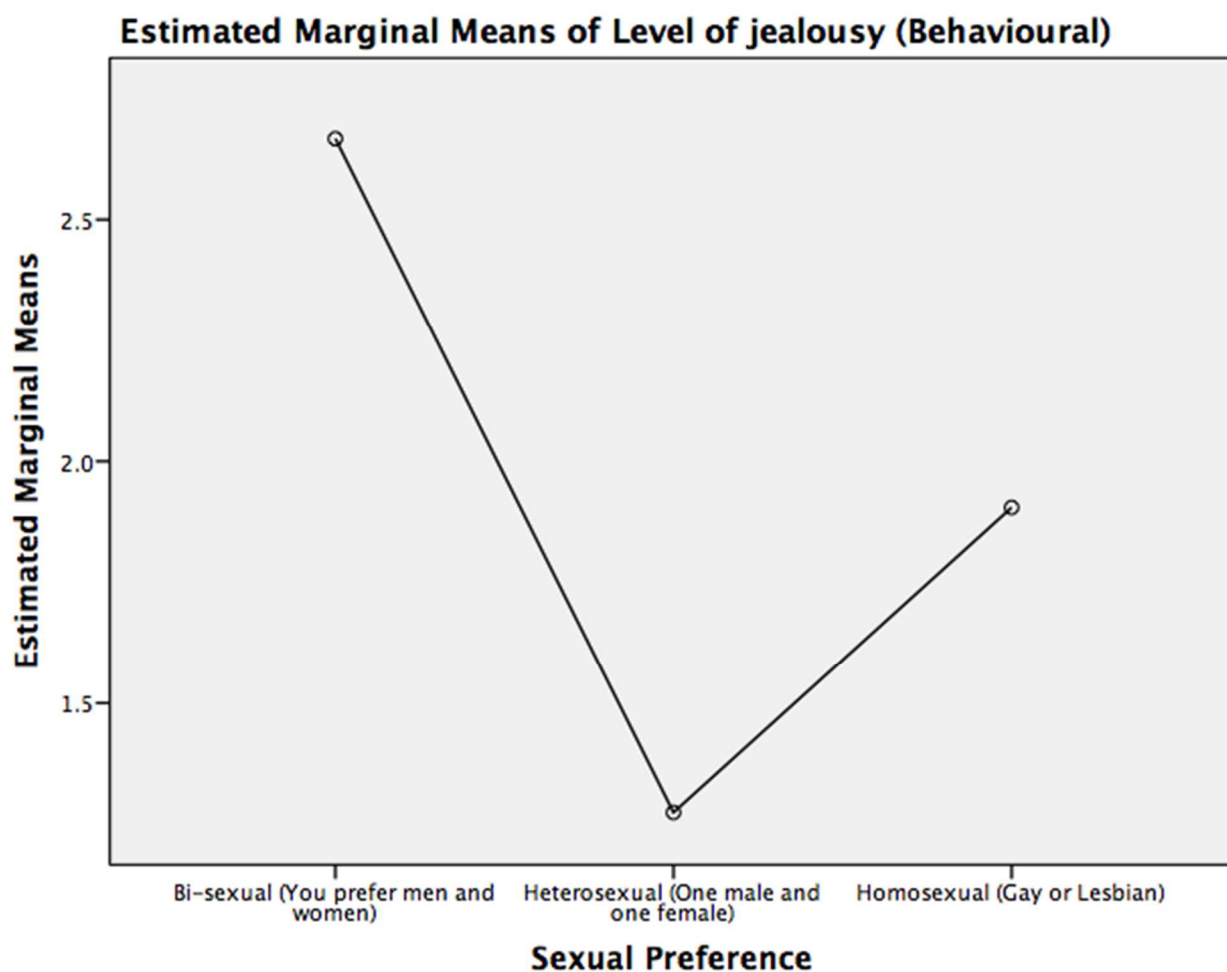


Figure 3. Level of Jealousy (Behavioral) by Sexual Preference

Results of Pearson correlation test. Pearson correlation analysis was conducted to determine the relationship between level of relationship satisfaction and the level of jealousy in a monogamous relationship. A level of significance of 0.05 was used in the correlation analysis. The correlation results are presented in Table 6.

The correlation results showed that the level of relationship satisfaction of individuals is significantly and negatively related with the level of jealousy in terms of cognitive ($r(98) = -0.61, p < 0.011$), emotional ($r(91) = -0.22, p = 0.04$), and behavioral ($r(103) = -0.57, p < 0.001$). It was determined that these correlations are statistically significant because the p -values were less than the level of significance of 0.05. The negative correlation means that the level of

relationship satisfaction of individuals in a monogamous relationship will become higher if there is lesser level of jealousy in a monogamous relationship. With this result, the null hypothesis 5 that “There is no significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship” was rejected. The Pearson correlation result supported the alternative hypothesis 5 that “There is a significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship”.

Table 6

Pearson Correlation Results of Relationship between Level of Relationship Satisfaction and Level of Jealousy

		Level of jealousy (Cognitive)	Level of jealousy (Emotional)	Level of jealousy (Behavioral)
Level of relationship satisfaction	Pearson Correlation	-0.61*	-0.22*	-0.57*
	Sig. (2-tailed)	0.00	0.04	0.00
	N	100	93	105

*. Correlation is significant at the 0.05 level (2-tailed).

Summary

The purpose of this quasi-experimental quantitative study is to identify if there are significant differences between the dependent variables of level of relationship satisfaction and jealousy levels and independent variables of gender (male and female) and sexual orientation (heterosexual, homosexual, and bisexual) in monogamous committed relationships. MANOVA and Pearson correlation analysis were conducted to address the research questions of the study. Results of the MANOVA analysis showed that the level of relationship satisfaction and level of jealousy measures of cognitive and behavioral were significantly different across the individuals with different sexual orientation. The results of the Pearson correlation analysis showed that

there is a negative significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship. Chapter 5 includes further discussion of the results presented in this chapter. Each of the five hypotheses will be reviewed and the potential implications for each of the results of the analysis.

Chapter 5

Introduction and Summary of the Findings

This chapter is comprised of a statement of the problem, the purpose of the study, and why the study was conducted. It includes a summary, interpretation of the results, and discusses the implications of those findings concerning social change. In addition, it presents any limitations of the study, as well as recommendations for future research. The study employed a quantitative approach because the goal was to gain an understanding of the sample population via testing the differences of the variables involved in committed, monogamous relationships (Cresswell, 2009). According to Harwell (2010) the advantages of utilizing this quantitative method include reliability, objectivity, and it allows the study to focus on assessing the effect of the independent variables on the dependent variables.

Statement of the Problem

In monogamous relationships, the jealousy problem can reach resolution via the identification of any underlying issues and any objective conditions allowing jealousy to exist in the committed relationship. Nevertheless, it appears that jealousy becomes problematic once it becomes classified as unhealthy jealousy, which may disrupt normal daily life not just for the person experiencing it but the person to which the emotion is channeled upon (Bevan, 2004). Jealousy constitutes a problem when it develops into an unhealthy jealousy that prompts disruptions to the people involved with the experience (Brevan, 2004). The primary concern regarding this study was to determine the extent that levels of relationship satisfaction and levels of jealousy diverge across gender and sexual orientation regarding monogamous, committed relationships.

Jealousy is an emotional response to inform a person regarding a threat to an important relationship, which is triggered by the presence of attracted intrasexual rivals that may be more desirable. Further, jealousy can act as a motivating mechanism conducive to behavior to deter the “dual specters of infidelity and abandonment.” Both sexes are believed to experience distress due to emotional and sexual infidelity (Buss, 2005). This often misunderstood adaptive reaction invites unfavorable outcomes in relationships. Previous research addressing this emotion have measured the general degree of jealousy and disregarded specifics regarding the circumstances, which include gender relationships, and sexual orientation, and this left a gap in the knowledge base (Widerman & Allgeier, 1993).

Purpose of the Study

In previous studies, Desteno, Bartlett, Braverman, and Salovey, (2002) concluded that jealousy is classified by sexual dimorphism because of the utilization of force-choice research methods. To remedy the deficit, this study was designed to analyze and comprehend the emotion of jealousy via the evaluation of all circumstances with the potential to provoke jealousy across relationships. The intent was to find answers regarding this emotion and the way in which it develops in gender differences that may be affected by social and cultural influences. Further, this study planned to produce comprehension of the specific jealousy factors to create an easier path to deal with the various types of problems that develop on relationships, and utilized a between-subjects design using sexual orientation as the independent variable; relationship satisfaction, levels of jealousy, and jealousy were used as the dependent variables. In addition, this research intended to produce understanding of the specific jealousy factors to create an easier path to deal with the various types of problems that develop on relationships.

The sample population consisted of 132 subjects, and all but one was over 18 years of age. Of this sample 126 had been in committed relationships three months or longer leaving six who were not in such a situation. The gender breakdown showed that females comprised 65 percent of the sample (85), while 35 percent of the sample (47) was male. As far as sexual orientation was concerned, 20 of the group were bi-sexual, 80 claimed to be heterosexual, and 22 said they were gay or lesbian.

The independent variables used were the sexual orientation and gender, and the dependent variables were the level of relationship and jealousy in common monogamous relationships. The following questions directed the study. Research Question 1: To explore the interconnection between gender, sexual orientation, level of relationship satisfaction, and level of jealousy; and Research Question 2: To identify the effects of sexual orientation and gender on the level of relationship satisfaction and level of jealousy in a monogamous relationship. Following are the hypotheses tested.

H_01 : There are no significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H_11 : There are significant differences between the effects of gender on the level of jealousy in a monogamous relationship.

H_02 : There are no significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H_12 : There are significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship.

H_03 : There are no significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

*H*₁₃: There are significant differences between the effects of gender on the levels of relationship satisfaction in a monogamous relationship.

*H*₀₄: There are no significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

*H*₁₄: There are significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship.

*H*₀₅: There is no significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship.

*H*₁₅: There is a significant relationship between the level of relationship satisfaction and the level of jealousy in a monogamous relationship

Summary of the Findings

Research Question 1 was designed to explore the interconnection between gender, sexual orientation, level of relationship satisfaction, and level of jealousy, and Research Question 2 was designed to identify the effects of sexual orientation and gender on the level of relationship satisfaction and level of jealousy in a monogamous relationship. The scores were summarized using the Hendrick's (1988) Relationship Assessment Scale (RAS), Pfeiffer and Wong's (1989) Multidimensional Jealousy Scale (MJS) and correlation analyses were conducted utilizing MANOVA and Pearson analysis. For items 4 and 7 in the RAS, reverse scoring was used before scoring the level of relationship satisfaction in aligning the measures. The scores of the independent variables, level of relationship satisfaction and level of jealousy, were arrived at using descriptive statistics analysis.

Relationship satisfaction as well as level of jealousy did not differ significantly across the individual of different genders. Heterosexual and homosexual samples had significantly greater

level of relationship satisfaction than the bisexual sample. Further, heterosexual samples showed significantly lesser levels of jealousy in terms of cognitive, behavioral than the bisexual sample.

Using gender comparison, males were found to attain a higher score on the level of relationship satisfaction than the females who participated in the study and the higher score the respondent gave, the more satisfied that she or he was in the current relationship. Females scored higher on the level of jealousy relative to the males who participated. The higher score indicates a better relationship with the partner. Using sexual orientation as a comparison, the heterosexual group scored higher on the level of relationship satisfaction ($M=4.40$; $SD=1.33$). The score for the bi-sexual sample indicated the lowest level of relationship satisfaction ($M=2.80$; $SD=1.88$).

Murphy, Vallacher, Shackelford, Bjorklund, & Yunger, (2006) thought that males leaned toward being more upset by a partner's behavioral infidelity, and women by a partner's emotional unfaithfulness. Boyle, Whitted, & Coulter-Kern, (2010) found that spousal abuse statistics were greater for men who believed their partner engaged in sexual infidelities, while women revealed more interest in a partner's emotional investment in outside interactions. As the findings indicate, females had a higher level of jealousy in terms of emotional relative to the males, while males scored a higher level of jealousy in terms of behavioral relative to the female respondents.

Using sexual orientation as a comparative factor, based on the data presented in table three, the heterosexual sample had the highest score regarding the level of relationship satisfaction, showing a mean score of 4.11, with levels of jealousy of 1.59 cognitive, 1.81 emotional, and 2.54 behavioral. The bi-sexual samples scored the lowest concerning the level of relationship satisfaction with a mean score of 2.80 in the satisfaction arena, and 1.36, 2.12, and 1.25 for cognitive, emotional, and behavioral jealousy. The mean for the homosexual, gay or

lesbian group was 4.12 regarding satisfactions levels, and 1.55, 2.16, and 1.70 for cognitive, emotional, and behavioral jealousy. The MANOVA results indicated the level of relationship satisfaction varied considerably across individuals with different sexual orientation, and not meaningfully different among those with different genders.

Measuring the level of jealousy for emotional, the bi-sexual group displayed the highest level, and the homosexual samples indicated the lowest level of jealousy in terms of emotional. The bi-sexual group scored the highest as related to the level of jealousy for behavioral, and the heterosexual sample displayed the lowest level concerning the jealousy aspect of this study. The finding that the level of jealousy for cognitive, the bisexual samples scored the highest, while in contrast, the heterosexual participants scored the lowest for this characteristic. These results found the following hypothesis, which stated, “There are significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship,” was supported. The bi-sexual sample scored the highest concerning all facets of jealousy: emotional, behavioral, and cognitive.

Interestingly, Denes (2006) found that bisexuals have a tendency toward varying levels of jealousy, which are dependent on the sex of the partner involved as well as the situation. Bisexual men experience a higher degree of distress when his female partner engages in a sexual relationship than when male partners engage in an emotional relationship. In contrast, bisexual women experience greater angst when the female partners engage in sexual relationships than their male partners’ emotional relationships. Mint, (2010) proposed that the distinction in the nature of the relationship can lead to variations in reactions manifested by the jealousy experience.

In addition, Hypothesis 4, which stated, “There are significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship,” also was supported. In accordance, the null hypothesis for 2, “There are no significant differences between the effects of sexual orientation on the level of jealousy in a monogamous relationship,” was not supported. In addition, the null hypothesis for 4, which posited, “There are no significant differences between the effects of sexual orientation on the levels of relationship satisfaction in a monogamous relationship,” was not supported. This finding is consistent with Boyle, Whitted, & Coulter-Kern, (2010) who believed gay males became more distressed when their partners engaged in emotional relationships with other men, and lesbians experienced a greater degree of angst over sexual infidelity than instances of emotional infidelity.

Consistent with the findings of Buss, Larsen, Westen, and Senmelroth (1992), which posited jealousy to be universal, having a definite link to jealousy and relationship satisfaction, the study produced these findings. Results showed measures of level of satisfaction and the level of jealousy in relationships were significantly different due to sexual orientation. Pietrzak, Laird, Stevens, & Thompson, (2002) found that levels of jealousy might be greater in heterosexuals than in gay men, and lesbian women. Conversely, the level of satisfaction and the level of jealousy were not found to be significantly different regarding different genders. What is not clear is the effect on the female regarding the male’s same sex relationship.

Interpretation of the Findings

This study and preceding studies indicate that jealousy can play a harmful role in any relationship, whether the couple is heterosexual, homosexual (gay or lesbian), or bisexual. The gender comparison results of this study found that the male participants tended to experience

higher levels of satisfaction than their female counterparts in their relationships. Furthermore, the females leaned toward greater levels of jealousy. Behavior infidelity had a greater effect on the males, while emotions had a greater impact on the female participants.

The subjects in the study displayed varied responses to the questions, confirming earlier studies regarding the reactions to infidelity. Infidelity is a pervasive and serious phenomenon that can destroy relationships and lead to physical and emotional abuse (Weeks, G.R., 2003). This research highlighted who tends to suffer the effects due to situations involving infidelity. The information produced by the participants serves as a basis for helping those who encounter problems with their partners. It can serve as a guide to ameliorating the impact of the unfaithful partner, and the larger issue regarding societal mistreatment.

Awareness of betrayal by infidelity is generated by this research that serves as a warning to society. Wiederman (1997) disclosed the extent of this issue, finding that in the United States, 23 percent of men and 12 percent of women stated that they participated in marital infidelity. These extramarital misjudgments often are cited as the cause for divorce (Amato & Previti, 2003). These numbers imply an enormous problem considering that this only applies to married, heterosexual couples, and homosexual and bisexual couples are absent.

As the study mentions in the literature review, jealousy can result from the fear of loss of a valued person or item, and it can also be the consequence of a poor connection with a partner (Anderson, 1987). Buss, Larsen, Westen, and Senmelroth (1992) infer that relationship satisfaction and jealousy are connected. Further, social reactions, emotions, and biological responses might take place all together to produce jealousy. When this occurs, the resultant emotions can have a serious impact regarding the worth of the relationship and cause anxiety, distress, and other negative side effects.

Ambwani & Strauss, (2007) produced research that indicated the sexual orientation of the individual has an effect regarding the way in which an individual reacts to jealousy provoking situations. Each gender's mating strategies will affect how each sex experiences the emotion of jealousy and how each responds within a committed relationship. Age, culture, gender, ethnicity, and personality all have an impact. Attachment theory and evolutionary psychology offer possible causes for jealousy and relationship issues.

According to Eagly & Wood, (1999), attachment theory, pioneered by John Bowlby, helps in understanding the complexity of these various associations. Bowlby observed the hardships that children, who were left homeless by WWII, experienced and thought that the attachment process of children to parental archetypes is contingent on the sensitivity and responsiveness to the character representing the parent in meeting the needs of said child. Bowlby proffered infants necessarily associate a parental character to the learning process. The association created serves as the underpinning of the capacity of the child to explore and gain knowledge, creating a deeper bond to the parental figure. An internal working model creates a value system that directs the child.

One assumption implicit in attachment theory is that during normal human development, a child must develop a connection to a minimum of one parental individual, and this connection governs the development, social and emotional, and determine the way in which a that person behaves in the larger society. The child attains sex-differentiated behaviors, societal norms, and these values get extended to adulthood. According to Bevan (2004) these values are acknowledged as primary elements in causing insecurity and feelings of insecurity. This adaptive response is brought forward to adulthood as the emotion of jealousy, and adults who experience jealousy are comparable to infants who experience the threat of detachment form their parental

models (Eagly & Wood, 1999). Furthermore, the level of the emotion of jealousy is affected by the level of attachment the person has invested in the partner, indicating that the higher the level of attachment, the more harmful this jealousy can become.

Bevan (2004) found that relationship uncertainty arises after expressions of jealousy are exhibited in a partner relationship. According to Bowlby's attachment theory, distinctive forms of attachments, which form early in life by a person are based on the association the person had with the primary care giver(s). These experiences turn into points of reference for that person when reaching adulthood and developing nascent relationships, including those of a romantic nature, (Levy & Kelly, 2010). To wit: attachment styles are primarily ascribed to life experiences within the close relationship of an adult individual. Levy & Kelly, (2010) found that attachment played a major role in the evolution of emotional and sexual infidelity.

Levy and Kelly (2010) showed that over time, a person may suffer feelings of fearfulness, insecurity, or anxiousness, which can have long-term effects, and will determine the nature of attachments the person will experience as he or she engages in adult romantic relationships. Unfortunately, partner abuse, rape, and stalking behavior have been attributed to thought of jealousy within partnered relationships. Levy and Kelly further added that the dissimilarities in levels of jealousy among the genders are the function of specific attachment styles. In addition, level of jealousy is attributable to differences between men and women related to social, biological and evolutionary determinations and evaluations of how men differ from women. What's more, a gap exists in the literature concerning the tangible influences that might alter a person's attachment pattern, and inadequate data exploring the effects of gender differences on jealousy.

Jealousy, according to evolutionary theorists, is a feeling set aside for humans because humans who perceived threats and were able to prevent them enjoyed higher reproductive success rates (Miller & Manner, 2009). This perspective suggests that responses to jealousy by men and women have evolved over time, and this enabled them to deal with the quandaries and reproductive challenges they encountered. These partner acts of infidelity can be classified two ways: one partner engages in sexual activities with others, and the other partner in emotional infidelity, in which one partner falls in love with another person outside the relationship. Men usually have a tendency to be affected by sexual infidelity, while women feel more of an impact from emotional infidelity, all of which is in sync with the results.

Implications of the Findings

Using attachments theory as the theoretical framework, the study uncovered the sample population's affective experiences in adulthood regarding levels of satisfaction and jealousy in committed, monogamous relationships across sexual orientation and gender. This complex research was consistent with much of the previous literature and provided greater insights into the issue and provides information to serve as guidance for understanding and dealing with the issue of relationships. The insights provided can help to focus on the areas of concern. Further, these perceptions can help determine how best to ameliorate the negative consequences on people at the individual, family, and societal levels.

As a review, the study found that sexual orientation had an impact on the level of jealousy in monogamous relationships. In addition, it found significant differences between the effects of sexual orientation on relationship satisfaction in monogamous relationships. This suggests that sexual orientation may be a factor in level of relationship satisfaction.

The findings for gender found that on the level of jealousy, there are no significant differences from the effects of gender. Additionally, the research found that no significant differences exist between the effects of gender on the levels of relationship satisfaction. These findings suggest that gender may not play a significant role in levels of relationship satisfaction.

The heterosexual samples had the highest level of relationship satisfaction, and they had the lowest levels of jealousy in terms of cognitive, emotional, and behavioral. In contrast, the bisexual had the highest level of jealousy in term of cognitive, emotional, and behavioral. Homosexual samples had the lowest level of jealousy in terms of emotional, had significantly greater levels of relationship satisfaction. This suggests that sexual orientation may be a factor in level jealousy, and that being bisexual may present the greatest risk.

The information gathered from this study can assist those in policy making positions, educational setting, and clinical practice create healthier attitudes leading to better understanding of the issues those in committed, monogamous relationships encounter. Clinicians may want to consider the greater risk posed to bisexuals by jealousy into account treating this group. Educators may want to contemplate comprehensive program to educate student populations concerning relationship issues. Policy makers may use the information to establish public policies that educate the general population regarding the effects and implications these issues bring to society.

Limitations of the Study

All studies, regardless of how well designed, implemented, or how methodically sound they appear, all have a measure of limitations. To reach a larger sample, the study employed convenience sampling to create a sample, which came from online sources such as Facebook and LinkedIn (Teddlie & Tashakkori., 2009). This study assumed that all the participants gave

honest, forthright answers to the questions, and this may be an issue. Further, many people from the gay, lesbian, and bisexual communities may be unwilling to offer their opinions in such a survey, thus denying the study greater and possibly more accurate information. Some discrepancies in data collection existed and the final total number of samples was not the 128 required.

Recommendations for Future Research

Due to the broad nature of this subject, more than likely, it would be advantageous to study each segment in greater via separate studies because each segment may have particulars not applicable to the other samples. It may prove beneficial to research gender roles according to gender role: heterosexual, homosexual, and bisexual to provide a better understand of each segment and the individualistic issues more pertinent to it. In addition, an attempt to determine, in greater depth, motivating factors for each segment of jealousy: emotional, behavioral, cognitive may add information crucial to these subjects. In addition, studying specific races and cultures may provide useful information regarding this subject.

It's fair to say that no one, regardless of their sexual orientation (heterosexual, homosexual, bisexual) enjoys suffering the consequences of his or her partner's jealousy, whether or not it is warranted. Gay and lesbian relationships are different because they live in a society, and often in a family, immersed in hostility, which is sometimes life-threatening, which adds to negative feeling and outcomes (DeVito, 1999). Having a large scale public relations information program may help to moderate these hostile attitudes and stave off the negative consequences they produce. In addition, similar messaging concerning decent, satisfying relationships may produce greater understanding among the general populace.

Summary and Conclusions

This quantitative study was intended to determine if there were significant differences between the dependent variables level of relationship satisfaction and jealousy and the independent variable of gender, sexual orientation in monogamous, committed relationships. Attachment theory provided a foundation to understanding the basics of the style issue related to these experiences. The data provided adequate information to posit that (1) gender may not play a significant role in levels of relationship satisfaction; (2) sexual orientation may be a factor in level jealousy; (3) sexual orientation may be a factor in level of relationship satisfaction; (4) and being bisexual may present the greatest risk. This concludes the study.

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Appendix A

Imagine that you are in a relationship with individual X.

How often do you have the following thoughts about X? Never Always

I suspect that X is secretly seeing someone of the opposite sex.

	<I	<I	
1<INPU			<INPU
	NP	NP	
T			T
	UT	UT	
NAME=			NAME
	NA	NA	
\ C1			=\ C1
	ME	ME	
VALUE			VALU
	=\	=\	
= 1			E= 5
	C1	C1	
TYPE=			4 TYPE=
	VA	VA	
radio >			radio >
	LU	LU	
\$MACR			\$MAC
	E=	E=	
OBUTT			ROBU
	2	3	
ON			TTON
	TY	TY	
HTMLD			HTML
	PE	PE	
irect			Direct5
	=	=	

radi radi

o > o >

§M §M

AC AC

RO RO

BU BU

TT TT

ON ON

HT HT

ML ML

Dir Dir

ect ect

2 3

1<INPU <I <I <INPU

T NP NP T

NAME= UT UT NAME

\ C1 NA NA =\ C1

VALUE ME ME 4 VALU

= 1 =\ =\ E= 5

TYPE= C1 C1 TYPE=

radio > VA VA radio >

§MACR LU LU §MAC

I am worried that some member of the opposite sex may be chasing after X.

OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

I suspect that X may be attracted to someone else.

1<INPU	<I	<I	<INPU
T	NP	NP	T
NAME=	UT	UT	NAME
\C1	NA	NA	=\C1

VALUE	ME	ME	VALU
= 1	=\	=\	E= 5
TYPE=	C1	C1	TYPE=
radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TTON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

I suspect that X may be physically intimate with another member of the opposite sex behind my back.

```

<I <I
NP NP
UT UT
NA NA
ME ME
1<INPU =\ =\ <INPU
T C1 C1 T
NAME= VA VA NAME
\C1 LU LU =\ C1
VALUE E= E= VALU
= 1 2 3 E= 5
TYPE= TY TY 4 TYPE=
radio > PE PE radio >
$MACR = = $MAC
OBUTT radi radi ROBU
ON o > o > TTON
HTMLD $M $M HTML
irect AC AC Direct5
RO RO
BU BU
TT TT
ON ON
HT HT

```

I think that some members of the opposite sex may be romantically interested in X.

```

ML ML
Dir Dir
ect ect
2 3
<I <I
NP NP
UT UT
1<INPU <INPU
NA NA
T T
ME ME
NAME= NAME
=\ =\
\C1 =\ C1
C1 C1
VALUE VALU
VA VA
= 1 E= 5
LU LU
TYPE= TYPE=
E= E= 4
radio > radio >
2 3
$MACR $MAC
TY TY
OBUTT ROBU
PE PE
ON TTON
= =
HTMLD HTML
radi radi
irect Direct5
o > o >
$M $M
AC AC

```

RO RO

BU BU

TT TT

ON ON

HT HT

ML ML

Dir Dir

ect ect

2 3

1<INPU <I <I <INPU

T NP NP T

NAME= UT UT NAME

\C1 NA NA =\C1

VALUE ME ME VALU

= 1 =\ =\ E= 5

TYPE= C1 C1 4 TYPE=

radio > VA VA radio >

§MACR LU LU §MAC

OBUTT E= E= ROBU

ON 2 3 TTON

HTMLD TY TY HTML

irect PE PE Direct5

I am worried that someone of the opposite sex is trying to seduce X.

= =
 radi radi
 o > o >
 §M §M
 AC AC
 RO RO
 BU BU
 TT TT
 ON ON
 HT HT
 ML ML
 Dir Dir
 ect ect
 2 3

I think that X is secretly developing an intimate relationship with someone of the opposite sex.

1<INPU <I <I <INPU
 T NP NP T
 NAME= UT UT NAME
 \ C1 NA NA =\ C1
 VALUE ME ME VALU
 = 1 =\ =\ E= 5
 TYPE= C1 C1 TYPE=
 radio > VA VA radio >

```

$MACR LU LU $MAC
OBUTT E= E= ROBU
  ON 2 3 TTON
HTMLD TY TY HTML
irect PE PE Direct5
      = =
      radi radi
      o > o >
      $M $M
      AC AC
      RO RO
      BU BU
      TT TT
      ON ON
      HT HT
      ML ML
      Dir Dir
      ect ect
      2 3

```

I suspect that X is crazy about members of the opposite sex.

```

1<INPU <I <I <INPU
  T NP NP 4 T
NAME= UT UT NAME

```

\C1	NA	NA	=\C1
VALUE	ME	ME	VALU
= 1	=\	=\	E= 5
TYPE=	C1	C1	TYPE=
radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	

2 3

How would you emotionally react to the following situations?

Very
pleased

Very
upset

X comments to you on how great looking a particular member of the opposite sex is.

<I <I
NP NP
1<INPU UT UT <INPU
T NA NA T
NAME= ME ME NAME
\ C1 =\ =\ =\ C1
VALUE C1 C1 VALU
= 1 VA VA E= 5
TYPE= LU LU 4 TYPE=
radio > E= E= radio >
\$MACR 2 3 \$MAC
OBUTT TY TY ROBU
ON PE PE TTON
HTMLD = = HTML
irect radi radi Direct5
o > o >
\$M \$M

AC AC

RO RO

BU BU

TT TT

ON ON

HT HT

ML ML

Dir Dir

ect ect

2 3

1<INPU <I <I <INPU

T NP NP T

NAME= UT UT NAME

\ C1 NA NA =\ C1

VALUE ME ME VALU

= 1 =\ =\ E= 5

4

TYPE= C1 C1 TYPE=

radio > VA VA radio >

§MACR LU LU §MAC

OBUTT E= E= ROBU

ON 2 3 TTON

HTMLD TY TY HTML

X shows a great deal of interest or excitement in talking to someone of the opposite sex.

	irect	PE	PE	Direct5
	=	=		
	radi	radi		
	o >	o >		
	§M	§M		
	AC	AC		
	RO	RO		
	BU	BU		
	TT	TT		
	ON	ON		
	HT	HT		
	ML	ML		
	Dir	Dir		
	ect	ect		
	2	3		
	1<INPU	<I	<I	<INPU
	T	NP	NP	T
	NAME=	UT	UT	NAME
	\ C1	NA	NA 4	=\ C1
	VALUE	ME	ME	VALU
	= 1	=\	=\	E= 5
	TYPE=	C1	C1	TYPE=
X smiles in a very friendly manner to someone of the opposite sex.				

radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

A member of the opposite sex is trying to get close to X
all the time.

1<INPU	<I	<I	<INPU
T	NP	NP	T

4

NAME=	UT	UT	NAME
\C1	NA	NA	=\C1
VALUE	ME	ME	VALU
= 1	=\	=\	E= 5
TYPE=	C1	C1	TYPE=
radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	

X if flirting with someone of the opposite sex.

```

ect ect
2 3
<I <I
NP NP
UT UT
NA NA
1<INPU <INPU
ME ME
T T
=\ =\
NAME= NAME
\C1 =\ C1
VA VA
VALUE VALU
LU LU
= 1 E= 5
TYPE= 4 TYPE=
2 3
radio > radio >
TY TY
$MACR $MAC
PE PE
OBUTT ROBU
= =
ON TTON
radi radi
HTMLD HTML
o > o >
irect Direct5
$M $M
AC AC
RO RO
BU BU

```

Someone of the opposite sex is dating X.

```

TT TT
ON ON
HT HT
ML ML
Dir Dir
ect ect
2 3
<I <I
1<INPU NP NP <INPU
T UT UT T
NAME= NA NA NAME
\C1 ME ME =\ C1
VALUE =\ =\ VALU
= 1 C1 C1 E= 5
TYPE= VA VA 4 TYPE=
radio > LU LU radio >
§MACR E= E= §MAC
OBUTT 2 3 ROBU
ON TY TY TTON
HTMLD PE PE HTML
irect = = Direct5
radi radi

```

o > o >
 §M §M
 AC AC
 RO RO
 BU BU
 TT TT
 ON ON
 HT HT
 ML ML
 Dir Dir
 ect ect
 2 3

X hugs and kisses someone of the opposite sex.

1<INPU <I <I <INPU
 T NP NP T
 NAME= UT UT NAME
 \C1 NA NA =\C1
 VALUE ME ME VALU
 = 1 =\ =\ 4 E= 5
 TYPE= C1 C1 TYPE=
 radio > VA VA radio >
 §MACR LU LU §MAC
 OBUTT E= E= ROBU

	ON	2	3	TTON
	HTMLD	TY	TY	HTML
	irect	PE	PE	Direct5
		=	=	
		radi	radi	
		o >	o >	
		§M	§M	
		AC	AC	
		RO	RO	
		BU	BU	
		TT	TT	
		ON	ON	
		HT	HT	
		ML	ML	
		Dir	Dir	
		ect	ect	
		2	3	
	1<INPU	<I	<I	<INPU
	T	NP	NP	T
X works closely with a member of the opposite sex (in school or office).	NAME=	UT	UT	4 NAME
	\C1	NA	NA	=\C1
	VALUE	ME	ME	VALU

= 1	=\	=\	E= 5
TYPE=	C1	C1	TYPE=
radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

How often do you engage in the following behaviors? Never Always

	<I	<I	
	NP	NP	
	UT	UT	
	1<INPU	NA NA	<INPU
	T	ME ME	T
	NAME=	=\ =\	NAME
	\ C1	C1 C1	=\ C1
	VALUE	VA VA	VALU
	= 1	LU LU	E= 5
I look through X's drawers, handbag, or pockets.	TYPE=	E= E= 4	TYPE=
	radio >	2 3	radio >
	§MACR	TY TY	§MAC
	OBUTT	PE PE	ROBU
	ON	= =	TON
	HTMLD	radi radi	HTML
	irect	o > o >	Direct5
		§M §M	
		AC AC	
		RO RO	

		BU	BU	
		TT	TT	
		ON	ON	
		HT	HT	
		ML	ML	
		Dir	Dir	
		ect	ect	
		2	3	
		<I	<I	
	1<INPU			<INPU
		NP	NP	
	T			T
		UT	UT	
	NAME=			NAME
		NA	NA	
	\ C1			=\ C1
		ME	ME	
	VALUE			VALU
		=\	=\	
	= 1			E= 5
		C1	C1	
I call X unexpected, just to see if he or she is there.	TYPE=			4 TYPE=
		VA	VA	
	radio >			radio >
		LU	LU	
	\$MACR			\$MAC
		E=	E=	
	OBUTT			ROBU
		2	3	
	ON			TTON
		TY	TY	
	HTMLD			HTML
		PE	PE	
	irect			Direct5
		=	=	

radi radi

o > o >

§M §M

AC AC

RO RO

BU BU

TT TT

ON ON

HT HT

ML ML

Dir Dir

ect ect

2 3

I question X about previous or present romantic relationships.

1<INPU <I <I <INPU

T NP NP T

NAME= UT UT NAME

\ C1 NA NA =\ C1

VALUE ME ME 4 VALU

= 1 =\ =\ E= 5

TYPE= C1 C1 TYPE=

radio > VA VA radio >

§MACR LU LU §MAC

OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

1<INPU	<I	<I	<INPU
T	NP	NP	T
NAME=	UT	UT	NAME
\ C1	NA	NA	=\ C1

I say something nasty about someone of the opposite sex
if X shows any interest in the person.

4

VALUE	ME	ME	VALU
= 1	=\	=\	E= 5
TYPE=	C1	C1	TYPE=
radio >	VA	VA	radio >
§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

I question X about his or her telephone calls.

```

<I <I
NP NP
UT UT
NA NA
ME ME
1<INPU =\ =\ <INPU
T C1 C1 T
NAME= VA VA NAME
\C1 LU LU =\ C1
VALUE E= E= VALU
= 1 2 3 E= 5
TYPE= TY TY 4 TYPE=
radio > PE PE radio >
$MACR = = $MAC
OBUTT radi radi ROBU
ON o > o > TTON
HTMLD $M $M HTML
irect AC AC Direct5
RO RO
BU BU
TT TT
ON ON
HT HT

```

I question X about his or her whereabouts.

	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	
	<I	<I	
	NP	NP	
	UT	UT	
1<INPU			<INPU
	NA	NA	
T			T
	ME	ME	
NAME=			NAME
	=\	=\	
\ C1			=\ C1
	C1	C1	
VALUE			VALU
	VA	VA	
= 1			E= 5
	LU	LU	
TYPE=			4 TYPE=
	E=	E=	
radio >			radio >
	2	3	
\$MACR			\$MAC
	TY	TY	
OBUTT			ROBU
	PE	PE	
ON			TON
	=	=	
HTMLD			HTML
	radi	radi	
irect			Direct5
	o >	o >	
	\$M	\$M	
	AC	AC	

RO RO

BU BU

TT TT

ON ON

HT HT

ML ML

Dir Dir

ect ect

2 3

1<INPU <I <I <INPU

T NP NP T

NAME= UT UT NAME

\C1 NA NA =\C1

VALUE ME ME VALU

= 1 =\ =\ E= 5

TYPE= C1 C1 4 TYPE=

radio > VA VA radio >

§MACR LU LU §MAC

OBUTT E= E= ROBU

ON 2 3 TTON

HTMLD TY TY HTML

irect PE PE Direct5

I join in whenever I see X talking to a member of the opposite sex.

= =
 radi radi
 o > o >
 §M §M
 AC AC
 RO RO
 BU BU
 TT TT
 ON ON
 HT HT
 ML ML
 Dir Dir
 ect ect
 2 3

I pay X a surprise visit just to see who is with him or
 her.

1<INPU <I <I <INPU
 T NP NP T
 NAME= UT UT NAME
 \ C1 NA NA =\ C1
 VALUE ME ME VALU
 = 1 =\ =\ E= 5
 TYPE= C1 C1 TYPE=
 radio > VA VA radio >

§MACR	LU	LU	§MAC
OBUTT	E=	E=	ROBU
ON	2	3	TON
HTMLD	TY	TY	HTML
irect	PE	PE	Direct5
	=	=	
	radi	radi	
	o >	o >	
	§M	§M	
	AC	AC	
	RO	RO	
	BU	BU	
	TT	TT	
	ON	ON	
	HT	HT	
	ML	ML	
	Dir	Dir	
	ect	ect	
	2	3	

Appendix B: Scoring

The Multidimensional Jealousy Scale measures jealousy levels by categories. The three categories that are assessed using this instrument are cognitive, emotional and behavioral forms of jealousy. In scoring this assessment, “Scores less than three indicate normal jealousy, while scores greater than three may indicate problematic levels of jealousy” (Personality-Testing, n.d., pp. 3).

Appendix III:

Appendix IV: