2002

Infertility and marital adjustment: the influence of perception of social support, privacy preference and level of depression

Margaret Haviland Maillet
Louisiana State University and Agricultural and Mechanical College

INFERTILITY AND MARITAL ADJUSTMENT;
THE INFLUENCE OF PERCEPTION OF SOCIAL SUPPORT, PRIVACY
PREFERENCE AND LEVEL OF DEPRESSION

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

In

The School of Social Work

by
Margaret Haviland Maillet
B.S., Marquette University, 1991
M.S.W., Tulane University, 1992
December, 2002

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

The purpose of this study was to investigate the influence of perception of social support, privacy preference and level of depression on marital adjustment for couples presenting for infertility treatment. Data was obtained from three infertility clinics in Louisiana from January 1, 2001 through October 1, 2001. Forty-seven couples presenting for infertility treatment completed four questionnaires measuring marital adjustment, perception of social support, privacy preference and level of depression. Demographic and descriptive information was gathered from an information sheet completed by the subjects.

Multiple regression analysis was used to determine which, if any, of the independent variables predicted the dependent variable of marital adjustment for couples, husbands and wives. Results indicated that when using couples' scores, perception of social support from significant other and privacy reference for solitude explained a significant amount of the variance in couple marital adjustment; when using husbands' and wives scores', husbands' perception of social support from significant other and privacy preference for solitude contributed significantly to the explained variance in couples' marital adjustment. When predicting husbands' marital adjustment, only couples' perception of social support from significant other and husbands' perception of social support from significant other were significant contributors to the explained variance. Privacy preference for solitude and perception of social support from significant other contributed significantly to the explained variance in wives' marital adjustment when using couples' scores. The strongest model was found when using

husbands and wives' scores to predict wives' marital adjustment. Wives' privacy preference for solitude, level of depression, perception of social support from significant other and from friends and husbands' privacy preference for solitude combined to predict a significant amount of variance for wives' marital adjustment.

Findings from this study have implications for social work practice. As the prevalence of infertility rises, social workers who may be in a position to assist couples in coping with the experience of infertility can use these findings to help address the special issues involved and possible risks to marital adjustment for couples presenting for infertility treatment.

INTRODUCTION

Research indicates that the emotional experience of infertility generally has two components: chronic vacillating stress and the experience of loss (Eunpu, 1995).   Although infertility is usually linked to a physical problem of one spouse or the other, the stress and loss associated with infertility can have serious implications for both spouses on psychological, physical, economic, and social well-being. Many studies have indicated that the problem of infertility is experienced as a crisis or major life stressor with potentially serious negative effects on the couple's relationship (Abbey, Andrews & Halman, 1991b; Bresnick, 1981; Higgins, 1990).

Conceptual and qualitative infertility research shows that the stress placed on the couple experiencing infertility can seriously impact the marital relationship. Although most clinicians assume that the infertile couple's relationship may suffer, little quantitative research has been devoted to exploring and identifying the specific factors that may impact or mitigate these negative consequences (Leiblum, 1993). Estimates that incidences of infertility will increase to 7.7 million couples by the year 2025 shows that this is a significant social problem (Henderson, 1998). Statistics of this growing social problem highlight the lack of research available to help professionals understand the couple dynamics that may exacerbate the crisis or stress of infertility.

Area of Concern

Researchers have only recently examined the psychosocial issues involved in the infertility experience. Cross-cultural infertility literature further underscores

the social context that views infertility as a threat to women's identity and status. Across the world, women partake in risky and painful medical procedures, as well as elaborate and mystical fertility rituals, in the pursuit of the ability to bear children. Inhorn (1994) notes that in cross-cultural research on infertility, those in the political power structures often do not recognize the psychosocial impact that infertility has on the woman. Although those in power do not recognize the social consequences, the women themselves perceive their infertility as a problem with grave social consequences. Motherhood, cross culturally, is seen as a central and defining role for women. Infertility has been equated with a failure to reproduce, which socially stigmatizes women desiring to have children. Thus, infertility can be seen as a threat to the nature of being a woman and to the ability of a woman to fulfill a social role.

Infertility has come to be recognized as a significant social problem. As the medicalization of infertility advances in biomedical technologies and sophisticated research practices have evolved, the problem of infertility has been explored and addressed in the research literature. The reported cases of infertility continue to rise and are expected to grow. Explanations for the continued rise in infertility include the rise in reported cases of sexually transmitted diseases, which can cause sterility; the trend towards choosing to start childbearing at a later age when healthy pregnancy is more difficult to achieve; and the increased availability of medical technology and the heightened awareness of infertility issues, which may have led to an increase in reporting of infertility to the medical arena. With the increase in awareness and reported

incidences of infertility, more research attention has been given to the multitude of issues involved with infertility.

The experience of infertility, and the resulting stress and feelings of loss, can impact a couple's physical well-being (Taylor, 1995). Research indicates that sexual relations are often negatively impacted by infertility. Infertility treatments, which may necessitate monitoring intercourse closely, can add a sense of awkwardness and obligation to an otherwise healthy sexual relationship. As the anticipation of conception builds each month, a couple may even stop sexual relations temporarily in order to avoid disappointment (Eunpu, 1995). Infertility may also cause physical pain for either or both spouses as they undergo various invasive procedures.

As infertility is a major life stressor, the experience can have implications for all areas of functioning. In addition to the physical implications of infertility, psychological and social functioning have also been shown to be negatively impacted. The stress and loss issues involved with infertility have negative consequences on individuals' psychological well-being. A common thread in the infertility literature concerns the negative impact of infertility on self-esteem. Men and women who experience infertility often report feeling physically defective; this diminished sense of body image has a profound impact on self-esteem (Abbey, Andrews & Halman, 1992).   Van Balen and Trimbos-Kemper (1993) describe an emotional chain of events occurring after a diagnosis of infertility: a period of deep emotional disturbance and instability, followed by anger and/or depression. Infertility can lead to feelings of hopelessness, helplessness, and

guilt. Feelings of frustration, mourning and loss are also associated with infertility (Van Balen & Trimbos-Kemper, 1994). Psychologically, infertility can represent a major threat to well-being.

Infertility can also have implications for the social sphere. The advent of new infertility technologies has added social pressure to produce a biologically related child (Donchin, 1994). Patients report that infertility is experienced as a stigmatizing condition (Whitehead & Gonzalez, 1995).   An additional burden faced by an individual with infertility is their reluctance to publicize their infertility problems (Miall, 1994). However, the medicalization of infertility treatment has transformed infertility "from a private pain to a public, prolonged crisis" (Whitehead & Gonzalez, 1995, p. 28). Because of strong cultural expectations to procreate, the inability to carry out this social role can cause isolation and a sense of failure for an infertile couple. Social relationships, including family, friends and the marital dyad, can suffer negative impacts from a couple's infertility. It can create social conditions of isolation, career and job stress, as well as financial difficulties.

The financial aspect of infertility treatment can have a dramatic economic impact for a couple seeking medical treatments. The diagnostic process for infertility can be long and may involve numerous medical procedures, some requiring hospitalization. The new reproductive technologies, such as in-vitro fertilization and artificial insemination, carry a heavy price tag. As medical insurance does not cover many or all of these procedures, the couples are left to pay the medical bills.

Along with the increasing body of knowledge about the psychosocial ramifications of infertility on the individual, infertility researchers have found individual stressors affect the marital relationship; there can be dramatic differences in the way that women and men react to the infertility crisis. A number of studies have found that men and women react differently to infertility, creating a strain on the marital relationship because of different gender expectations. Gendered reactions and coping styles can make it difficult for spouses to fully understand and support each other (Abbey, Andrews & Halman, 1994). These relationship dynamics involved with the crisis of infertility can have an impact on the marital relationship.

When considering the potential impact of the infertility experience on the marital relationship, it is necessary to consider two areas: the individual psychosocial reactions that each spouse experiences and their dynamic interactions, and the impact of gender differences on reactions to infertility felt by men and women. While considerable research and attention has been focused on the psychosocial impact of infertility, less attention has been focused on the impact of infertility on marital satisfaction (Leiblum, 1993). Marital satisfaction can be defined as an attitude of greater or lesser favorability toward one's own spouse and marital relationship (Roach, Frazier, & Bowden, 1981). Studies have shown mixed results when exploring the impact of infertility on marital satisfaction.

As research has shown that provision of support is a central aspect of marriage that impacts marital satisfaction (Abbey et al., 1995), it is important to

consider the impact of perceived social support for the infertile couple. Social support can be defined as any social relationship that operates as "coping assistance" (Zimet, Dahlem, Zimet & Harley, 1988). Thus, the concept of social support encompasses both the quantity and quality of the supportive relationships. The effects of social support networks have been well documented in the literature (Cohen & Willis, 1985). Social support, whether familial, peer or spousal, can function as a buffer or mitigating factor to stressful life events and a positive enhancer of self-esteem. Social support can be examined in terms of both positive and negative life stressors. Life transitions typically considered negative, such as divorce or widowhood, have been shown to be mitigated by social support. On the other hand, the stress involved in life events typically defined as positive, such as graduation, birth of a new baby, etc., are also made less stressful by social support (Pittman & Lloyd, 1988). Research has shown that significant gender differences exist in perception of social support (Zimet et al., 1988). As infertility can be considered a crisis and thus, a negative life event, social support may have an impact on the marital relationship for infertile couples.

Privacy is important for individuals in managing their social interactions and their negotiation of social support mechanisms. Privacy can be defined as "a condition of separateness, deliberately chosen and protected by an individual (or group), a separateness which the individual can…abandon or break down if he so chooses (Kelvin, 1973, p. 253). The concept of privacy preference can be thought of as the value that an individual places on that separateness. Research

6

has shown vast differences in the amount of separateness preferred by men and women (Craddock, 1997). Craddock (1994) found that couple differences in privacy preferences can affect marital satisfaction. In addition to differences in privacy preferences between genders, Pedersen (1987) found that environmental variables, such as geographic mobility and urban or rural living, and individual characteristics such as tolerance for large crowds, play a role in privacy preferences. No research has been done to specifically address the issue of privacy preferences for couples experiencing infertility. As individual reactions to the stress of infertility can cause conflict in couples, and perceptions of social support vary in men and women, the exploration of the role of privacy preference in dynamic couple interactions for infertile couples must be explored.

Purpose of the Study

The broad purpose of this dissertation is to gain an understanding of the relationship between perception of social support, privacy preferences and level of depression and the marital relationship for couples experiencing infertility. Perception of social support and privacy preferences for couples presenting for infertility treatment are thought to be related in that by seeking social support for the crisis of infertility, the couple is forced to negotiate their individual privacy preferences in an attempt to compromise and obtain social support. These differences and negotiations are thought to have an impact on the marriage. Additionally, the psychological consequences of infertility are thought to impact the marital dyad and the marital relationship. This dissertation provides an empirical description and analysis of the impact of perceptions of social support,

privacy preference and level of depression on the marital relationship for couples presenting for infertility treatment.

While there is a wide body of literature addressing the social and psychological impact on the infertile individual, there is little quantitative research specifically addressing the impact on the couple. No research is available examining the combined effect of the implications of perception of social support, privacy preference and level of depression on the infertile couple's marital relationship.

By using quantitative methods of assessment, this dissertation contributes to the deeper understanding of the complex dynamics affecting infertile couples and their marital relationship. The goal of this dissertation is to address the following research questions:

1: What is the relationship between perception of social support and the marital relationship for couples presenting for infertility treatment?

2: What is the relationship between privacy preferences and the marital relationship for couples presenting for infertility treatment?

3: What is the relationship between level of depression and the marital relationship for couples presenting for infertility treatment?

This study will be the first to specifically investigate the impact of perception of social support, privacy preferences and level of depression on marital relationship for infertile couples. The results of this study will expand knowledge about the psychosocial implications of infertility, about gender

differences in reactions to infertility, and about how these dynamic interactions affect the marital relationship.

Advancement of Social Work Knowledge

As the awareness and reported cases of infertility continue to increase, so to will the number of infertile couples seeking guidance from social workers to deal with the psychosocial issues related to the infertility experience. As social workers may come into contact with couples struggling with infertility in a wide variety of work settings, including mental health and health settings, this dissertation will provide information for more effective social work practice. Social workers are uniquely qualified to assist couples in addressing issues in all areas of psychosocial functioning.

Social work continues to struggle to define itself as a separate discipline with it's own knowledge base. Because the majority of infertility literature falls within other disciplines, it is imperative that rigorous and relevant research be conducted to help to define social work discipline-specific knowledge. This dissertation will add to the social work knowledge base regarding the experience of infertility, and further expand the understanding of how stressful life events affect the marital relationship. At a micro level, social workers need information to direct them in their assessments, interventions and practice with the infertile couple seeking help. Being informed about the specific psychosocial implications of infertility on the couple can help guide the choice of interventions for the social worker.

At a macro level, by broadening the social work knowledge base and helping social workers to be more informed and knowledgeable about the clients they are helping, social workers will become more educated about the issues involved in infertility. As experts, social workers can become more effectively involved in policy level research and action to address the needs of the infertile couple. Policymakers and advocates require sound empirical knowledge about the psychosocial implications involved in the infertility experience for couples in order to guide them in their work to create effective policies and programs for infertile couples. This dissertation will help to guide macro level social workers in their policy development and practice.

Importance of the Study

The results of this dissertation expand social work knowledge on the implications of infertility for couples by examining the effects of perception of social support, privacy preference and level of depression on the marital relationship. This dissertation looks at the implications of these variables on one measure of the marital relationship, marital adjustment, which is a more objective view by the couple of the status of their marital relationship. No previous research exists addressing the implications of social support, privacy preference and level of depression for couples experiencing infertility. Seeking to uncover the relationship between theses variables can help to further our understanding of couples facing the infertility experience.

Further understanding of the implications of the infertility experience will guide social workers, program directors and policy makers in making decisions to best

serve the psychosocial needs of the infertile couple. Clear understanding of the

potential risk factors to problems with marital adjustment for the infertile couple

will allow social workers on both the micro and macro level to focus resources on

addressing these problem areas.

LITERATURE REVIEW

A review of the clinical and research literature on infertility identifies many variables which may be related to the predication of the marital relationship for couples experiencing infertility. This literature review includes an examination of previous research on three specific variables which helped to identify the importance of these variables in explaining the impact of infertility on the marital relationship: privacy preference, perception of social support and level of depression.

This literature review will examine two broad areas—the experience of infertility and previous research on the marital relationship. Woven into these two areas will be an exploration of the importance of gender differences. Infertility is experienced as a crisis (Bresnick, 1981; Fouad & Fahje, 1989; Menning, 1980; Shapiro, 1982), which involves negative consequences to physical, psychological and social well-being. The experience of infertility places many stresses on a marriage, and can negatively impact marital satisfaction (Bresnick, 1981; Shapiro, 1982). Although there is a wide body of literature exploring the psychological impact of infertility on the individual (largely the woman), research studies focusing on the impact of infertility on marital satisfaction are sparse. Hence, in order to understand the impact of infertility on the marital relationship, it is important to understand the interaction of social support with the need to maintain privacy in relationships, as well as the influence of level of depression. Thus, this literature review explores theory and available research related to the marital relationship for infertile couples, and to perception of social support,

12

privacy preferences and level of depression, which will be shown to play an important role in the marital relationship for infertile couples.

<u>Gender Differences in Reactions to Infertility</u>

The problem of infertility certainly has historical significance. Prior to the last few decades, available historical information on infertility focused on women within their social context. Because women more than men have historically been identified with their reproductive organs, material that focused on infertility almost exclusively centered on the female. Furthermore, historical material is limited in that the women studied were likely to be Caucasian, middle class and urban (Rhodes, 1988).

It is estimated that one in six couples that desire to have a child will experience infertility, defined as having tried to conceive a child unsuccessfully for at least one year (Forrest & Gilbert, 1992). As recently as two decades ago, 40% to 50% of infertility had no known physical cause. Current research, however, reveals that 90% of infertility has a known physical cause; 40% of infertility is causally related to the women, 40% is causally related to the man and 20% is shared (Menning, 1988). Although infertility is typically due to physical problems of only one partner, both partners feel the effects. Cultural and societal norms generally place a higher pressure on females to procreate and to become mothers, due to the high value of the role of motherhood in society. Traditionally, motherhood is perceived as the central role for women, while paid employment is the central role for men (Miall, 1989; Whitehead & Gonzalez, 1994). Thus, infertility represents a different threat to the social roles of men and women.

Men and women cope with the experience, diagnosis, label and treatment of infertility in different ways. Physical well-being is more likely to be impacted for women than for men. For example, infertility treatments, such as in vitro fertilization and other invasive procedures, are more often performed on women. Thus, women have the added stress of adjusting to potentially painful medical techniques. Additionally, infertility treatment often involves hormonal therapies that can affect mood for women. Jordan and Revenson (1999) report that women feel anxious about mood and body changes resulting from these hormonal treatments, while men feel anxiety about giving injections or other forms of medications to their wives, worrying that they may not give the medication properly. In general, women's treatment for infertility is more painful and more financially costly (Whitehead & Gonzalez, 1994). Because infertility treatment more often than not involves the woman's reproductive system, her life may be more disrupted than her partner's (Abbey et al., 1994).

There is a body of qualitative literature that suggests that the psychological well-being of women is more negatively impacted by infertility than men (Abbey et al., 1991a; Brand, 1989; Daniluk, 1996). More research attention has been paid to exploring the psychological reactions of women, due in part to the societal norms and culture that shape the research. Carmelli and Birenbaum-Carmelli (1994) found that although male physical impairments cause half of the reported cases of infertility, the literature on the psychosocial aspects of male infertility is sparse, and researchers still put greater effort into studying the female aspects of

infertility. The body of research about the psychological effect of infertility on women is more extensive.

Research suggests that women and men experience different psychological reactions to infertility (Morrow, Thoreson & Penney, 1995). Some authors suggest that the differences in reactions to infertility depend on who carries the primary diagnosis. When the infertility is male-related, Leiblum (1993) found that men experience stress and loss at levels similar to women who are diagnosed as infertile. Women, however, express higher levels of stress regardless of who carries the primary diagnosis of infertility.

The negative psychological effect that women suffer from infertility has been widely explored in the literature. Greil, Leitko and Porter (1988) suggest that women are likely to see infertility as a "cataclysmic role failure" whereas men are likely to see infertility as "a disconcerting event but not a tragedy" (p. 172). Women experiencing infertility have been found to be more depressed, anxious, guilty, and frustrated than men. Wright, Duchesne, Sabourin, Bissonnette, Benoit and Girard (1991) found that women experiencing infertility scored higher than their spouses on a global measure of psychiatric symptoms. Women report that infertility represents a threat to self-concept, sexuality and important life goals (Stanton, Tennen, Affleck & Mendola, 1991). Williams (1997) found that women experience anger and resentment, feelings of inadequacy and worthlessness and envy of other mothers. Women often experience infertility as a stigmatizing condition and as a threat to their sense of self, their social role and their ability to be successful as a woman (Miall, 1994).

There is a smaller body of literature on the male experience of infertility, both as a partner and as the partner with the primary diagnosis (Daniluk, 1997). Men experience infertility as a stressful event (Band, Edelmann, Avery & Brinsden, 1998). Glover and Gannon (1998) found that in a study of men attending a specialist male infertility clinic, the men reported experiencing high levels of anxiety, feeling "less of a man," and blaming themselves for the infertility. The anxiety of these infertile men suggests that their experience is perceived more in terms of threat than loss. Importantly, however, they were not depressed, whereas women have been described as experiencing infertility as bereavement, consistent with the finding of high levels of depression (Menning, 1980; Daniluk, 1996). Infertile males often report having sexual problems, such as erectile dysfunction (Elliot, 1998), while the male partners of infertile females report decreased sexual satisfaction (Leiblum, 1993).

As this review of the literature indicates, there are some conflicting findings in the research regarding the experience of infertility and the impact of the experience on men, women and the martial relationship. However, a majority of the authors agree that, to differing degrees, infertility is experienced as a life crisis, a major disruption in the steady progress of daily life.

> With the crisis comes disequilibrium-unbalance. Everything feels out of kilter. But rarely does it start with a roar. Instead, it creeps in quickly, nefariously. The crisis of infertility begins with slowly mounting fear, the subtle but nagging anxiety that something is not right (Nachtigall and Mehren, 1991, p. 38).

Impact of Infertility on the Marital Relationship

Research literature specifically examining the impact of infertility on marital satisfaction is sparse and largely conceptual and qualitative in nature. Most studies focus on the psychological impact of infertility and extrapolate that the psychological reactions that a couple experiences must have a resulting negative effect on marital satisfaction. There is a lack of empirical knowledge addressing marital satisfaction for infertile couples. Many of the claims that infertility leads to a negative effect on psychological functioning, emotional distress and marital problems are based on anecdotal reports and lack the use of standardized measures (Edelmann, Connelly & Bartlett, 1994). Research regarding the impact of infertility on the marriage is unclear and at times confusing (Amir, Horesh & Lin-Stein, 1999).

A common thread in the literature identifies the fact that infertility can be devastating for a couple desiring a child. "For many couples, procreation represents a highly significant and emotional bond…a public display of their 'coupledom'…to be frustrated or thwarted in this enterprise of making a baby together is a major insult as well as, potentially, a major loss" (Leiblum, 1996). The experience can stress a couple's personal relationship, diminish sexual satisfaction, deplete financial resources, threaten perceptions of masculinity and femininity and cause psychological stress. The experience of infertility is unanticipated, and often represents a challenge to or loss of a primary life goal for a couple (Forrest & Gilbert, 1992). Research indicates that many couples

facing infertility go through a series of reactions similar to those found in other grief and crisis experiences. Although these phases have been conceptualized differently by different authors (Forrest & Gilbert, 1992; Menning, 1988; Shapiro 1982), some basic reactions include denial, anger, isolation, guilt and depression. Most authors agree that there is no set order to the reactions and that revisiting phases is common for those struggling with infertility.

Because of the serious and varied psychological impact, men and women react differently to the stressors related to the infertility experience and the marital relationship can be weakened. Andrews et al. (1991a) suggest that infertility places an enormous burden on the marital relationship and is associated with negative effects on the marital relationship. For example, in terms of coping, infertile men appear to engage in denial, distancing and avoidance, which may conflict with their partner's coping strategies (Abbey et al., 1991a, Stanton et al., 1991; Daniluk, 1997).

Numerous authors have addressed the issue of stressful life events on the marital relationship and there is widespread anecdotal evidence that infertility involves substantial stress, which can negatively impact the martial relationship (Andrews et al., 1991b; Daniluk, 1997; Greenfield, 1996; Valentine, 1986), but few have specifically examined the effect of infertility on levels of marital satisfaction. The empirical research that is available on marital satisfaction suggests somewhat mixed results. Leiblum (1993) suggests that although women experiencing infertility report lower levels of marital satisfaction, the majority of infertile men and women fall within the normal range of marital

satisfaction. Similarly, in a three year follow-up longitudinal study, Slade, Ravel, Buck and Leiberman (1992), found that marital adjustment in couples was generally considered to be good.   These results may be questionable due to small sample size.

Some of the discrepancies in results of research on infertility and marital satisfaction may be due to research procedures and testing issues. Infertility literature has been criticized for its lack of scientific rigor and lack of utilization of standardized measures (Pepe & Byrne, 1991). Connolly, Edrumann, Cook & Robson (1991) suggest that much of the literature on the link between infertility and the marital relationship is "muddled" because of several methodological inadequacies (p. 460). The infertile couple being treated as a homogenous group with no uniform testing instruments contributes to the mixed research results (Connolly et al., 1991).

Pepe and Byrne (1991) used the Index of Marital Satisfaction (Hudson, 1982) and found that marital satisfaction was decreased for couples presenting for infertility treatment. However, this study's generalizability is limited in that only women were surveyed and the study was retrospective. Most of the researchers investigating the effects of infertility on the marital relationship have used the Dyadic Adjustment Scale and have found no significant impact of infertility on marital relationships.

The mixed results in research can in part be explained by operationalization of key concepts. There are inherent conceptual difficulties in measuring qualities of a marital relationship (Roach, Frazier & Bowden, 1981).   The research literature

on infertility and the marital relationship uses two terms to describe the marriage: marital adjustment and marital satisfaction. The concept of marital adjustment is used to define the process that couples use to achieve a harmonious and functional marital relationship; the unit of analysis is the marital dyad.

> Conceiving of marital adjustment as the process of adaptation of the husband and wife in such a way as to avoid or resolve conflict sufficiently so that the mates feel satisfied with the marriage and each other, develop common interests and activities, and feel that the marriage is fulfilling their expectations (Sabatelli, 1988).

Marital satisfaction is typically used to refer to the individual's attitudes toward the partner and the relationship. The unit of analysis is the individual's attitude or feelings, and the object of analysis is the individuals' subjective impressions (rather than objective accounts of) the marriage. (Sabatelli, 1988, p. 894). The terms adjustment and satisfaction are often used interchangeably in the literature and cause confusion.

An additional limitation to most research examining the impact of infertility on the marital relationship is that men are often excluded from the study. Thus, the findings only reflect the woman's point of view and fail to include both partners; one such study that did not include men found that infertility caused no negative implications for the marriage (Downey & McKinney, 1992). Thus, a review of the infertility literature regarding the marital relationship reveals some conceptual, testing and sampling issues, which may impact the usefulness of the findings and implications.

<u>Theoretical Perspectives on Social Support</u>

The influence of social relationships on the ways in which individuals cope with life stressors in a variety of areas has been well examined (Abbey et al., 1991b). Social support is usually regarded as a resource (Zimet, Dahlen, Zimet & Farley, 1988).   Although most authors agree that social support involves some type of relationship transaction, there are differing theories on the best definition of this transaction. Shumaker and Brownell (1984) suggest that social support can be defined as "an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (p. 13). However, some researchers argue that social support can have either a negative or positive effect (Zimet et al., 1988). Abbey et al. (1995) argue that sometimes people believe they are providing support, however, the recipient perceives the deeds or actions to be critical or demanding. Researchers agree that the provider cannot measure social support; it must be a subjective appraisal made by the recipient.

There is an increasing body of literature exploring the role of social support in health maintenance. Many authors support the hypothesis that people with spouses, friends and family members who provide social support are in better health than those with fewer supportive social contacts (Cohen & Willis, 1985). The beneficial effects of social support for those individuals experiencing physical or emotional stress are well documented (Abbey et al., 1995). In regard to psychological well-being, Cohen and Willis (1985) have developed the "buffering model", which posits that social support buffers or protects individuals from

21

potentially negative influences of stressful events. Thus, although social support may be helpful in all circumstances, it may be particularly beneficial during times of stress.

Social support can take many forms. Some authors have explored the nature of social support in terms of the type of assistance provided. Thoits (1986) suggested that social support can act as a buffer to a stressful situation when providers help the recipient to change the situation (i.e. provide child-care to an overworked parent), alter the meaning it has (i.e. help the recipient see the stressful event as less threatening) and/or change the recipient's affective response to the event (i.e. help the recipient who is anxious and can not sleep with sleeping pills).

Researchers do agree, however, that the perception of social support and the meaning attributed to social support vary across age and gender; women report higher levels of social support than men and older adults report lower levels of support than younger adults (Pittman & Lloyd, 1988). An interesting paradox in the literature surrounds the relationship between gender, social support and depression. Although women report higher levels of depression than men, they also generally report more social support—a factor found to reduce depressive symptoms (Turner, 1994). In her qualitative study, Turner (1994) found that even though women report higher perceptions of social support, they also experience higher levels of depression due to the fact that they also report more negative aspects of their social supports than do men. This relationship has interesting

implications for the earlier contention that not all social support received for infertile couples is perceived as positive.

Social Support and Infertility

Research on social relationships as support mechanisms for infertile couples has focused on the perceptions of the infertile individuals themselves (Miall, 1994). According to Greil et al., (1988) the experience of being infertile is not only negotiated between the couple and their physician, but also with family and friends. As discussed previously, social support can be conceptualized as a buffer against the negative effects of a stressful situation or as a negative influence, which may serve to underscore stress. The fact that infertility, as a stressful event, is also combined with the influence of stigma and a potential threat to successful fulfillment of social roles, may signal that social support does not buffer the negative effects of infertility as in other events.

Matt and Dean (1993) have argued that social support provided by friends serves to provide a referral to evaluate one's own health and social role, thus, protecting against negative self evaluation. This support then acts as a buffer in that it allows the recipient to gauge and appraise him or herself positively. Miall (1994) argues, however, that social support provided to infertile individuals often may exacerbate rather than alleviate the stress involved with infertility. Procreation, especially motherhood, is viewed in our cultural context as a central social role that is biologically determined. Thus, Miall (1994) contends that if social support is offered by providing referrals for evaluation of one's own health and social roles, this emphasis on the biological may cause women experiencing

infertility to feel inadequate or incomplete rather than emotionally supported.

Thus, social constructs of infertility held by providers of social support may

influence, in a negative way, their capacity to be perceived as a buffer to the

stress of infertility. To the contrary, Amir et al. (1999) found that social support

given to women experiencing infertility served as a buffer against the stress of

infertility diagnosis and treatment and helped to maintain a sense of well being

for the women.

Researchers have found that significant others who may be in a position to

provide social support may recommend solutions that are stigmatizing and

behave in ways that are considered unsupportive (Abbey et al., 1991b).

However, several authors have shown that infertile couples do seek out and

desire more recognition as to the extent of their loss and time to talk about their

feelings with their friends (Conway & Valentine, 1988; Fouad & Fahje, 1989;

Mahlstedt, 1985).   Gibson and Myers (2002) found that family and partner

supports are very important coping resources for women coping with infertility

stress. So, while individuals experiencing infertility, especially women, may seek

out social support, often they may receive inadequate or negative social

assistance from family and friends.

A further issue, which impacts the provision and receipt of social support to

individuals experiencing infertility, is the medicalization of infertility, which can be

examined in terms of the cultural context. Whereas infertility was once a

condition that was kept between the couple, the advent of new reproductive

technologies has medicalized infertility. This can be seen as stigmatizing, in that

unless an infertile couple exhausts all possible medical interventions, they may be seen as not attempting to fulfill their social role (Miall, 1994). Miall (1994) notes that medical intervention is seen as a "solution" and can be stigmatizing when recommended by others who are well-meaning. Significant others who encourage medical intervention may in fact be increasing the stress felt by the couple by recommending procedures that may be painful, both emotionally and physically.

An additional phenomenon, which may exacerbate the stress and negative emotional impact of infertility, is the anecdotal belief that infertility is due to psychological characteristics. Miall (1994) notes that it is a widely held belief that all an infertile couple needs is to "relax or take a vacation" or that they were "trying too hard". These well-intentioned, albeit misinformed, suggestions are perceived as stigmatizing and demanding. Miall (1994) notes that one infertile woman reported, "We got a lot of advice about going for a nice holiday, having a rest. I mean the implication is there's something wrong with you…You're too uptight" (p. 412). In terms of social support literature, this experience supports the idea that social support can also be experienced as negative.

In addition to social support from family and friends, couples that experience infertility will seek each other out for support through the crisis of infertility. Not only is the individual impacted in terms of their psychological well-being, but they are also stressed in terms of their ability to assist their partner in negotiating the infertility experience. There are some conflicts in the literature regarding the ability of infertile couples to successfully assist each other in coping with the

crisis. For example, Van Keep and Scmidt-Elmendorff (1975) found that compared with a matched sample of control subjects, couples experiencing infertility had a higher level of communication and greater consensus on a wider range of subjects. However, research has also shown that conflict in a marriage can occur when the way one spouse attempts to be supportive is inconsistent with the individual needs of the other spouse. In Valentine's (1986) study, the majority of female participants expressed a desire to increase the time spent talking to their husbands about infertility; the husbands reported that although they had a desire to be helpful to their wives, such conversations actually served to increase their own stress. Thus, at a time when marital closeness is needed or desired by one or both spouses, differences in coping and support lead to unmet needs.

Theoretical Perspectives on Privacy Preference

There is some debate among researchers as to the best definition of privacy. Kelvin (1973) defined privacy as "a condition of separateness, deliberately chosen and protected by an individual (or group), a separateness which the individual can…abandon or break down if he so chooses" (p. 253). Privacy does not involve removing oneself from others, but rather controlling the amount of contact one has with others. Privacy can be conceptualized in terms of a boundary control, which limits the access to oneself or group. The individual regulates with whom contact will occur, and how much and what type of interaction will be involved (Derlega, Metts, Petronio & Margulis, 1993; Pedersen, 1996).

Various authors have conceptualized privacy as multi-dimensional. Marshall (1974) identified six components of privacy: solitude (the desire to be alone and undisturbed), reserve (the desire to disclose little about oneself), not neighboring (the desire to minimize contact with neighbors), seclusion (the desire to screen out unwanted visual and auditory input through the use of barriers around one's home), intimacy (the desire to get away from others in order to spend time with one's intimate or family), and anonymity (the desire to be an unidentifiable individual). Later research, in an attempt to standardize the operationalization of privacy, identified five concepts of privacy: Solitude, intimacy with family, intimacy with friends, anonymity, reserve and isolation (Pedersen, 1982). The main difference in Pederson's conceptualization of privacy preferences (1982) is the distinction between solitude and isolation. Whereas solitude involves shutting oneself off from outside stimuli by use of barriers, isolation involves an assumption of mobility. Isolation involves placing geographical distance between oneself and the unwanted stimuli (Pedersen, 1987).

Individuals use privacy as a mechanism to negotiate social interaction. By negotiating and transacting with others to a degree chosen by the individual, that person is asserting their privacy preference. A privacy preference is the value that an individual places on the separateness he/she chooses. Kelvin (1973) identified three factors, which are involved in the concepts of privacy and privacy preference. In negotiating privacy preference, there is an assumption that the individual is independent (i.e. the individual is autonomous and can make choices about regulating his/her environment), the individual is vulnerable (i.e. in

27

the sense that his/her independence is potentially threatened) and that others have power over the individual (whether potential or actual). These three factors are involved in any negotiation of privacy preference.

There is agreement in the privacy literature that differences exist across gender as to privacy preference; however, researchers have mixed results as to which aspects of privacy are different by gender. Marshall (1974) found that women score significantly higher on privacy preference measure of reserve, solitude, intimacy and anonymity. However, Pedersen (1987) did not find significant differences between men and women on reserve, solitude and anonymity; intimacy with friends and intimacy with family were found to be significantly different for men and women. The lack of consensus may in part be due to operationalization and testing issues. Pedersen (1982) found that in addition to gender, environmental variables and personality characteristics are likely to influence an individual's immediate choice of privacy (Pedersen, 1987). The preference by women of intimacy reflects the cultural climate and social context of women. When given a choice, Pederson (1987) suggests that women choose to limit the access that certain others have to them by restricting their own interactions to either family or friends; men, however, seek isolation to a significantly greater degree than do women. Men are generally more equipped than women to seek geographical distance and to remove themselves from unwanted stimuli, in that they can protect themselves to a greater degree.

Privacy Preference, Social Support and Infertility

A review of the literature points to a connection between the negotiation of privacy and level of social support for the infertile couple. Infertile couples may go to great lengths to keep their condition a secret from others in an attempt to avoid pity, inappropriate or insensitive advice, and the stigma associated with infertility (Forrest & Gilbert, 1992; Miall, 1994). Feelings of jealousy and resentment toward friends with children, in addition to the desire to avoid inappropriate questioning by would-be grandparents or curious co-workers and friends are all contributing factors to infertile couples ambivalence about discussing their condition with others (Butler & Koraleski, 1990). When infertile couples do choose to disclose their infertility with others, research shows that the couple often feels a sense of further isolation because their friends/family avoid the subject or do not know how to respond appropriately. Thus, both disclosure and non-disclosure of the infertility can lead to a sense of isolation for the infertile couple.

Coping strategies employed by infertile couples serve to further underscore the relationship between privacy preference and perception of social support. Klock (1997) identified two coping mechanism that infertile couples use to gain social support in dealing with the stress associated with infertility. Problem-focused coping refers to those behaviors that attempt to change the problem or situation or change an individual's reaction to the situation. For example, an infertile individual may seek out information regarding the success rate of a certain infertility clinic, or investigate a specific treatment plan with an infertility

specialist. Emotion-focused coping strategies refer to those behaviors that serve to help the individual process the feelings associated with his/her infertility. Emotion-focused coping strategies for an individual would include calling a friend to discuss a treatment procedure or doctor visit, or attending a support group to share experiences with other infertile individuals (Klock, 1997).

Both emotion-focused and problem-focused coping strategies involve negotiation of privacy preferences. Reserve is an important privacy preference factor in infertile couples. Reserve involves the amount of disclosure one is comfortable sharing with others. Disclosure becomes an important part of the process of diagnosis and treatment for infertility. The sexual lives of couples are generally kept private and only discussed within the marital dyad. However, infertility makes these once private issues much more public, and forces the couple to disclose personal information in the process of diagnosis and treatment, as well as in the pursuit of social support. As with most life stresses, seeking out social support is a common way of coping. The infertile individual must appraise his/her available social resources or seek out new resources, and negotiate a level of disclosure to these resources in order to access social support. Such level of disclosure, however, involves a certain amount of risk and vulnerability; sharing personal information with others assumes a level of trust. There is variation across genders as to the level of comfort with disclosure (Derlega et al., 1993).

Clearly, there are differences in the amount and type of privacy desired across genders; however, Craddock (1994) states that there is little examination

of privacy preferences in the marital research literature. Authors do agree that there is a need to negotiate differences in privacy preferences when one partner strongly values the need for privacy but this value is not shared by his/her partner.

Two of the four components of privacy identified earlier are strong indicators for producing marital conflict: Solitude and reserve. In these cases, extremely strong and perhaps unusually dominant preferences for separateness (being alone and low on self-disclosure) are likely to conflict with and frustrate physical and emotional closeness, both of which have been shown to be associated with marital satisfaction (Merves-Okin, Amidon & Bernt, 1991). As privacy preference negotiation involves power, Craddock (1994) asserts that conflicts in privacy preferences for a married couple will necessarily involve some level of a power struggle. For example, in a case where the preferences of one partner are such that he/she requires the involvement of his/her spouse if these desires are to be met, cooperation is not likely to be available if the other partner has strongly contrasting privacy preferences.

Although no specific research has been conducted which examines the impact of privacy preferences on the martial relationship for infertile couples, research does indicate that there are definite gender differences that have an impact on the couple. Daniluk (1997) found that infertile men tend to isolate themselves from disclosing information related to their condition with others, and rely on their wives for their primary source of support and communication.

Women, however, tend to be more willing to access their social support resources outside the marriage to cope with the infertility experience.

Theoretical Perspectives on Depression, Infertility and the Marital Relationship

As discussed throughout this review of the literature on infertility, research regarding the psychological impact of infertility on the couple has somewhat mixed results. Most authors agree that psychological functioning is negatively impacted, to varying degrees, for men and women experiencing infertility (Abbey et al., 1991a; Daniluk, 1996). However, some authors argue that claims of the negative psychological impact for couples experiencing infertility are due to methodological issues. Edelmann, Connelly and Bartlett (1994) found that the psychological functioning of couples about to embark on in-vitro fertilization treatment did not differ significantly from normative data.

As discussed earlier, most research indicates a difference in terms of levels of depression experienced by men and women as a reaction to the experience of infertility. While men tend to view the infertility as a threat more than a loss, women tend to experience the infertility as a loss or a bereavement (Glover & Gannon, 1998; Menning, 1980; Daniluk, 1996). Several authors agree that women experience the loss associated with infertility with more intensity and show greater distress than do men (Forrest & Gilbert, 1992; Greil et al., 1988; Valentine, 1986). Guilt is often a response to infertility, and is usually experienced differently by men and women. Several researchers have found that women tend to blame themselves for the infertility, even when the physical cause is found to be related to the man (Forrest and Gilbert, 1992; Maill, 1989;

32

Taylor, 1995). When women direct their feelings of guilt and isolation inward, depression is common (Covington, 1988). It is accepted in the infertility literature that depression, especially for women, is a natural response to the experience of infertility. For some it is an episodic or brief reaction; "for others, depression—with occasional respites—is a daily curse throughout the entire process" (Mahlstedt, 1985, p. 336). Domar (1997) found that women experiencing infertility had significantly higher depression scores than control subjects and had twice the prevalence of depressive symptoms. According to Domer (1997), up to 11% of women experiencing infertility meet the criteria for a current major depressive episode.

Research indicates that women experience infertility as a loss on many levels. Physically, infertility may cause a woman to feel her body is ineffective or inadequate (Mahlstedt, 1985) resulting in feelings of inadequacy and shame. Socially, women report feeling a sense of loss when infertility does not allow them to experience pregnancy and childbirth. They report missing the social experience of being pregnant and sharing that experience with others (Forrest & Gilbert, 1992). Another major loss brought on by infertility is a sense of control. Because infertility can be seen by the couple as an inability to carry out a major life goal, the couple may not feel confident in their ability to plan for their immediate or long-range future (Mahlstedt, 1985).

For over two decades, studies have documented a robust association between depressive symptoms and relationship functioning. For example, in a study of couples that presented for treatment of marital problems, approximately

50% were composed of at least one spouse who was clinically depressed (Remen & Chambless, 2001). Similarly, in a 12 month study of community volunteers, initial marital dissatisfaction was significantly associated with increased incidence of major depressive episodes (Whisman & Bruce, 1999). Among married couples, relationships in which one member is depressed have been found to be characterized by more tension, hostility, and negative expressiveness than that in relationships of couples where neither partner experiences depressive symptoms (Thompson, Whiffen, & Blain, 1995). Among community and clinical samples of married couples, several studies have demonstrated that the association between depression and relationship satisfaction tends to fall in the moderate to strong range for both sexes (Thompson et al., 1995).

Thus, as infertility literature points to the negative psychological impact, to varying degrees, on the couple, and marital research highlights the negative impact of depressive symptoms on marital interaction, exploring the impact of depressive symptoms on the marital relationship for infertile couples can be an important indicator of the marital functioning for the infertile couple.

Literature Review Summary

Infertility is a psychologically and physically challenging stressful life event. Infertility literature shows that differences exist in the way that men and women react to the stress of infertility. Although there is some disagreement about the exact nature of the psychological impact of infertility on the couple, researchers agree that a strain is placed on the marital relationship.

In coping with infertility, as with other major life stressors, seeking social support is an important coping mechanism used by couples undergoing infertility treatment. In the process of seeking social support from friends and family, infertile couples are forced to disclose information that they may otherwise keep private. This dissertation seeks to investigate the impact of couple differences in privacy preferences and perceptions of social support, as literature has shown that there are gendered differences in these two variables; it can be anticipated that these differences may place added strain on an already stressful situation.

Finally, there is a wide body of literature suggesting that the psychological impact of infertility is experienced as more devastating to women. This dissertation will include a measure of levels of depression to determine if there are gendered differences in levels of depression and what the resulting impact is on the marital relationship.

METHODOLOGY

Conceptual Framework

In an effort to understand the effects of perception of social support, privacy preferences and level of depression on the couple, the current study analyzes data on marital adjustment of couples presenting for infertility treatment. Data was analyzed from surveys taken by couples presenting for treatment at three infertility clinics in Louisiana. (See Appendices A through F for copies of the instruments).

The null hypothesis in this research was that no relationship existed between perception of social support, privacy preference, level of depression and marital adjustment for men and women presenting for infertility treatment. Tested against the null hypothesis were possible effects of perceived social support, privacy preferences and level of depression on marital adjustment for couples presenting for infertility treatment.

Hypotheses

This dissertation proposed to further investigate the conflicting findings of previous research by addressing three primary research questions. The questions were addressed with six sets of hypotheses using quantitative data that were based on the research literature.

QUESTION 1: What is the relationship between perception of social support and marital adjustment for couples presenting for infertility treatment? This question will be addressed with hypotheses 1a through 3i, using the

36

Multidimensional Scale of Perceived Social Support (MSPSS) and the Locke-Wallace Marital Adjustment Test (LWMAT).

1a. The couples' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1b. The couples' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1c. The couples' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1d. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1e. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment

1f. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1g. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1h. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1i. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

2a. The couples' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2b. The couples' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands'

marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2c. The couples' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2d. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2e. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2f. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2g. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2h. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2i. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

3a. The couples' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3b. The couples' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3c. The couples' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3d. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3e. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3f. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3g. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

3h. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels

of perception of social support from significant other contributing to high levels of marital adjustment.

3i. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

QUESTION 2: What is the relationship between privacy preferences and marital adjustment for couples presenting for infertility treatment? This question will be addressed with hypotheses 4a through 5i, using the Relationship Privacy Preference Scale (RPPS) and the Locke-Wallace Marital Adjustment Test (LWMAT).

4a. The couples' privacy preference for solitude as measured by the solitude subscale on the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4b. The couples' privacy preference for solitude as measured by the solitude subscale on the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4c. The couples' privacy preference for solitude as measured by the solitude subscale on the RPPS will contribute to the prediction of the wives' marital

adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4d. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4e. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4f. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4g. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4h. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4i. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

5a. The couples' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5b. The couples' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5c. The couples' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5d. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of

privacy preference for reserve with partner contributing to low levels of marital adjustment.

5e. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5f. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5g. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5h. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5i. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

QUESTION 3: What is the relationship between level of depression and marital adjustment for couples presenting for infertility treatment? This will be addressed with hypotheses 6a through 6i, using the Center for Epidemiological Studies- Depressed Mood Scale (CES-D) and the Locke-Wallace Marital Adjustment Test (LWMAT).

6a. The couples' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6b. The couples' level of depression as measured by the CES-D will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6c. The couples' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6d. The husbands' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6e. The husbands' level of depression as measured by the CES-D will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6f. The husbands' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6g. The wives' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6h. The wives' level of depression as measured by the CES-D will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6i. The wives' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

Definition of Key Concepts

The following are definitions of key concepts involved in this dissertation:

   Couples presenting for infertility treatment: any couple that presented for treatment at one of three infertility clinics used in this research.

   Marital adjustment: the process that couples use to achieve a harmonious and functional marital relationship; the unit of analysis is the marital dyad. This

will be measured by the score on the Locke-Wallace Marital Adjustment Test (Locke &Wallace, 1959).

Perception of social support: the appraisal of an exchange of resources between at least two individuals, perceived by the provider or the recipient as to be intended to enhance the well-being of the recipient. This will be measured by the scores on the three subscales, measuring perception of social support from family, friends and significant other, of the Multidimensional Scale of Social Support (Zimet, Dahlem, Zimet &Farley, 1988).

Privacy preference: the value placed on a condition of separateness, deliberately chosen and protected by an individual (or group), a separateness which the individual can abandon or break down if he/she so chooses. This will be measured by the scores on the two subscales, privacy preference for solitude and reserve with partner, of the Relationship Privacy Preference Scale (Craddock, 1997).

Level of depression: occurrence of depressive symptomology, particularly the affective component of depressed mood. This will be measured by the score on The Center for Epidemiological Studies- Depressed Mood Scale (Radloff, 1977)

Data Collection

This dissertation was submitted to and granted approval by the Louisiana State University Institutional Review Board prior to data collection. The current study analyzes data obtained from couples presenting for treatment at three infertility clinics in Southern Louisiana. Studying the impact of perception of social support, privacy preference and level of depression on marital adjustment

for couples presenting for infertility treatment was exploratory in nature and thus not amenable to experimental design, due to the scope and resources for this dissertation.

A convenience sampling method was used for this research. As reported by the infertility physicians, each of the three clinics saw an average of four new couples presenting for infertility treatment per week. All new couples presenting for infertility treatment at the three infertility clinics between the period of January 1, 2001 through October 1, 2001 were approached to be participants in the study. Couples eligible to be included in the study were both: at least 18 years of age, able to read and write, able to either provide a telephone number or an address where they could be reached, and presenting for treatment of infertility.

Subjects for this dissertation were obtained from three infertility clinics in Louisiana: two clinics in Baton Rouge and one clinic in New Orleans. The two infertility specialist physicians involved agreed to assist in facilitating the data collection for this dissertation. Couples who presented at the three infertility clinics for their initial visit were informed by the administrative assistant/intake worker that a research study was being conducted that was examining the effects of infertility on marital adjustment. At that time, the administrative assistant/intake worker attempted to obtain consent for the couple to be contacted by telephone after their visit, in order to obtain informed consent for participation in the study.

Bimonthly, the consent to contact forms were obtained from the three clinics which included the names, phone numbers and available times for couples who

expressed an interest and willingness to participate in the study. Couples who did not give consent were not contacted by this researcher and were not included in this study. Demographic data on those couples who did not wish to be contacted was not collected and no information is known about those couples due to the anonymous and voluntary nature of the study.

Couples were contacted who signed the initial consent to be contacted by phone to discuss the basic premise of the research and to obtain verbal permission to send the couple a packet of information in the mail. Those couples who did not agree to have a packet sent to them were not included in this research and no demographic information is known about them due to the anonymous and voluntary nature of the study.

One survey packet was sent to the husband and one survey packet was sent to the wife. These packets contained a cover letter explaining the basic premise of the research and instructions on how to successfully complete the packet materials, as well as a consent form to be involved in the study, which was to be signed by both members of the couple. The packet included a brief demographic sheet asking for personal information on the couple, such as age, number of years married, educational level and other relevant demographic information. Information on which member of the couple, if any, had received previous infertility treatment and/or an infertility diagnosis was also obtained. The packet included five survey instruments that both members of the couple were instructed to complete at home and return to the researcher through the mail. The couple was asked to complete the contents of the packet individually without discussion

between them of their answers. The survey instruments measured marital adjustment, perception of social support, privacy preference and level of depression. The participants were given an addressed, stamped envelope to return the packet. If the completed packet was not received by this researcher within three weeks, a follow-up contact was made by telephone to determine if the participants would be completing the materials.

Confidentiality of the subjects was insured by restricting access to any materials with identifying information to this researcher. Potential subjects were informed of the nature of this study and were assured that every effort would be taken to insure their confidentiality and anonymity in the dissertation. All couples contacted were free to not participate in the study. All identifying information was excluded from the packets when reporting the data; only this researcher had access to the identifying information at any time during the research process. Informed consent was secured prior to any data collection from the subjects. No incentives were offered to participate in this study.

<u>Instrumentation</u>

This dissertation utilized separate scales to measure marital adjustment, perception of social support, privacy preference and levels of depression for the couples presenting for infertility treatment. All scales selected for this study were short, paper and pencil instruments that were amenable to at-home completion by the couples.

- Locke-Wallace Marital Adjustment Test (LWMAT)

The Locke-Wallace Marital Adjustment Test (Locke & Wallace, 1959) was used to measure marital adjustment. The LWMAT is designed to measure the accommodation of partners to each other at any given time, spouses' happiness with the spouse and the marriage, degree of agreement on marital issues (i.e. affection, philosophy of life, etc), level of companionship experienced, and abilities to resolve conflict constructively (Sabatelli, 1988). This 15-item paper and pencil instrument uses a Likert format. Scoring of the test is done by summing the score on all items, which are weighted differently; the theoretical range of scores is 2 – 158. The cutting score of less than 100 indicates maladjustment. The LWMAT was one of the first measures of marital adjustment and can be considered, despite its age, one of the most widely used instruments by contemporary researchers (Sabatelli, 1988). The internal consistency of the Lock-Wallace is very good, with a correlation of .90. The LWMAT has evidence of known-group validity, with scores discriminating between adjusted and maladjusted couples. The scale is available for use from Locke and Wallace (1959) free of charge and without permission

- Multidimensional Scale of Perceived Social Support (MSPSS)

Perception of social support can be defined as the appraisal of an exchange of resources between at least two individuals, perceived by the provider or the recipient as to be intended to enhance the well-being of the recipient. For the purposes of this dissertation, perception of social support will be measured by the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988). The

MSPSS is designed to measure the individual's subjective assessment of social support adequacy from three specific sources: family, friends and significant others. This instrument is a 12-item paper and pencil scale with a Likert format. The MSPSS is scored by summing individual item scores for the total and subscale scores and dividing by the number of items; the theoretical range of total scores is 12 – 84. Higher scores on the MSPSS reflect higher perception of social support. The reliability of the scale is .88, which indicates good internal consistency and the MSPSS has strong factorial validity and moderate construct validity (Zimet et al., 1988). Permission for use of the MSPSS was given by Dr. Gregory Zimet.

- Relational Privacy Preference Scale (RPPS)

Privacy preference can be defined as the value placed on a condition of separateness, deliberately chosen and protected by an individual (or group), a separateness which the individual can abandon or break down if he/she so chooses. For the purposes of this dissertation, privacy preference was measured with the Relationship Privacy Preference Scale (Craddoock, 1997). The RPPS, which has specific relevance to marriage and cohabitation, is designed to measure privacy preferences through evaluation of four components of privacy: neighbor avoidance, solitude, reserve with partner and possessiveness. The scale is designed to measure the nature and strength of privacy preferences that are perceived as relevant to an individual's marriage. The RPPS is a 12-item, paper and pencil measure with a Likert format. The RPPS is scored by reversing selected items and summing for the total score and

subscale scores; high scores on the RPPS represent high privacy preferences.

The RPPS is considered to be "highly appropriate for an exploration of the association between privacy preferences and relationship satisfaction" (Craddock, 1997). According to Craddock (1997) the RPPS possesses a sound factor structure, is reliable and has predictive validity. Permission for use of the RPPS was given by Dr. Alan Craddock.

- Center for Epidemiological Studies- Depressed Mood Scale (CES-D)

Depression can be defined as the occurrence of depressive symptomology, particularly the affective component of depressed mood. The Center for Epidemiological Studies- Depressed Mood Scale (Radloff, 1977) will be used to measure levels of depression for this dissertation. The CES-D is a 20-item scale that was originally designed to measure depression in the general population for epidemiological research, but has been shown to be useful in clinical settings (Corcoran & Fischer, 1987). The CES-D measures current level of depressive symptomology, with emphasis on the affective component—such as depressed mood, feelings of hopelessness or helplessness, interpersonal difficulties and self-worth. The CES-D is a paper and pencil instrument with a Likert format. The CES-D is scored by reverse scoring selected items and then summing the scores on all the items. The theoretical range of scores is 0 – 60, with higher scores indicating greater depression. The instrument has good internal consistency, with an alpha of roughly .85 and excellent concurrent validity. The scale is available for use from the National Institutes of Mental Health free of charge and without permission.

The current study is designed to measure the strength of the relationship between the independent variables of perceived social support from family, friends and significant other, privacy preference for solitude and reserve with partner, and level of depression, and the dependent variables of couples', husbands' and wives' marital adjustment. Six multiple regression analyses were conducted to analyze the data. In two of the analyses, the dependent variable was the couples' mean score on marital adjustment; two of the analyses utilized the husbands' score on marital adjustment as the dependent variable; the last two analyses utilized the wives' score on marital adjustment as the dependent variable. The independent variables were the couples' mean scores on the variables for three of the analyses; the husbands' and the wives' scores on the independent variables were utilized in three of the analyses.

Hypotheses were tested by applying multiple regression analysis utilizing a stepwise procedure using SPSS 10.0 (the Statistical Package for the Social Sciences). The stepwise procedure was used due to the exploratory nature of the study. Use of multiple regression methods allowed for examination of the effects of all the independent variables on the dependent variables and thus gave a clear picture of the actual relationship of the independent variables to the dependent variables.   Multiple regression analysis assumes that there is a linear relationship between the predator variables and the criterion variable. In the stepwise procedure, the first variable considered for entry into the equation is the one with the largest positive or negative correlation with the dependent variable

used in that equation. If the variable meets entry requirement, (p of F-to-enter = .05), then the second variable is selected based on the highest semipartial correlation. If the second variable also meets entry requirements, it is entered into the equation. At this step, the first variable is examined to determine whether it should be removed according to the removal criterion (p of F-to-remove = .10). On the next step, variables not in the equation are examined for entry, and after each step variables already in the equation are examined for removal. Variable selection terminates when no more variables meet entry and removal criterion. In the regression equations tested, independent variables were added that increased the explained variance by one percent or more as long as the regression equation remained significant.

To meet assumptions necessary for multiple regression analysis, each variable used, as an independent variable must be measured at either the interval level of measurement or be dichotomous in nature.   The independent variables of the scores of perception of social support, privacy preference, and level of depression were all measured at the interval level.

Summary

A sample of 47 couples was obtained from infertility clinics in Louisiana. Six variables were examined to determine if they contributed to the prediction of couples', husbands' and wives' marital adjustment for couples presenting for infertility treatment. The predictor variables were perception of social support from family, friends and significant other, privacy preference for solitude and

reserve with partner and level of depression. The method of analysis was

multiple regression analysis utilizing a stepwise selection procedure.

FINDINGS

The present study was designed to investigate how perception of social support, privacy preference and level of depression are related to marital adjustment for couples presenting for infertility treatment. Subjects completed a series of questionnaires designed to measure these variables. Demographic and descriptive information was gathered on a questionnaire designed for this study. Marital adjustment was measured by the total score on the Locke-Wallace Marital Adjustment Test (LWMAT). Perception of social support from family was measured by the family subscale of the Multidimensional Scale of Perceived Social Support (MSPSS - family). Perception of social support from friends was measured by the friends subscale of the Multidimensional Scale of Perceived Social Support (MSPSS - friends). Perception of social support from significant other was measured by the significant other subscale of the Multidimensional Scale of Perceived Social Support (MSPSS – sig. other). Privacy preference for solitude was measured by the solitude subscale of the Relational Privacy Preference Scale (RPPS - solitude).   Privacy preference for reserve with partner was measured by the reserve with partner subscale of the Relational Privacy Preference Scale (RPPS – res. w/partner). Level of depression was measured by the Center for Epidemiological Studies Depressed Mood Scale (CES-D). Data were analyzed statistically on the basis of these measures.

Characteristics of Sample and Preliminary Statistics

Descriptive information about the subjects in this study is presented in Tables 1 through 4. Husbands and wives who participated in this study ranged in age

58

from 25 years to 38 years. The mean age for men was 32.45; the mean age for women was 31.32. Couples in this study were married an average of 3.61 years with length of marriage ranging from .5 years to 8 years. Age and years married are summarized in Table 1.

Table 1

Age and Years Married for Subjects

Variables	Husbands		Wives	
	M	SD	M	SD
Age	32.45	2.46	31.32	2.85
Years Married	3.61	1.85	3.61	1.85

Most participants identified as Caucasian (91.5% of husbands, 93.6% of wives). The majority of husbands (61.7%) and wives (51.1%) reported their education level as an undergraduate college degree. None of the participants in this study reported having children with their current partner; however, 12.8% of husbands and 2.1% of wives indicated that they had at least one child with a previous partner. Race, educational level and previous biological children of the subjects are presented in Table 2.

Table 2

Race, Educational Level and Previous Biological Children of Subjects

Race	Husbands		Wives	
	n	%	n	%
Caucasian	43	91.5	44	93.6
African-American	3	6.4	3	6.4
Hispanic	1	2.1	0	0
Other	0	0	0	0

(table cont.)

Educational Level	Husbands		Wives	
	n	%	n	%
High School Degree	4	8.5	7	14.9
Some College	9	19.1	12	25.5
Bachelor's Degree	29	61.1	24	51.1
Master Degree or Above	5	10.6	4	8.5
Biological Children				
None	41	87.2	46	97.9
One Child	4	8.5	1	2.1
Two Children	2	4.5	0	0

None of the husbands in this study indicated that they had ever been given an infertility diagnosis. However, 59.6% of wives reported that they had been diagnosed with infertility. Endometrioses was cited as the most common diagnosis for the women (27.7%); other infertility diagnoses for the wives included ovarian dysfunction (12.8%), polycystic ovarian syndrome (10.6%), and unspecified diagnosis (8.5%). The majority of couples (55.9%) report being refereed to the infertility clinic by their obstetrician-gynecologist (ob-gyn). Information about infertility diagnosis for the wives is summarized in Table 3; referral source information for the couples is presented in Table 4.

Table 3

Infertility Diagnosis for Wives

Infertility Diagnosis	Wives	
	n	%
Endometriosis	13	27.7
Ovarian Dysfunction	6	12.8
Polycystic Ovarian Syndrome	5	10.6
Unspecified	4	8.5
None	19	40.4

Table 4

Referral Source for Couples

Referral Source	Couples	
	n	%
Ob-Gyn	52	55.9
Insurance	9	9.7
Physician	14	15.1
Friend/Word of Mouth	12	12.9
Other (Resolve, Internet, Unspecified)	6	6.5

The means and standard deviations on all independent variables (MSPSS –

family, MSPSS – friends, MSPSS – sig. other, RPPS – solitude, RPPS – res.

w/partner and CES-D) and the dependent variable (LWMAT) are reported in

Table 5. These statistics are reported for the couples' mean scores, husbands'

mean scores and wives' mean scores for all variables.

Table 5

Means and Standard Deviations for Couples, Husbands and Wives on Dependent and Independent Variables

	Couples		Husbands		Wives	
Variables	M	SD	M	SD	M	SD
LWMAT	116.723	21.077	116.55	27.45	116.89	21.85
MSPSS-family	20.84	2.93	20.32	4.30	21.36	4.06
MSPSS-friends	39.20	7.84	38.43	9.55	39.98	8.39
MSPSS-sig. other	23.52	4.99	23.02	6.66	24.02	4.98
RPPS-solitude	7.83	2.00	8.23	2.52	7.43	2.50
RPPS-res. w/partner	9.50	1.37	9.51	1.85	9.49	1.78
CES-D	12.947	5.255	8.98	8.37	16.91	10.27

Before any multiple regression equations were conducted, the independent

variables to be included in the analysis were checked for the presence of

multicollinearity. Although several techniques exist for conducting a

multicollinearity test, Lewis-Beck (1980) states that the most powerful method for assessing multicollinearity is to "Regress each independent variable on all the other independent variables" (p. 60). The strength of this method lies in the fact that it takes into account the relationship of each independent variable with all other independent variables and a combination of all other independent variables. Whenever the R^2 values approach 1.0, there is high multicollinearity. The R^2 were checked for all independent variables included in this study; these results showed no instances of excess multicollinearity.

Multiple Regression Analysis

Six separate multiple regression analyses were conducted on the data collected. The first analysis utilized the couples' mean score on the LWMAT as the dependent variable. The independent variables included the couples' mean score on the MSPSS – family, the couples' mean score on the MSPSS – friends, the couples' mean score on the MSPSS – sig. other, the couples' mean score on RPPS – solitude, the couples' mean score on RPPS – res. w/partner and the couples' mean score on CES-D.

The second analysis also utilized the couples' mean score on the LWMAT as the dependent variable. The independent variables included the husbands' and the wives' mean scores on the MSPSS – family, the husbands' and the wives' mean scores on the MSPSS – friends, the husbands' and the wives' mean scores on the MSPSS – sig. other, the husbands' and the wives' mean scores on RPPS – solitude, the husbands' and the wives' mean scores on RPPS – res/ w/partner and the husbands' and the wives' mean scores on CES-D.

The third and fourth multiple regression analysis utilized the husbands' mean score on the LWMAT as the dependent variable. In the third analysis, the couples' mean scores on the independent variables were included. In the fourth analysis, the husbands' and the wives' mean scores on the independent variables were included.

The fifth and sixth multiple regression analysis utilized the wives' mean score on the LWMAT as the dependent variable. In the fifth analysis, the couples' mean scores on the independent variables were included. In the sixth analysis, the husbands' and the wives' mean scores on the independent variables were included

<u>Analysis 1</u>

The first stepwise multiple regression analysis indicated that of 6 variables available for entry, 2 met the criteria for entry (p of F-to-enter = .05; p of F-to-remove = .10). The first variable selected was the couples' mean score on MSPSS – sig. other; considered alone, considered alone, this variable explained 19.7% of the variability in the dependent variable. The second variable selected was the couples' mean score on RPPS – solitude; this variable added 16% to the explained variance in the model. The analysis indicated that a combination of couples' perception of social support from significant other and couples' privacy preference for solitude contributes significantly to the prediction of couples' marital adjustment (p = .000, F = 12.258; R^2 = .358). The R^2 of .358 indicates that slightly less than 36% of the variance is explained by the combination of the

two independent variables selected. Results of this multiple regression analysis

are presented in Table 6.

Table 6

**Multiple Regression Analysis of Couples' Marital Adjustment Using
Couples' Scores**

Source of Variation	df	MS	F-ratio	p
Regression	2	3655.932	12.258	.000
Residual	44	298.240		
Total	46			

_____Variables in the Equation_____

Variables	R^2 Cumulative	R^2 Change	Beta
MSPSS-sig. other	.197	.197	1.925
RPPS-solitude	.358	.160	-4.216

_____Variables Not in the Equation_____

Variables	t	sig. t
MSPSS-family	-.372`````	.711
MSPSS-friends	-.168	.868
RPPS-res. w/partner	-.514	.610
CES-D	-1.276	.209

Four variables failed to meet the criteria for inclusion in the model. These

variables included the couples' mean scores on perception of social support from

family and from friends, the couples' mean score on privacy preference for

reserve with partner and the couples' mean score on level of depression.

Results yielded from Analysis 1 lead to the acceptance of Hypotheses 3a and 4a. These results lead to the rejection of Hypotheses 1a, 2a, 5a and 6a.

Hypotheses accepted are:

3a. The couples' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

4a. The couples' privacy preference for solitude as measured by the solitude subscale on the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

Hypotheses rejected are:

1a. The couples' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

2a. The couples' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

5a. The couples' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the

couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6a. The couples' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

Analysis 2

The second stepwise multiple regression analysis indicated that of 12 variables available for entry, 2 met the criteria for entry (p of F-to-enter = .05; p of F-to-remove = .10). The first variable selected was the husbands' mean score on MSPSS – sig. other; considered alone, this variable explained 17.6% of the variability in the dependent variable. The second variable selected was the husbands' mean score on RPPS – solitude; this variable added 12.3% to the explained variance in the model. The analysis indicated that a combination of husbands' perception of social support from significant other and husbands' privacy preference for solitude contributed significantly to the prediction of couples' marital adjustment ($p \leq .000$, F = 9.409; R^2 = .300). The R^2 of .300 indicates that 30% of the variance is explained by the combination of the two independent variables selected. These results of this multiple regression analysis are presented in Table 7.

Table 7

Multiple Regression Analysis of Couples' Marital Adjustment Using Husbands' and Wives' Scores

Source of Variation	df	MS	F-ratio	p
Regression	2	3060.811	9.409	.000
Residual	44	325.291		
Total	46			

_____Variables in the Equation_____

Variables	R^2 Cumulative	R^2 Change	Beta
MSPSS-sig. other-h	.176	.176	1.328
RPPS-solitude-h	.300	.123	-2.936

Note. h = husbands' mean scores

_____Variables Not in the Equation_____

Variables	t	sig. t
MSPSS-family-h	.473	.638
MSPSS-family-w	-.435	.636
MSPSS-friends-h	.033	.974
MSPSS-friends-w	.351	.727
MSPSS-sig. other-w	1.326	.192
RPPS-solitude-w	-1.141	.260
RPPS-res. w/partner-h	-.039	.969
RPPS-res. w/partner-w	-.782	.438
CES-D-h	.351	.727
CES-D-w	-1.561	.104

Note. h = husbands' mean scores; w = wives' mean scores

Ten variables failed to meet the criteria for inclusion in this model. These variables included the husbands' and the wives' mean scores on perception of social support from family and from friends, the wives' mean score on perception

of social support from significant other, the husbands' and the wives' mean score on privacy preference for reserve with partner, the wives' mean score on privacy preference for solitude and the husbands' and the wives' mean scores on level of depression.

Results yielded by Analysis 2 lead to the acceptance of Hypotheses 3d and 4d. The results lead to the rejection of Hypotheses 1d, 1g, 2d, 2g, 3g, 4g, 5d, 5g, 6d and 6g.

Hypotheses accepted are:

3d. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

4d. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

Hypotheses rejected are:

1d. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1g. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

2d. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2g. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

3g. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

4g. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

5d. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of

the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5g. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6d. The husbands' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

6g. The wives' level of depression as measured by the CES-D will contribute to the prediction of the couples' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

Analysis 3

The third stepwise multiple regression analysis indicated that of 6 variables available for entry, 1 variable met the criteria for entry (p of F-to-enter = .05; p of F-to-remove = .10). The variable selected was the couples' mean score on MSPSS – sig. other. The analysis indicated that couples' perception of social support from significant other contributes significantly to the prediction of husbands' marital adjustment (p ≤ .002, F = 11.275; R^2 = .200). The R^2 of .200 indicates that 20% of the variance is explained by the independent variable

selected. The results of this multiple regression analysis are presented in

Table 8.

Table 8

Multiple Regression Analysis of Husbands' Marital Adjustment Using Couples' Scores

Source of Variation	df	MS	F-ratio	p
Regression	1	6944.444	11.275	.002
Residual	45	616.937		
Total	46			

_____Variables in the Equation_____

Variables	R^2 Cumulative	R^2 Change	Beta
MSPSS-sig. other	.200	.200	2.464

_____Variables Not in the Equation_____

Variables	t	sig. t
MSPSS-family	.394	.859
MSPSS-friends	.491	.694
RPPS-solitude	-1.321	.193
RPPS-res. w/partner	-1.649	.106
CES-D	-.503	.618

Five variables failed to meet the criteria for inclusion in the model. These

variables included the couples' mean scores on perception of social support from

family and from friends, the couples' mean scores on privacy preference for

solitude and for reserve with partner and the couples' mean score on level of

depression.

71

Results yielded by Analysis 3 lead to the acceptance of Hypothesis 3b. The results lead to the rejection of Hypotheses 1b, 2b, 4b, 5b, and 6b.

Hypothesis accepted is:

3b. The couples' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

Hypotheses rejected are:

1b. The couples' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment

2b. The couples' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

4b. The couples' privacy preference for solitude as measured by the solitude subscale on the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

5b. The couples' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the

husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6b. The couples' level of depression as measured by the CES-D will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

Analysis 4

The fourth stepwise multiple regression analysis indicated that of 12 variables available for entry, 1 met the criteria for entry (p of F-to-enter = .05; p of F-to-remove = .10). The variable selected was the husbands' mean score on MSPSS – sig. other. The analysis indicated that husbands' perception of social support from significant other contributes significantly to the prediction of husbands' marital adjustment ($p \leq .001$, F = 12.753; R^2 = .221). The R^2 of .221 indicates that slightly more than 22% of the variance is explained by the independent variable selected. The results of this multiple regression analysis are presented in Table 9.

Table 9

Multiple Regression Analysis of Husbands' Marital Adjustment Using Husbands' and Wives' Scores

Source of Variation	df	MS	F-ratio	p
Regression	1	7654/090	12.753	.001
Residual	45	600.167		
Total	46			

(table cont.)

_____
_____Variables in the Equation_____
_____

Variable	R^2 Cumulative	R^2 Change	Beta
MSPSS-sig. other-h	.221	.221	1.937

Note. h = husbands' mean scores

_____
_____Variables Not in the Equation_____
_____

Variables	t	sig. t
MSPSS-family-h	-.071	.944
MSPSS-family-w	.429	.670
MSPSS-friends-h	-/008	.994
MSPSS-friends-w	.598	.533
MSPSS-sag. Other-w	.452	.654
RPPS-solitude-h	-1.653	.105
RPPS-solitude-w	-.048	.962
RPPS-res. w/partner-h	-1.298	.201
RPPS-res. w/partner-w	-.470	.641
CES-D-h	.343	.734
CES-D-w	-.752	.456

Note. h = husbands' mean scores; w = wives' mean scores

Eleven variables failed to meet the criteria for inclusion in the model. These variables included the husbands' and the wives' mean scores on perception of social support from family and from friends, the wives' mean score on perception of social support from significant other, the husbands' and the wives' mean scores on privacy preference for solitude and for reserve with partner and the husbands' and the wives' mean scores on level of depression.

Results yielded by Analysis 4 lead to the acceptance of Hypothesis 3e. These results lead to the rejection of Hypotheses 1e, 1h, 2e, 2h, 3h, 4e, 4h, 5e, 5h, 6e and 6h.

Hypothesis accepted is:

3e. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment

Hypotheses rejected are:

1e. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1h. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

2e. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

2h. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

3h. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment

4e. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4h. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

5e. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5h. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the husbands' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6e. The husbands' level of depression as measured by the CES-D will contribute

to the prediction of the husbands' marital adjustment (as measured by the

LWMAT) with high levels of depression contributing to low levels of marital

adjustment.

6h. The wives' level of depression as measured by the CES-D will contribute to

the prediction of the husbands' marital adjustment (as measured by the LWMAT)

with high levels of depression contributing to low levels of marital adjustment.

Analysis 5

The fifth stepwise multiple regression analysis indicated that of 6 variables

available for entry, 2 variables met the criteria for entry (p of F-to-enter = .05; p of

F-to-remove = .10). The first variable selected were the couples' mean score on

MSPSS – sig. other; considered alone, this variable explained 20.7% of the

variability in the dependent variable. The second variable selected was the

couples' mean score on RPPS – solitude; this variable added 9.6% to the

explained variance in the model. The analysis indicated that a combination of

couples' perception of social support from significant other and couples' privacy

preference for solitude contributes significantly to the prediction of wives' marital

adjustment (p ≤ .000, F = 14.239; R^2 = .393). The R^2 of .393 indicates that

slightly more than 39% of the variance is explained by the independent variables

selected. The results of this multiple regression analysis are presented in

Table 10.

Table 10

Multiple Regression Analysis of Wives' Marital Adjustment Using Couples' Scores

Source of Variation	df	MS	F-ratio	p
Regression	2	4315.506	14.239	.000
Residual	44	303.079		
Total	46			

_____Variables in the Equation_____

Variables	R^2 Cumulative	R^2 Change	Beta
MSPSS-sig. other	.297	.297	-6.036
RPPS-solitude	.393	.096	1.359

_____Variables Not in the Equation_____

Variables	t	sig. t
MSPSS-family	-1.012	.317
MSPSS-friends	-1.403	.168
RPPS-res. w/partner	.937	.354
CES-D	-1.706	.095

Four variables failed to meet the criteria for inclusion in the model. These variables included the couples' mean scores on perception of social support from family and from friends, the couples' mean score on privacy preference for reserve with partner and the couples' mean score on level of depression.

Results yielded from Analysis 5 lead to the acceptance of Hypotheses 3c and

4c. These results lead to the rejection of Hypotheses 1c, 2c, 5c and 6c.

Hypotheses accepted are:

3c. The couples' perception of social support from significant other as measured

by the significant other subscale of the MSPSS will contribute to prediction of the

wives' marital adjustment (as measured by the LWMAT) with high levels of

perception of social support from significant other contributing to high levels of

marital adjustment.

4c. The couples' privacy preference for solitude as measured by the solitude

subscale of the RPPS will contribute to the prediction of the wives' marital

adjustment (as measured by the LWMAT) with high levels of privacy preference

for solitude contributing to low levels of marital adjustment.

Hypotheses rejected are:

1c. The couples' perception of social support from family as measured by the

family subscale of the MSPSS will contribute to the prediction of the wives'

marital adjustment (as measured by the LWMAT) with high levels of perception

of social support from family contributing to high levels of marital adjustment.

2c. The couples' perception of social support from friends as measured by the

friends subscale of the MSPSS will contribute to the prediction of the wives'

marital adjustment (as measured by the LWMAT) with high levels of perception

of social support from friends contributing to high levels of marital adjustment.

5c. The couples' privacy preference for reserve with partner as measured by the

reserve with partner subscale RPPS will contribute to the prediction of the wives'

marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6c. The couples' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

<u>Analysis 6</u>

The sixth stepwise multiple regression analysis indicated that of 12 variables available for entry, 5 met the criteria for entry (p of F-to-enter = .05; p of F-to-remove = .10). The first variable selected was the wives' mean score on RPPS – solitude; this variable; considered alone, this variable explained 21.2% of the variability in the dependent variable. The second variable selected was the wives' mean score on CES-D; this variable added 14.4% to the explained variance in the model. The other variables in order of entry were the wives' mean scores on MSPSS – sig. other, which added 9.5% to the explained variance in the model, the husbands' mean score on RPPS – solitude, which added 9% to the explained variance in the model, and the wives' mean score on MSPSS – friends, which added 5.4% to the explained variance in the model. The analysis indicated that wives' privacy preference for solitude, wives' level of depression, wives' perception of social support from significant other, husbands' privacy preference for solitude and wives' perception of social support from friends contribute significantly to the prediction of wives' marital adjustment (p ≤ .000, F = 12.084; R^2 = .596). The R^2 of .596 indicates that slightly less than 60%

of the variance is explained by the independent variables selected. The results

of this multiple regression analysis are presented in Table 11.

Table 11

Multiple Regression Analysis of Wives' Marital Adjustment Using Husbands' and Wives' Scores

Source of Variation	df	MS	F-ratio	p
Regression	5	2617.288	12.084	.000
Residual	41	216.586		
Total	46			

_____Variables in the Equation_____

Variables	R^2 Cumulative	R^2 Change	Beta
RPPS-solitude-w	.212	.212	-4.205
CES-D-w	.356.	.144	-.709
MSPSS-sig. other-w	.451	.095	2.923
RPPS-solitude-h	.541	.090	-2.760
MSPSS-friends-w	.596	.054	-1.119

Note. h = husbands' mean scores; w = wives' mean scores

_____Variables Not in the Equation_____

Variables	t	sig. t
MSPSS-family-h	.952	.347
MSPSS-family-w	.481	.633
MSPSS-friends-h	.842	.406
RPPS-sig. other-h	.299	.767
RPPS-res. w/partner-h	-1.796	.080
RPPS-res. w/partner-w	-.036	.971
CES-D-h	-.382	.704

Note. h = husbands' mean scores; w = wives' mean scores

Seven variables failed to meet the criteria for inclusion in the model. These

variables included the husbands' and the wives' mean scores on perception of

social support from family, the husbands' mean score on perception of social support from friends and from significant other, the husbands' and the wives' mean scores on privacy preference for reserve with partner and the husbands' mean score on level of depression.

Results yielded of analysis 6 lead to the acceptance of Hypotheses 2i, 3i, 4f, 4i and 6i. These results lead to the rejection of Hypotheses 1f, 1i, 2f, 3f, 51, 5f and 6f.

2i. The wives' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

3i. The wives' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

4f. The husbands' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

4i. The wives' privacy preference for solitude as measured by the solitude subscale of the RPPS will contribute to the prediction of the wives' marital

82

adjustment (as measured by the LWMAT) with high levels of privacy preference for solitude contributing to low levels of marital adjustment.

6i. The wives' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

Hypotheses rejected are:

1f. The husbands' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

1i. The wives' perception of social support from family as measured by the family subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from family contributing to high levels of marital adjustment.

2f. The husbands' perception of social support from friends as measured by the friends subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from friends contributing to high levels of marital adjustment.

3f. The husbands' perception of social support from significant other as measured by the significant other subscale of the MSPSS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of perception of social support from significant other contributing to high levels of marital adjustment.

5f. The husbands' privacy preference for reserve with partner as measured by the reserve with partner subscale of the RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

5i. The wives' privacy preference for reserve with partner as measured by the reserve with partner subscale RPPS will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of privacy preference for reserve with partner contributing to low levels of marital adjustment.

6f. The husbands' level of depression as measured by the CES-D will contribute to the prediction of the wives' marital adjustment (as measured by the LWMAT) with high levels of depression contributing to low levels of marital adjustment.

SUMMARY AND DISCUSSION

The present study was designed to measure possible predictors of marital adjustment for couples, husbands and wives presenting for infertility treatment. Independent variables included perception of social support from family, perception of social support from friends, perception of social support from significant other, privacy preference for solitude, privacy preference for reserve with partner and level of depression. Results of this study have implications for social work in that factors that may be associated with poor marital adjustment in couples presenting for infertility are identified.

<u>Summary of Findings</u>

Results of the analyses completed on the study participants (N = 47 couples) yielded the following results:

When couples' mean scores on the independent variables were utilized to predict couple marital adjustment, the couples' mean scores on instruments measuring perception of social support from significant other and privacy preference for solitude were found to be significant predictors. These independent variables explained slightly less than 36% of the variance in couples' marital adjustment. The multiple regression analysis indicated that high levels of couples' perception of social support from significant other contributes to high levels of couples' marital adjustment. The second finding from this analysis indicated that high levels of couples' privacy preference for solitude contributes to low levels of couples' marital adjustment.

The husbands' and the wives' scores on the independent variables were utilized to predict the couples' marital adjustment in the second analysis. The husbands' scores on instruments measuring perception of social support from significant other and privacy preference for solitude were found to be significant predictors. These independent variables explained 30% of the variance in couples' marital adjustment. The multiple regression analysis indicated that high levels of husbands' perception of social support from significant other contributes to high levels of couples' marital adjustment. The second finding from this analysis indicated that high levels of husbands' privacy preference for solitude contributes to low levels of couples' marital adjustment

When couples' mean scores on the independent variables were utilized to predict the husbands' marital adjustment, the couples' mean score on the instrument measuring perception of social support from significant other was found to be a significant predictor. This independent variable explained 20% of the variance in husbands' marital adjustment. The multiple regression analysis indicated that high levels of couples' perception of social support from significant other contributing to high levels of husbands' marital adjustment.

The husbands' and the wives' scores on the independent variables were utilized to predict the husbands' marital adjustment in the fourth analysis. The husbands' score on the instrument measuring perception of social support from significant other was found to be a significant predictor. This independent variable explained slightly more than 22% of the variance in husbands' marital adjustment. The multiple regression analysis indicated that high levels of

husbands' perception of social support from significant other contributes to high levels of husbands' marital adjustment

When couples' mean scores on the independent variables were utilized to predict the wives' marital adjustment, the couples' mean score on the instruments measuring privacy preference for solitude and perception of social support from significant other were found to be significant predictors. These independent variables explained slightly more than 39% of the variance in wives' marital adjustment. The multiple regression analysis indicated that high levels of couples' perception of social support from significant other contributes to high levels of wives' marital adjustment. The second finding from the analysis indicated that high levels of couples' privacy preference for solitude contributes to low levels of wives' marital adjustment.

The husbands' and the wives' scores on the independent variables were utilized to predict the wives' marital adjustment in the sixth analysis. The wives' scores on instruments measuring privacy preference for solitude, level of depression, perception of social support from significant other, and perception of social support from friends, and the husbands' score on the instrument measuring privacy preference for solitude were found to be significant predictors. These independent variables explained slightly less than 60% of the variance in wives' marital adjustment. The multiple regression analysis indicated that high levels of wives' perception of social support from significant other and from friends contributes to high levels of wives' marital adjustment. Another finding indicated that high levels of wives' privacy preference for solitude and level of

depression contributes to low levels of wives' marital adjustment. Furthermore, the analysis indicated that high levels of husbands' privacy preference for solitude contributes to low levels of wives' marital adjustment.

To assure that there was not response bias related to the three different data collection sites, a comparison of the mean marital adjustment scores for couples', husbands' and wives' for each data collection site were examined. This analysis revealed that there were no significant differences in marital adjustment across collection sites.

Sample, Procedure and Method

An examination of the mean marital adjustment for couples (Mean = 116.723), husbands (Mean = 116.55) and wives (Mean = 116.89) and the traditionally accepted cutting score of 100, indicating marital maladjustment on the Locke-Wallace Marital Adjustment Test, indicates that couples included in the present study score within the well-adjusted range on this variable. The anonymous and voluntary method of data collection may have contributed to the prevalent return of materials from more highly adjusted couples. Perhaps couples that chose not to participate in this study made this decision because their infertility is associated with much distress and problems with their marriage. Conflicting findings exist in the literature in regard to the impact of infertility on marital adjustment; some authors note that infertility results in poorer marital adjustment (Andrews et al., 1991a; Daniluk, 1997; Greenfield, 1996; Valentine, 1986), while others argue that infertility has little to no effect on overall marital adjustment (Leiblum, 1993; Slade et al., 1992). The range of marital adjustment scores in

the present study for husbands (range = 54 – 156) and wives (range = 68 – 150) suggests that this sample demonstrates the occurrence of both ends of the spectrum in levels of marital adjustment.

In addition, husbands and wives were asked to complete their packet of questionnaires independently, but there is no way to know if the subjects complied with this instruction. Couples who were more satisfied with their marriage may have communicated about the study and may have shared their responses to the questionnaires with each other. Interviewing husbands and wives separately to ensure independent answers to the questionnaires probably could rectify this in future research.

A caution exists in regard to data collection and response rate for this study. It should be noted that receptionists/intake workers at the three infertility clinics reported that they may not have given the option to participate to every couple presenting for treatment within the research timeframe. Although every effort on behalf of this researcher was made to include every couple meeting the criteria within the research timeframe, there is no way to know how many couples may not have been asked to participate. This data collection issue may have resulted in the sample being less than representative of the population of couples presenting for infertility treatment.

The response rate for this study poses a further caution to address. During the research timeframe, a total of 180 couples were approached by the administrative assistant/intake worker to give consent for this researcher to contact them by phone. Of those 180 couples, 56 couples (31.1%) refused

participation in the study. Of the 154 couples who agreed to the initial telephone contact, 5 couples (3.3%) refused to have packets mailed to them, and refused participation in the study. Additionally, of those 154 who agreed to be contacted by phone, 25 couples (16.2%) were not reached by phone after at least 4 attempts by this researcher (9 couples had disconnected lines with no forwarding number, and 16 never answered at the phone number provided). A total of 68 packets were mailed out and 47 packets were returned completed (69.1%). Because there were so many points at which a couple could refuse or drop out of the study, the response rate is difficult to ascertain. It is noted, however, that because of the complex nature of the response rate, caution should be taken when interpreting these results as representative of the population of couples presenting for infertility treatment.

A further concern involves the relative lack of African-American, Hispanic or other minorities n this sample. This may indicate that African-Americans, Hispanics and other minorities are less likely to seek infertility treatment, or are less likely to volunteer for studies of this kind. Several researchers have noted that although African-American couples are twice as likely to be infertile as Caucasian couples, Caucasian couples seek infertility treatment to a greater extent than African-Americans (Aral & Carter, 1983; Stephen & Chandra, 2000). Further exploration into the lack of minorities represented in infertility research is warranted in future research. It is stressed that generalizability of the results of this study may be limited due to the homogeneity of study participants and method of sampling. In light of these concerns, it is suggested that the results of

this study offer important but incomplete information regarding the possible risk factors to poor marital adjustment for couples, husbands and wives as they face the possibility of infertility treatment.

Analysis

The use of couples' scores, husbands' scores and wives' scores as the dependent variable in the 6 multiple regression analyses was an attempt to understand the couple dynamics of marital adjustment, as well as the husband's and wife's experience individually. This methodology yielded some interesting results in regard to the importance of certain variables in predicting marital adjustment for husbands and wives separately and together as a couple.

The variable of perception of social support from family was used as an independent variable as a couples' mean score in Analysis 1, 3, and 5 and as husbands' score and wives' score in Analysis 2, 4, and 6. This variable did not appear as a significant predictor in any of the regression models created.   It is somewhat surprising that this variable did not contribute to the prediction of marital adjustment, as other studies have found perception of social support from family to be an important factor, especially for women experiencing infertility. There is some disagreement in the literature regarding the effect of social support from family on those experiencing infertility; some authors argue that perception of family support has a positive effect on a couple experiencing infertility (Gibson & Myers, 2002), while others report that it may have an exacerbating effect on the stress involved (Miall, 1994). Perhaps the inclusion of the other subscales of perception of social support, friends and significant other,

was the reason this variable did not significantly enter into the model. Similarly interesting, the wives' score on perception of social support from friends was found only to be a significant predictor of wives' marital adjustment, and alone only explained 5.4% of the variance in the model. As noted earlier, perhaps the inclusion of the three subscales together in the model was confounding. Another possibility may be that because marital adjustment was the dependent variable in all analyses, only independent variables that involved the couple as a dyad were significant. In other words, while support from family and friends may be important to the individual and to the couple, these two variables do not have a direct impact on the prediction of marital adjustment. Further investigation into the importance of perception of social support from family and friends would be important to understand the role it plays in infertile couples' marital adjustment.

By far the most important aspect of social support in all of the models was perception of social supports from significant other. This variable was the only variable that contributed significantly to the prediction of marital adjustment for couples, husbands and wives in every analysis. Couple perception of social support from significant other was in fact the most important predictor for the couples' marital adjustment. The only significant predictor for the husbands' marital adjustment was husbands' perception of social support from significant other, which corroborates Daniluk's (1997) finding that infertile men tend to rely on their wives for their primary source of support and communication. These findings lend support to Cohen and Willis' (1985) "buffering model", which posits that social support buffers or protects individuals from potentially negative

92

influences of stressful events. Thus, although social support may be helpful in all circumstances, it may be particularly beneficial during times of stress and especially important in marital adjustment.

The inclusion of privacy preference in the analysis of marital adjustment was exploratory in nature; no studies exist which specifically examine this variable with respect to marital adjustment for couples experiencing infertility. The inclusion of two of the subscales of the Relational Privacy Preference Scale, privacy preference for solitude and privacy preference for reserve with partner, was based on previous research linking these two aspects of privacy preference with marital conflict. Extremely strong and perhaps unusually dominant preferences for separateness (being alone and low on self-disclosure) are likely to conflict with and frustrate physical and emotional closeness, both of which have been shown to be associated with marital satisfaction (Merves-Okin, Amidon & Bernt, 1991). The results of the current study point to some interesting findings with respect to privacy preference for couples experiencing infertility. Privacy preference for reserve with partner was not a significant predictor in any of the analyses. However, privacy preference for solitude was found to be a significant contributor in predicting couples' marital adjustment when using both couples' mean scores and husbands' mean scores. Privacy preference for solitude was also found to be a significant contributor in predicting wives' marital adjustment when using couples', husbands' and wives' mean scores. Further examination reveals that when wives' marital adjustment was the dependent variable, wives' mean score on privacy preference for solitude was shown to be

the most important contributing factor. The fact that privacy preference for reserve with partner was not a predictor of marital adjustment and privacy preference for solitude was important in 4 out of the 6 analyses may mean that couples experiencing infertility place a high level of importance on the degree of separateness rather than the level of disclosure between themselves and their partner. Further exploration into the dynamics of privacy preferences with infertile couples may lead to critical knowledge about marital adjustment for couples experiencing infertility.

Another interesting finding of the current study involved the variable level of depression. The only time level of depression was found to be a significant predictor of marital adjustment was when wives' mean score on level of depression was found to be a significant predictor of wives' marital adjustment. Several authors agree that women experience the loss associated with infertility with more intensity and show greater distress than do men (Forrest & Gilbert, 1992; Greil et al.,1988; Valentine, 1986); it is also widely accepted in the infertility literature that depression, especially for women, is a natural response to the experience of infertility. For over two decades, studies have documented a robust association between depressive symptoms and relationship functioning (Remen, & Chambless, 2001; Whisman & Bruce, 1999; Thompson et al., 1995). Thus, it is not surprising that level of depression would be a significant predictor of marital adjustment for wives.

By far the strongest model in predicting marital adjustment was the model which utilized husbands' and wives' scores on the independent variables to

predict wives' marital adjustment; the combination of wives' privacy preference for solitude, level of depression, perception of social support from significant other and from friends and husbands' perception of social support from significant other explained 60% of the variance in wives' marital adjustment. Clearly, further research is needed to explore the dynamics that best predict husbands' and couples' marital adjustment for couples' experiencing infertility.

Recommendation and Conclusions

Many suggestions for future research have already been discussed in this chapter and additional suggestions will be offered. It is hoped that future research into the dynamics involved in the infertility experience continue to focus on the both partners in the relationship, rather than the woman solely. Although it may be one partner who is given the medical diagnosis of infertility, it is both partners who share the experience, albeit to varying degrees. Possible avenues of future research may be treatment studies that involve the couple, and that would help them to deal with the risk factors to poor marital adjustment that are discussed in this study. One example may be utilizing a couple support group where couples can openly discuss their feelings related to the infertility experience, and particularly with respect to marital adjustment. A pre and post test design would be useful to examine the effects of the support group on marital adjustment for the couple.

Studying the effects of larger systems on the couple experiencing infertility may be another beneficial area for future research. Looking at the impact of extended family and other larger social support networks, organizational

influences such as church and school, and the larger community's attitudes towards infertility may lead to important knowledge about how these larger systems, and the couples' relationship to these larger systems, effect marital adjustment for couples.

It is further noted that longitudinal studies with sound empirical methodologies examining marital adjustment of infertile couples during and after treatment are strongly recommended. The long-term effects of infertility on marital adjustment have received little attention in the literature (Slade et. al, 1992). Longitudinal treatment studies looking at the effect of therapeutic interventions on couples who exhibited the risk factors identified in this study and received treatment would provide a wealth of information about the most beneficial interventions for these couples. A longitudinal design would have been the optimal choice for studying the variables selected for the present sample of couples presenting for infertility treatment. It would be ideal to study couples as they begin the infertility investigation and to follow their marital adjustment throughout treatment. In this type of design, predictions could be made regarding future marital adjustment of couples. Tracking couples across time would allow researchers to determine what the long-term effects are of facing infertility and possible treatment. Such a study might also identify healthy coping strategies for couples facing the infertility experience. A follow-up study of the same sample could provide knowledge about long-range effects of the impact of whether they eventually conceive, adopt, or choose to accept a childless lifestyle.

Another interesting avenue for future research might be to examine

physicians, nurses and other medical personnel who have contact with couples

presenting for infertility treatment in regard to their attitudes and behaviors

toward these couples. As biomedical technologies continue to advance and new

reproductive technologies continue to be made more widely available, knowledge

regarding the impact and influence of medical professionals on the couple

experiencing infertility could be very informative. Physicians specializing in

infertility treatment are especially important individuals in the couples' lives as

they face infertility. These physicians may often be the primary confidants of the

couples with regard to their physical and emotional state   A study examining the

awareness level and attributions of infertility specialists regarding the emotional

factors and risks to marital adjustment for these couples may lead to important

new information about ways that these medical professionals can better interact

with couples seeking infertility treatment. Awareness programs could be

developed to educate medical professionals about the importance of their role in

the experience of infertility for the couple. Physicians who are able to identify

couples who may be at risk for problems with their marital adjustment could then

make appropriate referrals to social workers. It could also be beneficial to study

the impact and effectiveness of having a social worker right in the infertility

specialists' office to be available for counseling and to run support groups for the

at-risk couples.

Implications of the Study

Infertility is a problem that occurs in one in six couples that desire to have a child (Forrest & Gilbert, 1992), yet psychological strategies and interventions geared toward the recognition of the special problems of the infertile couple are seldom discussed in the research and clinical literature. The present study has identified several characteristics which combine to predict marital adjustment for couples, and for husbands and wives individually, as they present for infertility treatment. Some of these couples may benefit from a support group or couples therapy with a social worker who is sensitive to the special needs of the couple as they go through the infertility experience.

The prevalence of fertility-related concerns is not likely to decrease in the near future. This means that most social workers who work with adults will have clients included in their caseloads who are attempting to cope with the substantial stresses associated with trying to produce a child, and who have feelings of grief and loss. Unless educated about the specific dynamics involved for the couple experiencing infertility, social workers may not recognize the warning signs of risk factors to problems with marital adjustment identified in this study.

In conclusion, it is felt that the results of this study should provide helpful information to clinicians who encounter the special problems of couples who seek social work intervention as part of their infertility treatment. More importantly, it is hoped that these results will help social workers to provide more effective treatment of couples at risk for problems with marital adjustment and

that couples will feel more understood and more willing to address the special

issues that may arise in the course of their infertility experience. This research

can also help direct future research in the right direction in terms of the

importance of further examination of the effects of perception of social support,

privacy preference and level of depression for the prediction of marital

adjustment for couples experiencing infertility.

REFERENCES

Abbey, A., Andrews, F., & Halman, L. (1991a). Gender's role in responses to infertility. Psychology of Women Quarterly, 15, 2295-316.

Abbey, A., Andrews, F., & Halman, L. (1991b). Stress from infertility, marriage factors, and subjective well-being of wives and husbands. Journal of Health and Social Behavior, 32, 238-253.

Abbey, A., Andrews, F., & Halman, L. (1992). Infertility and subjective well-being: The mediating role of self-esteem, internal control and interpersonal conflict. Journal of Marriage and the Family, 54, 408-417.

Abbey, A., Andrews, F., & Halman, L. (1994). Psychosocial predictors of life quality. Journal of Family Issues, 15(2), 253-271.

Abbey, A., Andrews, F., & Halman, L. (1995). Provision and receipt of social support and s\disregard: What is their impact on the marital life quality of fertile and infertile couples? Journal of Personality and Social Psychology, 68(3), 455-469.

Amir, M., Horesh, N., & Lin-Stein, T. (1999). Infertility and adjustment in women: The effects of attachment style and social support. Journal of Clinical Psychology in Medical Settings, 6(4), 463-479.

Aral, S. O. & Carter, W. (1983). The increasing concern with infertility: Why now? JAMA, 250, p. 2327-2331.

Band, D, Edelmann, R., Avery, S., & Brinsden, P. (1998). Correlates of psychological distress in relation to male infertility. British Journal of Health Psychology, 3, 245-256.

Brand, H. J. (1989). The influence of sex differences on the acceptance of infertility. Journal of Reproductive and Infant Psychology, 7, 129-131.

Bresnick, E. (1981). A holistic approach to the treatment of the crisis of infertility. Journal of Marital and Family Therapy, April, 181-188.

Butler, R. R. & Koraleski, S., (1990). Infertility: A Crisis with no resolution. Journal of Mental Health Counseling Vol.,12 n. 2 April, 1990, 151-163

Carmelli, Y., & Birenbaum-Carmelli, D. (1994). The predicament of masculinity understanding the male's experience of infertility treatments. Sex Roles: A Journal of Research, 30(9-10), 663-685.

Cohen, S. & Willis, T. (1985). Stress, social support and the buffering hypothesis. <u>Psychological Bulletin, 98(2),</u> 310-337.

Connolly, K., Edrumann, R., Cooke, J., & Robson, J. (1991). The impact of infertility on psychological functioning. <u>Journal of Psychological Research, 36(5),</u> 459-468.

Conway, P., & Valentine, D. (1988). Reproductive losses and grieving. <u>Journal of Social Work and Human Sexuality, 6,</u> 43-64.

Corcoran, K., & Fischer, J. (1987). <u>Measures for Clinical Practice: A Sourcebook.</u> NY: The Free Press.

Covington, S. (1988). Psychosocial evaluation of the infertile couple: implications for social work practice. <u>Journal of Social Work and Human Sexuality, 6,</u> 21-36.

Craddock, A. (1994). Relationship between marital satisfaction and privacy preferences. <u>Journal of Comparative Family Studies, 25(3),</u> 371-383.

Craddock, A. (1997). The measurement of privacy preferences within marital relationships: The relationship privacy preference scale. <u>The American Journal of Family Therapy, 25(1),</u> 48-54.

Daniluk, J. (1996). When treatment fails: The transition to biological childlessness for infertile women. <u>Women & Therapy, 19(2),</u> 81-98.

Daniluk, J. (1997). Gender and infertility. In Sandra Leiblum (ed.) <u>Infertility.</u> NY: John Wiley & Sons, Inc.

Donchin, A. (1994) Feminist critiques of new fertility technologies: implications for social policy. (Reproductive). The Journal of Medicine and Philosophy, Oct 1996, Vol. 21, n. 5. p. 475(24).

Derlega, V., Metts, S., Petronio, S., & Margulis, S. (1993). <u>Self-Disclosure.</u> Newbury Park, CA: Sage Publications, Inc.

Downey, J., & McKinney, M. (1992). The psychiatric status of women presenting for infertility evaluation. <u>American Journal of Orthopsychiatrics , 62(2),</u> 196-205.

Edelmann, R., Connolly, K. J., & Bartlett, H. (1994). Coping strategies and psychological adjustment of couples presenting for IVF. <u>Journal of Psychometrics Research. Vol. 38, n. 4.</u> p. 355-364.

Elliot, Stacy (1998). The relationship between fertility issues and sexual problems in men. The Canadian Journal of Human Sexuality, Fall 1998 V7, i3, p. 295(1).

Eunpu, Deborah L., (1995). The impact of infertility and treatment guidelines for couples therapy. The American Journal of Family Therapy, Summer 1995 Vol. 23, n. 4. 2. p. 115(14).

Forrest, L., & Gilbert, M. S. (1992). Infertility: An unanticipated and prolonged life crisis. Journal of Mental Health Counseling, 14, 42-58.

Fouad, N., & Fahje, K. (1989). An exploratory study of the psychological correlates of infertility on women. Journal of Counseling and Development, 68, 97-101.

Gibson, D., & Myers, J. (2002). The effect of social coping resources and growth-fostering relationships on infertility stress in women. Journal of Mental Health Counseling, Jan 2002 Vol. 24, i1, p. 68(13.)

Glover, L., Abel, P., & Gannon, K. (1998). Male sub fertility: Is pregnancy the only issue? British Medical Journal, 316(7), 1405-1407.

Greenfield, D. (1996). The course of infertility: Immediate and long-term responses. Psychotherapy in Practice, 2(2), 5-16.

Greil, A., Leitko, T., & Porter, K. (1988). Infertility: his and hers. Gender and Society, 2, 172-199.

Henderson, C. (1998). As many as 7.7 million could be infertile by the year 2000. Impotence and Male Health Weekly Plus, Sept. 7.

Higgins, Barbara S. (1990). Couple infertility: from the perspective of the close-relationship model. Family Relations, Jan 1990 Vol. 39, n.1. p. 881(6).

Hudson, W.W. (1982). The Clinical Measurement Package:A Field Manual. Homewood, Illinois: Dorsey Press.

Inhorn, M. (1994). Interpreting infertility: Medical anthropological perspectives. Soc. Sci. Med, 39(4), 459-461.

Jordan, C., & Revenson, T. (1999). Gender differences in coping with infertility: A meta-analysis. Journal of Behavioral Medicine, 22(4), 341-358.

Kelvin, P. (1973). A social-psychological examination of privacy. British Journal of Social and Clinical Psychology, 12, 248-261.

Klock, S. (1997). To tell or not to tell: The issue of privacy and disclosure in infertility treatment. In Sandra Leiblum (ed.) Infertility. New York: John Wiley & Sons, Inc.

Leiblum, S. (1993). The impact of infertility on sexual and marital satisfaction. Annual Review of Sex Research. 4. 99-120.

Leiblum, S. (1996). Love, sex and infertility: The impact of infertility on the couple. In Session: Psychotherapy In Practice, 2(2), 29-39.

Lewis-Beck, M.S., (1980). Applied Regression: An Introduction. Sage Publication. Beverly Hills, CA.

Locke, H. J., & Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. Marriage and Family Living, 21, 251-255.

Mahlstedt, P. P. (1985). The psychological components of infertility. Fertility and Sterility, 43, 335-346.

Marshall, N. (1974). Dimensions of privacy preferences. Multivariate Behavioral Research, 9, 255-271.

Matt, G.E. & Dean, A., (1993). Social support from friends and psychological distress among elderly persons: moderator effects of age. The Journal of Health and Social Behavior, Sept 1993 Vol. 34, n. 3 p187(14)

Menning, B. (1980). The emotional needs of infertile couples. Fertility and Sterility, 34(4), 313-319.

Menning, B. (1988). Infertility: A guide for the childless couple. (2nd ed.). Englewood Cliffs, New Jersey: Prentice-Hall.

Merves-Okin, L., Amidon, E., & Bernt, F. (1991). Perceptions of intimacy in marriage: A study of married couples. The American Journal of Family Therapy, 19(2), 110-118.

Miall, C. (1989). Reproductive technology vs. stigma of involuntary childlessness. Social Casework: The Journal of Contemporary Social Work, 43-50.

Miall, C. (1994). Community constructs of involuntarily childlessness: sympathy, stigma and social support. The Canadian Review of Sociology and Anthropology, 31(4), 392-422.

Morrow, K., Thoreson, R., & Penney, L. (1995). Predictors of psychological distress among infertile clinic patients. Journal of Consulting and Clinical Psychology, 63(1), 163-167.

Nachtigall, R., Mehren, E. (1991). Overcoming infertility. NY: Doubleday.

Pedersen, D. (1982). Personality correlates of privacy. The Journal of Psychology, 112, 11-14.

Pedersen, D. (1987). Sex differences in privacy preferences. Perceptual and Motor Skills, 64, 1239-1242.

Pedersen, D. (1996). A factorial analysis of privacy questionnaires. Social Behavior and Personality, 24(3), 249-262.

Pepe, M., & Byrne, T. (1991). Women's perceptions of immediate and long-term effects of failed infertility treatment on marital and sexual satisfaction. Family Relations, 40, 303-309.

Pittman, J., & Lloyd, S. (1988). Quality of family life, social support, and stress. Journal of Marriage and the Family, 50, 54-57.

Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. Applied Psychological Measures, 1, 385-401.

Remen, A.L. & Chambless, D.L. (2001). Predicting dysphoria and relationship adjustment: Gender differences in their longitudinal relationship. Sex Roles: A Journal of Research, p. 45.

Roach, A., Frazier, L. & Bowden, S. (1981). The marital satisfaction scale: Development of a measure for intervention research. Journal of Marriage and the Family, 42, 537-546.

Rhodes, R. (1988). Women, motherhood and infertility: The social and historical context. Journal of Social Work and Human Sexuality, 6(1), 5-20.

Sabatelli, R. (1988). Measurement issues in marital research: A review and critique of contemporary survey instruments. Journal of Marriage and the Family, 50, 891-915.

Shapiro, C. (1982). The impact of infertility on marital satisfaction. Social Casework: The Journal of Contemporary Social Work, 387-393.

Shumaker, S. & Brownell, A. (1984). Toward a theory of social support: Closing conceptual gaps. Journal of Social Issues, 40, 11-36.

Slade, P., Raval, H., Buck, P., & Lieberman, B. E. (1992). A 3-year follow-up of emotional, marital and sexual functioning in couples who were infertile. Journal of Reproductive and Infant Psychology, 10, 233-243.

Stanton, A., Tennen, H. Affleck, G., & Mendola, R. (1991). Cognitive appraisal and adjustment to infertility. Women & Health, 17(3), 11-20.

Stephen, E.H. & C., A. (1995). Use of infertility services in the United States (Statistical data included). Family Planning Perspectives, May 2000 Vol. 32, i3, p. 132.

Taylor, E. (1995). The stress of infertility. Human Ecology Forum, 23(4), 12-16.

Thompson. J. M., Whiffen, V. E., & Blain, M. D. (1995). Depressive symptoms, sex and perceptions of intimate relationships. Journal of Social and Personal Relationships, 12, 49-66

Thoits, P. (1986). Social support as coping assistance. Journal of Counseling and Clinical Psychology, 54, 416-423.

Turner, H.A. (1994). Gender and social support: Taking the bad with the good? Sex Roles: A Journal of Research, Vol. 30, n7-8 p. 521(21).

Valentine, D. (1986). Psychological impact of infertility: Identifying issues and needs. Social Work in Health Care, 11(4), 61-68.

Van Belan, F., & Trimbos-Kemper, T. (1993). Long-term couples: A study of their well-being. J, Psychosom. Obstet. Gynecol, 14, 53-60.

Van Belan, F., & Trimbos-Kemper, T. (1994). Factors influencing the well-being of long-term infertile couples. J, Psychosom. Obstet. Gynecol, 15, 157-164.

Whisman, M. A., & Bruce, M. L. (1999). Marital dissatisfaction and incidence of major depressive episode in a community sample. Journal of Abnormal Psychology, 108. 674-678.

Whitehead, L., & Gonzalez, L. (1994). Stigma: The hidden burden of infertility. Soc. Sci. Medicine, 40(1), 27-36.

Williams, M. (1997). Toward greater understanding of the psychological effect of infertility on women. Psychotherapy in Private Practice, 16(3), 7-26.

Wright, G., Duchesne, C., Sabourin, S., Bissonnette, F., Benoit, J., & Girard, Y. (1991). Psychosocial distress and infertility: Men and women respond differently. <u>Fertility and Sterility, 55(1),</u> p.100-108.

Zimet, G., Dahlen, N., Zimet, S., & Farley, G. (1988). The multidimensional scale of perceived social support. <u>Journal of Personality Assessment, 522(1),</u> 30-41.

APPENDIX A

CONSENT FORM

1. Study Title: Infertility and Marital Adjustment: The Influence of
Perception of Social Support, Privacy Preference and
Level of Depression

2. Performance Site: Fertility Clinic

3. Investigator: The investigator listed below is available
to answer questions about the research
M-F (9:00am to 4:00pm)
Peggy Haviland, LCSW
336-0174

4. Purpose of the
   Study: The purpose of this research project is to
Identify the effects of infertility on the marital
relationship.

5. Subject Inclusion: Individuals at least 18 years of age who
present as a couple seeking infertility
treatment.

6. Number of participants: 50 couples

7. Study Procedures: Each participant will complete a packet
of brief questionnaires and return them
to the investigator.

8. Benefits: There may be no direct benefit to the
participant. However, information gained from
the study may provide clinicians with valuable
knowledge about the effects of infertility on the
couple.

9. Risks/Discomforts: There are no direct risks to the participants. However,
some of the questionnaires involve sensitive issues. The
packets should be filled out separately by each partner
without discussion of the answers.

10. Injury/Illness: There are no risks to injury involved.

11. Right to Refuse: Subjects may choose not to participate or

to withdraw from the study any time with no jeopardy to their treatment by their doctors or other penalty at the present time or in the future.

12. Privacy: The LSU Institutional Review Board (which oversees university research with human

subjects) may inspect and/or copy the study records.
Results of the study may be published, but no names or identifying information will be included In the publication.
other than as set forth above, subject identity will remain confidential unless disclosure is legally compelled.

13. Financial
    Information: There is no cost to the subjects, nor is there any compensation for participating in the study.

14. Signatures:

The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigator. If I have questions about subjects' rights or other concerns, I can contact Charles E. Graham, Institutional Review Board, (504) 388-1492. I agree to participate in the study described above and acknowledge the investigator's obligation to provide me with a signed copy of the consent form.

Subject Signature _____   Date_____

APPENDIX B

DIRECTIONS FOR PARTICIPANTS

Dear study participant,

Thank you for agreeing to be a participant in this exploration of the impact of infertility on the marital relationship. Your participation is greatly appreciated.

Please take a moment to familiarize yourself with the packet materials. You and your partner should each have a separate packet. Each packet should include a consent form, information sheet, five brief questionnaires and a stamped, addressed envelope to return all materials. Please read and sign the consent form, fill out the information sheet and answer all questions carefully with a pencil. You and your partner should fill out the materials separately, with no discussion of the statements or answers. Returning your materials promptly will help to expedite the study.

Once the researcher receives both packets in the mail, all identifying information will be discarded and you will remain anonymous. The results of this study will be used for academic and clinical purposes.

Thanks again for your time and participation.

INFORMATION SHEET

1. Male __   Female __

2. Married? Yes __ No __
   If yes, how long? _____
   If no, how long have you been with partner? _____

3. Date of birth? ___/___/___

4. Occupation? _____

5. Race? _____

6. Highest educational level achieved? _____

7. Do you have biological children with current partner?
   Yes __ No __
   If yes, how many? _____

8. Do you have any biological children from previous relationship?
   Yes __ No __
   If yes, how many? _____

9. Have you and your partner sought treatment for infertility before?
   Yes__No__
   If yes, please describe setting and duration_____
   _____

10. Have you ever been given a diagnosis of infertility? Yes__ No__
   If yes, please describe _____
   _____

11. Has your partner ever been given a diagnosis of infertility?
   Yes__No__
   If yes, please describe _____
   _____

APPENDIX D

LOCKE-WALLACE MARITAL ADJUSTMENT TEST

1. Check the dot on the scale line below which best describes the degree of happiness, everything considered, of your present marriage. The middle point, "happy", represents the degree of happiness which most people get from marriage, and the scale gradually ranges on one side to those few who are very unhappy in marriage, and on the other, to those few who experience extreme joy or felicity in marriage.

0	2	7	15	20	25	35
.	.	.	.	.	.	.

very
unhappy

perfectly
happy
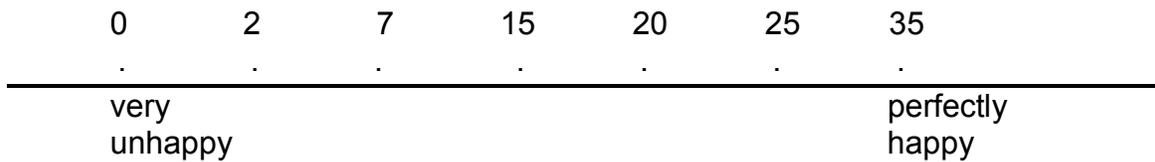
State the approximate extent of agreement or disagreement between you and your mate on the following items. Please circle a number for each question.

	Almost Always agree	always agree	Occasionally disagree	Almost Frequently disagree	always disagree	Always disagree
2. Handling family finances	5	4	3	2	1	0
3. Matters of recreation	5	4	3	2	1	0
4. Demonstration of affection	8	6	4	2	1	0
5. Friends	5	4	3	2	1	0
6. Sex relations	15	12	9	4	1	0
7. Conventionality (right, good or proper conduct)	5	4	3	2	1	0
8. Philosophy of life	5	4	3	2	1	0

9. Ways of   5   4   3   2   1   0
    dealing with
    in-laws

10. When disagreements arise, they usually result in:
     0   husband giving in
     1   wife giving in
    10 agreement by mutual give and take

11. Do you and your mate engage in outside interests together?
    10   all of them
     8   some of them
     3   very few of them
     0   none of them

12. In leisure time do you generally prefer: to be "on the go" ____
                                             to stay at home? ____

          Does your mate generally prefer: to be "on the go" ____
                                               To stay at home? ____

13. Do you ever wish you had not married?
     O   frequently
     3   occasionally
     3   rarely
    15 never

14. If you had your life to live over, do you think you would:
    15 marry the same person
     0   marry a different person
     1   not marry at all

15. Do you confide in your mate:
     0   almost never
     2   rarely
    10 in most things
    10 in everything

APPENDIX E

THE MULTIDIMENSIONAL SCALE OF
PERCEIVED SOCIAL SUPPORT

We are interested in how you feel about the following statements. Please read each item carefully. Indicate how you feel about each statement using the scale below.

1= Very strongly disagree
2= Strongly disagree
3= Mildly disag
4= Neutral
5= Mildly agree
6= Strongly agree
7= Very strongly agree

____ 1. There is a special person who is around when I am in need.

____ 2. There is a special person with whom I can share joys and

   sorrows.

____ 3. My family really tries to help me.

____ 4. I get the emotional help and support I need from my family.

____ 5. I have a special person who is a real source of comfort for

   me.

____ 6. My friends really try to help me.

____ 7. I can count on my friends when things go wrong.

____ 8. I can talk about my problems with my family.

____ 9. I have friends with whom I can share my joys and

   sorrows.

____10. There is a special person in my life who cares about my

   feelings.

____11. My family is willing to help me make decisions.

____12. I can talk about my problems with my friends.

APPENDIX F

THE RELATIONAL PRIVACY PREFERENCE SCALE

This questionnaire is concerned with people's preferences for the amount of privacy they need in various areas of life. There are no universally right or wrongs responses since privacy is a very personal thing and each person has his or her own particular preferences. Your responses will be handled in such a way as to respect your privacy. Please indicate your own preferences by writing in the number that corresponds to the answer for each question. Please note that the higher the number the stronger your disagreement with the statement, Please answer each statement.

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	2	3	4	5

____ 1. I prefer not to socialize with neighbors.

____ 2. I need a lot of time to be alone, even from my partner.

____ 3. I think it is important to tell my partner just about everything there is to know about me.

____ 4. My partner doesn't have to ask to borrow my things.

____ 5. I would dislike living in an area where I never got to meet my neighbors.

____ 6. I don't need a lot of opportunities to be apart from other people.

____ 7. It is important for me to confide in my partner about my work-life.

____ 8. It is important for me to have places in my home that are just for my personal use.

____ 9. It is important for me to aim to live in a place where neighbors often do things together.

____ 10. I prefer to have a lot of time to get away from other people and just be on my own.

___11. My personal preference is not to tell my parents all my deepest feelings.

___12. I feel uncomfortable letting my partner borrow things that are special to me.

APPENDIX G

CENTER FOR EPIDEMIOLOGICAL STUDIES-
DEPRESSED MOOD SCALE

Using the scale below, indicate the number which best describes how often you felt or behaved this way DURING THE PAST WEEK. Please consider each statement carefully.

1= Rarely or none of the time (less than one day)
2= Some or a little of the time (1-2 days)
3= Occasionally or a moderate amount of time (3-4 days)
4= Most or all of the time (5-7 days)

DURING THE PAST WEEK:

____ 1. I was bothered by things that usually don't bother me.

____ 2. I did not feel like eating: my appetite was poor.

____ 3. I felt that I could not shake off the blues, even with help from

my family and friends.

____ 4. I felt that I was just as good as other people.

____ 5. I had trouble keeping myself on what I was doing.

____ 6. I felt depressed.

____ 7. I felt that everything I did was an effort.

____ 8. I felt hopeful about the future.

____ 9. I thought my life had been a failure.

____10. I felt fearful.

____11. My sleep was restless.

____12. I was happy.

____13. I talked less than usual.

____14. I was lonely.

____15. People were unfriendly.

____16. I enjoyed life.

____17. I had crying spells.

____18, I felt sad.

116

___19. I felt that people disliked me.

___20. I could not get "going".

VITA

Peggy Maillet was born in Appleton, Wisconsin, and attended elementary, middle and high schools there. She received a bachelor of arts with a double major in psychology and sociology from Marquette University in 1991. In 1992, she received a master's degree in social work from Tulane University in New Orleans, Louisiana, and is a candidate for the degree of Doctor of Philosophy in social work from Louisiana State University in Baton Rouge, Louisiana. This degree is to be awarded in December 2002.

Her career in social work has included work in psychiatric hospitals and a substance abuse clinic with a focus on marriage and family therapy, children and adolescents, and group work. She is currently teaching in a baccalaureate social work program at Meredith College in Raleigh, North Carolina.