



**THE RELATIONSHIP BETWEEN INFERTILITY,  
COPING AND WOMEN'S PSYCHOLOGICAL  
WELL-BEING**

**BY**

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**A dissertation submitted in a partial fulfilment of the  
requirements for the degree of Master of Human  
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## **ABSTRACT**

This study was carried out to examine the relationship between infertility, coping and women's well-being. A convenience sample of 49 women with fertility problems and 51 fertile women participated in this study. They were asked to complete a questionnaire consisting of scales measuring their coping strategies and psychological well-being. It was hypothesized that (1) women with fertility problems would report lower psychological well-being than fertile women, and (2) coping would moderate the relationship between infertility and psychological well-being such that those who used emotion-focused coping would report lower psychological well-being than those who used problem-focused coping regardless of infertility. *t*-tests and hierarchical multiple regression analyses were conducted to test for the hypotheses. Results showed that infertility was not a significant predictor of psychological well-being, and there was no evidence of coping acting as a moderator in the hypothesized relationship. Limitations and implications of research were highlighted.

## ملخص البحث

انجزت هذه الدراسة لأختبار العلاقة بين العقم، التحمل و السلامة النفسية للنساء. عينة ملائمة مكونة من 49 امرأة تعاني من مشاكل الخصوبة، و 51 امرأة عقيمة شاركوا في هذه الدراسة. حيث طلب منهن ملئ استبيان مكون من مقاييس لقياس تقنيات التحمل و السلامة النفسية لدى النساء. فرضيات البحث كانت كالآتي:1- السلامة النفسية لدى النساء اللواتي يعانين من مشاكل الخصوبة سوف تكون أقل مقارنة بالنساء العقيمات، 2- التحمل سوف يعدل العلاقة بين العقم والسلامة النفسية، مثلاً السلامة النفسية للنساء اللواتي استعملن تقنية التحمل -العاطفة المركزة- سوف تكون أقل مقارنة مع اللواتي استعملن تقنية التحمل -المشكل المركز- بغض النظر على كونهن عقيمات أو لا. تحليلات  $t$ -tests و الانحدار الهرمي المتعدد استعملت لاختبار الفرضيات. اظهرت النتائج أن العقم لم يكن عامل تنبؤي ذو دلالة للسلامة النفسية؛ بالاضافة لذلك، لم تكن هناك أي دلالة على ان التحمل يلعب دور المعدل كما كان مفترضاً. حدود الدراسة و مجالات تطبيقها ابرزت ايضاً.

## **APPROVAL PAGE**

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Human Sciences (Psychology).

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Badri Najib bin Zubir  
Dean, Kulliyah of Islamic Revealed  
Knowledge and Human Sciences

## DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

Shahidah binti Mohamed Makki

Signature .....

Date .....

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

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This research is dedicated to my beloved parents,  
Mohamed Makki bin Ahmad and Siti Rohani binti Manaf,  
my sisters and brothers  
and  
infertile women and men out there,  
you deserve more than medical treatment.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **INTRODUCTION**

Infertility is defined as a failure to conceive after unprotected intercourse for a period of one year, or the inability to carry a pregnancy to a live birth (Glazer & Cooper, 1988). The World Health Organization (WHO) Manual for the Standardized Investigation and Diagnosis of the Infertile Couple reported that there are two million new cases of infertility every year and approximately 8% of the couples have some problem related to their reproductive life (Cunha, Carvalho, Albuquerque, Ludermir & Novaes, 2008).

Infertility can be divided into two types, namely primary infertility and secondary infertility. Primary infertility refers to couple who have never been able to conceive (Sijuwade, 2008). On the other hand, secondary infertility is difficulty conceiving after already having conceived and carried a normal pregnancy (Zwick, 2003). Infertility could occur due to female factors (e.g., polycystic ovarian syndrome, anovulation, ovarian cancer and endometriosis), male factors (e.g., low sperm count and bad semen quality), mixed factor (both male and female factors), or unexplained factors in which result revealed no abnormality in husband and wife after investigations have been carried out (Peterson, 2000).

According to Ponjaert-Kristoffersen and Beatens (1999), infertility is considered as a major crisis that upsets the way people see their future. It affects practically every important decisions or events in their life (Glazer, 1994).

Oddens, den Tonkelaar and Nieuwenhuyse (1999) conducted a survey on 281 patients awaiting for the Assisted Reproduction Treatment (ART) at five centres in three countries, and 289 controls, who already had at least one child of their own, were not pregnant at the time of the survey and had no history of ART. They wanted to investigate whether the infertile patients experienced more negative emotional feelings and negative emotional impact during periods when they were attempting to conceive as compared to the control group, and whether there was any difference in their well-being at the time of consultation. Their study revealed that women with fertility problems did in fact consistently report higher negative emotions than the controls with reference to the periods during which they had been trying to conceive. The women with fertility problem also reported less favourable scores than the controls on scales for depressed mood, memory/concentration, anxiety and fears, as well as for self-perceived attractiveness. In addition, Oddens et al (1999) also found that infertile as well as fertile women ranked infertility as a severe life event. These findings show the negative impact of infertility and that infertility is a nightmare shared by everybody regardless of their fertility status.

Infertility has been described as a developmental, personal and social life crisis, and it is often chronic, unanticipated and uncertain (Applegarth, 1999; Peterson, 2000). People experiencing infertility are burdened with stressful experiences and decisions including financial costs, frequent doctor appointments, treatment decisions, painful and embarrassing procedures and month-to-month emotional cycle (Zwick, 2003). Moreover, infertility is also believed to have detrimental social and psychological effect on the individual, from overt ostracism or divorce to more subtle forms of social stigma leading to isolation and mental distress (Cousineau & Domar, 2007).

From the time they were young girls, most women learn that their destiny is to bear children and become mothers. The image of oneself as a mother tends to operate regardless of how their career and professions developed (Glazer, 1994). For most people, parenting is one of the major parts of their expectation for the future and an important goal in adult life. Psychiatrists and psychologists viewed the ability to reproduce as central to an individual's core identity, self-concept and body image, whether or not one wants children (Rosenthal, 1997).

Parenthood is the targeted key identity of most people (McQuillan, Greil, White & Jacob, 2003) and motherhood is the only way to enhance women's status in their family and community (Cousineau & Domar, 2007). The ultimate fulfilment of women's femininity can only be achieved by a child, and it is a lifelong expectation (Pawson, 2007). Thus infertility is an unwelcome interruption (McQuillan et al., 2003). The affected women would be frustrated, sad and feel out of control when they learn that their plans are not being fulfilled (Rosenthal, 1997). Infertility becomes the focal point of daily discourse and tasks, often to the exclusion of other important aspects of life (Cousineau & Domar, 2007).

Despite the negative associations between infertility and psychological well-being presented above, there were also a number of researches that reported no significant findings on the negative impact of psychological well-being in infertile men or women (Connolly, Edelman, Cooke & Robson, 1992; Downey & McKinney, 2002; Matsubayashi, Hosaka, Izami, Suzuki & Maino, 2001; Peterson, 2002). The studies found either little evidence of psychopathology in the infertile group or no significant difference in the psychiatric symptoms between infertile and controls groups.

Due to the mixed findings, the first objective of the present study was to test for the relationship between infertility and psychological well-being.

## **JUSTIFICATION OF THE STUDY**

The present study was important for several reasons:

First, this study contributed to a new area of research in Malaysia; the psychological well-being of infertile women. Intuitively, we would predict that any infertile women, including Malaysians, might suffer some degree of psychological distress. Therefore, this study is carried out to examine this prediction, so that it will help us to better understand how infertile women are affected psychologically. This understanding is important because it will direct us on how to address the psychological issues of infertile women more effectively.

Second, this study compared the psychological well-being of two groups of women; (1) women with fertility problems, and (2) fertile women. The literature from Western countries has indicated the lower psychological well-being in women with fertility problems as compared to the control group (normal fertile women). Thus, this study explored whether similar negative psychological impact are observed in infertile women in Malaysia.

Third, this study also examined the moderator role of coping in the relationship between infertility and psychological well-being of women with and without fertility problems. Coping is important because it is a specific set of responses tailored to specific constraints (Pearlin, 2006). Coping may exercise multiple moderating roles such as reducing the intensity of a stressor on outcomes, or it can also have a direct relationship to an outcome regardless of modification on the stressor

(Pearlin, 2006). Consequently, knowledge on the specific role of coping in the relationship between infertility and psychological well-being would help physician/therapist to give special attention to coping during infertility treatment.

Finally, it is hoped that the findings of this study would suggest a few concrete actions that could be taken by the government or private agencies to enhance the well-being of the affected women. Suitable psychological support services especially psychological counselling might be suggested and provided in future in Malaysia. Furthermore, it was reported by Boivin et al. (1999) that the Human Fertilization and Embryology Authority (HFEA) which regulates the assisted reproduction in the UK has stipulated psychological counselling to be offered to any patient seeking for it. Presently, there is no such service in Malaysia.

## **THEORETICAL FRAMEWORK**

Researchers have been using stress theory not only to explain the psychological reactions to infertility, but also to suggest helpful ways of coping in order to face the challenge of infertility successfully (Rosenthal, 1997).

This study is guided by the theoretical framework of Pearlin's stress process model (Pearlin, 2006). According to Pearlin, there are three fundamental concepts that form the core of the stress process: stressors, moderators/mediators, and stress outcomes.

*Stressors* are defined as any external (environmental or social) or internal (biological or psychological) factors that challenge an individual to adapt or change. According to Lazarus and Folkman (1984), two characteristics must be present for stress to have an impact on an individual; (1) a given situation must be perceived as being demanding or threatening, and (2) the individual must believe he/she lacks

sufficient resources to cope with the situation. Stressors can appear in two forms: (1) event stressor that include any sudden and generally unexpected phenomenon that result in a stress outcome such as destruction of one's home by a tornado, or death of a beloved one, and (2) chronic stressor which is likely to emerge more insidiously and be more persistent. Chronic stressor comprise of a wide variety of stressors including status strain (a person's position in the social structure), role strain (conflict or demands within an individual's role set), ambient strain (stressors that come from an individual's proximal environment, specifically neighbourhood), and quotidian/daily strain (arise out of repeated daily hassles) (Pearlin, 2006).

*Moderators* are the social or personal resources that enable an individual to prevent or reduce the impact of stressors on the outcome. The moderating resources considered by this model are (1) coping, (2) social support, and (3) self-concept/mastery. Certain moderating resources might also have mediating effects on stress outcome.

*Stress outcomes* refer to the psychological, emotional or physiological conditions resulting from the exposure to the stressors, after accounting for the moderators/mediators.

Coping as one of the identified moderating resources is the behaviours that individuals employ on their own behalf, in their effort to prevent or avoid stress and its consequences. According to Pearlin (2006), these behaviours may function to change the situations by reshaping the meaning of stressors in ways that reduce their threat, hindering the impact of stressor, or reducing the intensity of distress that has been created by the stressor. The stress process model is illustrated in figure 1.

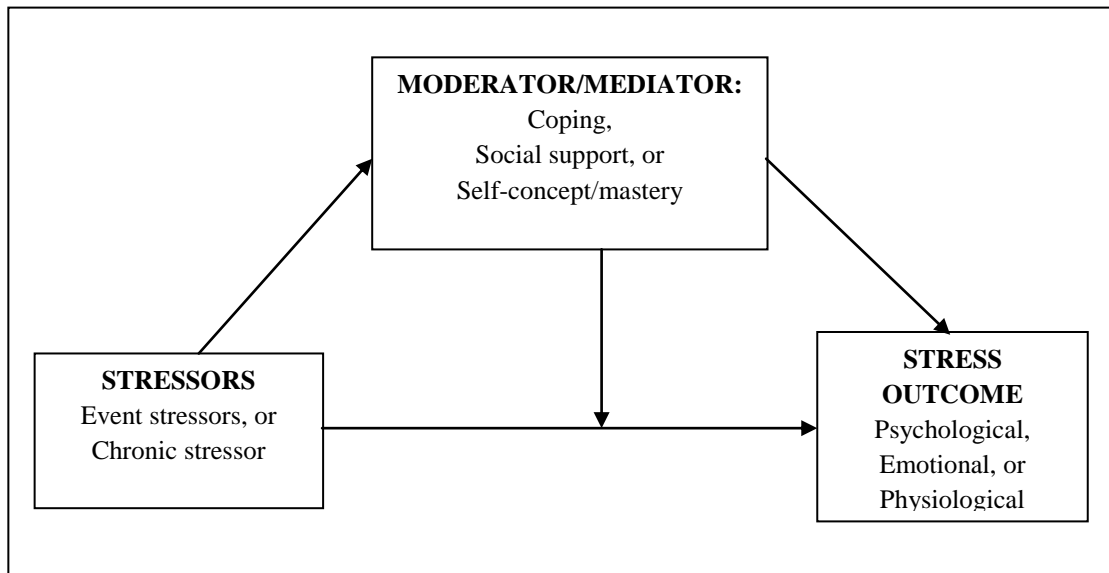


Figure 1: Framework of Pearlman's Stress Process Model

## CONCEPTUAL FRAMEWORK

Infertility can be perceived as a chronic stressor with no clear solution and often results in strong feelings and uncertainty about the future (Zucker, 1999). Therefore, negative outcomes are predicted to be the result. Besides that, moderator variables are believed to play a role in the relationship between infertility and the outcomes.

Figure 2 illustrates the conceptual framework of the present study. In this study, infertility was considered as the stressor and psychological well-being, specifically depressed mood and anxiety were the stress outcomes. In addition, this study examined the role of coping strategy in moderating the relationship between infertility and well-being.

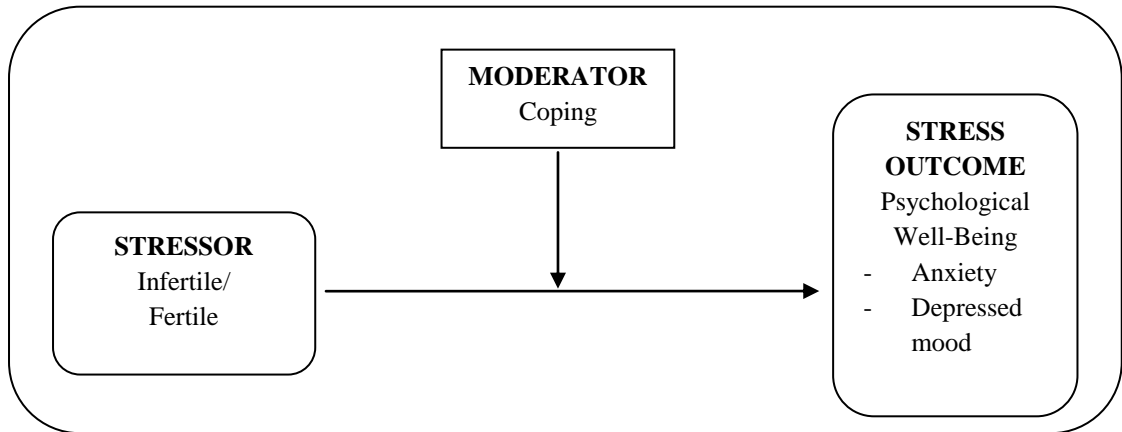


Figure 2: Framework of the Relationship between Infertility, Coping and Psychological Well-being in the Present Study

### STATEMENT OF THE PROBLEM

Infertility is a worldwide phenomenon. It is not only an individual issue. It is an issue of a couple, a family and a society. At the individual level, the affected woman has to accept the fact that she is unlike other normal fertile woman who can eventually conceive spontaneously. At the couple's level, they have to accept the reality that they need to sacrifice physically, psychologically and materially before they might or might not have a biological child. At the family level, the affected individuals would be filled with guilt feeling for their inability to contribute to the continuation of the family's generation (Pawson, 2007). Finally, at the social level, those with fertility problems especially the women would need to face the stigmatization and negative reactions of the society on their inability to reproduce.

Women would be assumed to be psychologically more affected by infertility than men (Mahoney, 2008) because in many societies, a woman's role is defined by her ability to have children (Boonmongkon, 2001). In fact, in some places, the stigma of childlessness is so great that infertile women are socially associated and neglected (Boonmongkon, 2001). Unfortunately, little attention has been given to the

psychological aspects of infertility in Malaysia, what more the psychological services for infertile women or men.

This present study also focused on the coping processes which involved the effort to address perceived demands engendered by infertility (Berghuis & Stanton, 2002). It is believed that coping can act as buffer to help people avoid, overcome or reduce psychological distress by moderating the potential effects that stressors have on the functioning, as well as preventing future stressors (Zwick, 2003). Therefore, coping would certainly has some form of relationship to the psychological well-being of women with fertility problem. Thus, this study tries to address two research questions:

1. What is the impact of infertility on women's psychological well-being?
2. Can coping moderate the relationship between infertility and psychological well-being?

## **CONCEPTUAL AND OPERATIONAL DEFINITIONS**

The main variables in this study were infertile/fertile, coping and psychological well-being.

*Infertile/Fertile.* Infertility refers to inability to conceive after one year of unprotected sex (Sijuwade, 2008). The infertile women in this study were diagnosed by the gynaecologists in the research site (Fertility Centre of International Islamic University Malaysia, Kuantan) as primarily infertile, and had been married for at least four years. As for the controls (fertile), they also had been married for at least four years with at least one child.

*Coping.* Coping is defined as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised at

taxing or exceeding the resources of the person” (Lazarus and Folkman, 1984, p.141). Coping was assessed by the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1988), measuring participant’s emotion-focused and problem-focused coping strategies.

*Psychological Well-Being.* It is defined as a subjective feeling of emotional well-being (Coulter, 1999). The psychological well-being measured in this study were anxiety and depressed mood. Anxiety and depressed mood were assessed using anxiety and depressed mood subscales of the Psychological General Well-Being Index (PGWBI; Dupuy, 1984).

Demographic information on women’s age, duration of marriage, educational level, and employment status were also asked.

## **RESEARCH OBJECTIVES**

The objectives of this research are:

1. To examine the relationship between infertility and psychological well-being.
2. To examine the moderator role of coping in the relationship between infertility and psychological well-being, such that women who use problem-focused coping strategies would report better psychological well-being than women who use emotion-focused coping strategies regardless of infertility.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter discusses the history of psychological research on infertility, and research relating to coping and psychological well-being of women with fertility problem.

#### **HISTORICAL OVERVIEW OF PSYCHOLOGICAL RESEARCH ON INFERTILITY**

Research studying the relationship between psychology and infertility has progressed through several stages since the 1950s (Peterson, 2000). The early writings focused on psychological variables as causal factors for infertility (Rosenthal, 1997) or what they called as the psychogenics of infertility, which was rooted from psychodynamic theory. In the 1980s, most research focused on personality differences between infertile and fertile women in which they tried to demonstrate that personality difference and interpersonal conflicts were the cause of infertility in some women (Zwick, 2003).

However, the psychogenic hypothesis has been rejected by researchers, counsellors, and the infertile patients themselves. It is because this hypothesis has come to be seen as a mechanism for minimizing the reality of the suffering associated with infertility, and as a means of blaming victims for their own suffering (Greil, 1997). Furthermore, many researches conducted in 1980s and 1990s found no indication that rates of psychopathology in infertile persons are higher than the normal population (Mabasa, 2002). Therefore, for the past 15 years, the direction of psychological research has turned to assessing the emotional impact of infertility on

couples and individuals as the consequences rather than cause of infertility (Peterson, 2000).

In some parts of the world, research regarding the psychological impact of infertility has been carried out and given proper attention. The detrimental effects of infertility on individual's well-being have been shown by many studies (Amir, Horesh & Lin-Stein, 1999). The effects include:

...tension, depression, anger, decrease in sexual functioning, mood disturbances, cognitive disturbances expressed in excessive worrying and a tendency for a self-blame, low energy level, ... overeating..., feel offended, lowers body image, and decrease psychological and financial resources. (p.464)

However, according to Greil (1997), the psychogenic theory cannot be totally rejected because some recent studies have provided some support for the psychogenic hypothesis. Boivin and Schmidt (2005) claimed that "there is now converging evidence that negative psychological traits and mood states are associated with reduced conception rates in women" (p.1745). In addition, Rosenthal (1997) stated that psychological problems might co-exist with physical problems in infertility. For example, distress can impact a woman's hormonal levels and ability to reproduce (Zwick, 2003).

Nonetheless, the debate on whether psychological states are the factors or the consequences of infertility should not be prolonged. What is evidenced is that many studies showed significant correlations between psychological variables and the well-being of those affected. It indicates that infertile patients need professional psychological help.

Psychological service for infertile couples has been offered and proven to be helpful for those affected (Boivin, Scanlan & Walker, 1999). Unfortunately, though most patients attending infertility clinic believe that psychological services should be