RELATIONSHIP BETWEEN MARITAL ADJUSTMENT, PERCEIVED SOCIAL SUPPORT AND SELF-ESTEEM AMONG INFERTILE MARRIED FEMALES

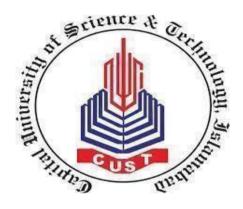


By

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DEPARTMENT OF PSYCHOLOGY Faculty of Management and Social Sciences Capital University of Science & Technology, Islamabad January,2024

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A Research Thesis submitted to the DEPARTMENT OF PSYCHOLOGY In partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN PSYCHOLOGY

Faculty of Management and Social Science Capital University of Science and Technology, Islamabad

January 2024

CERTIFICATE OF APPROVAL

It is certified that the Research Thesis titled "Relationship Between Marital Adjustment, Perceived Social Support and Self-Esteem among infertile married females." carried out by Laiba Naeem, Reg. No BSP201053, under the supervision of Mr. Zeeshan Iltaf, Capital University of Science & Technology, Islamabad, is fully adequate, in scope and in quality, as a Research Thesis for the degree of BS Psychology.

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Relationship between Marital Adjustment, Perceived Social Support and Self Esteem among Infertile Married Females

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DEDICATION

This Research is wholeheartedly dedicated to my parents, who have been

my constant source of peace and success.

DECLARATION

It is declared that this is an original piece of my work, except where otherwise acknowledged in text and references. This work has not been submitted in any form for another degree or diploma at any university or other institution for tertiary education and shall not be submitted by me in the future for obtaining any degree from this or any other University or Institution.

Laiba Naeem

BSP201053

January 2024

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Firstly, I would like to thank Allah Almighty, for giving me the strength and ability to complete this report. Foremost, I want to thank my devoted parents for always being there for me.

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Abstract

The rapid increase in infertility is observed globally. Women experiencing infertility often encounter elevated levels of psychological distress, including feelings of tension, hostility, anxiety, depression, self-blame, and even suicidal thoughts. The prevalence rate of primary infertility ranged from 0.6% to 3.4%, whereas rates of secondary infertility ranged from 8.7% to 32.6%. The present study aims to investigate the relationship between Perceived Social Support, Marital Adjustment, and Self-Esteem among infertile married females. A cross-sectional research design was used in this study. A sample of 150 married females having the age range of 25 to 40 years were selected. Data was collected from the gynecology departments of hospitals in Rawalpindi and Islamabad. After obtaining consent and debriefing the participants were provided with a self-report questionnaire (Rosenberg Self Esteem Scale, Perceived Social Support Scale, and Marital Adjustment Test). Data was analyzed through frequency, descriptive, independent sample T-test, and correlation analysis using SPSS. Marital Adjustment has a weak positive non-significant relationship with Perceived social support (r = .12, p = .15) and has a weak positive non-significant relationship with Self-Esteem (r = .11, p = .19). Perceived social support has a weak positive non-significant relationship with Self-Esteem (r=.10, p=.25). Moreover, no significant mean difference was found between the type of infertility I.e., primary infertility and secondary infertility. For females who experience infertility, it is advised that they seek professional counseling and the appropriate medication

Keywords: Infertility, Perceived social support, Marital Adjustment, Self-Esteem.

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CHAPTER 1 - INTRODUCTION

Infertility is a global issue that affects a significant number of couples and individuals worldwide, with estimates ranging from 48 million couples to 186 million people (WHO, 2022). To gain valuable insights into the mental health and well-being of infertile married women, it is important to study the connection between their marital adjustment, perceived social support, and self-esteem. Such research can guide

the development of targeted interventions, support systems, and counseling approaches tailored to the specific needs of infertile women, ultimately enhancing their overall quality of life during the challenging journey of infertility (Boivin et al., 2007)

Infertility is a medical condition that affects both men and women equally (Callahan & Caughey, 2008). In clinical terms, a couple is typically classified as infertile if they are unable to achieve pregnancy after engaging in consistent, unprotected sexual activity for 12 months or more without the use of contraception

(WHO, 1994). The term "primary infertility" is used to describe couples who have never conceived, while "secondary infertility" refers to the inability to conceive after having previously achieved pregnancy at least once (Lunenfeld & Van, 2004). While the prevalence of infertility varies across countries, the pattern of primary infertility surpassing secondary infertility remains consistent in developing nations (Louis et al., 2013). In Pakistan, primary infertility is more prevalent than secondary infertility, with primary infertility affecting 68% of couples and secondary infertility affecting 32% (Shahzad et al., 2022).

Around 90% of infertility cases can be attributed to identifiable causes and approximately 50% of these cases can be successfully treated to enable pregnancy (Callahan & Caughey, 2008). From a psychological standpoint, women experiencing infertility often encounters elevated levels of psychological distress, including feelings of tension, hostility, anxiety, depression, self-blame, and even suicidal thoughts (Fido, 2004). In Latin America, infertility is associated with significant social stigma (Luna, 2002), and this stigma is particularly pronounced in South Asia. For instance, in Andhra Pradesh, India, 70% of women facing infertility reported experiencing physical violence as a consequence of their inability to conceive (Daar & Merali, 2002). Infertile women may endure verbal or physical abuse within their households, be deprived of inheritance rights, be sent back to their parents, face social exclusion, or even encounter the dissolution or termination of their marriages due to their infertility (Ali et al., 2011). Approximately 86.8% of infertile women are estimated to experience anxiety, while 40.8% experience depression. Psychologically, infertile women exhibit higher levels of aggression, nervousness, unhappiness, self-blame, and feelings of hopelessness (Fido, 2004).

Marital adjustment plays a significant role in influencing the well-being of women who are unable to conceive. It involves the process through which married couples work together to achieve common goals and find satisfaction while also maintaining their individuality (APA, 2022). Research indicates that infertility contributes to higher levels of marital conflict and dissatisfaction, particularly among women, who experience more conflict compared to infertile men (Bolvin & Lancastle, 2010)

However, the mental well-being of infertile women greatly depends on their perception of social support. Social support is defined as the assistance and comfort that individuals receive from their social connections, including friends, family, and the broader community. It represents the cognitive aspect of perceived social support (Brainerd, E., 2017) For women facing the unexpected stress of infertility, adequate social support can be a crucial factor, given that women tend to disclose their infertility more often and to a greater extent than men (Peterson et al., 2009).

The role of self-esteem is crucial for women experiencing infertility, as it pertains to how they perceive themselves in terms of positive qualities and selfconfidence. Self-esteem encompasses various aspects such as physical appearance, beliefs about abilities and accomplishments, personal standards, and perceptions of how others view and respond to them. Numerous studies in the field of infertility have consistently highlighted the detrimental effects of infertility on individuals' selfworth, indicating a negative impact (Chaubey et al., 2018). Since many individuals consider their ability to conceive and have children as an integral part of their identity, the inability to do so may be viewed as a personal failure, leading to a decline in selfesteem (Cohen & McKay, 2020)

The connection between marital adjustment, perceived social support, and selfesteem among married women facing infertility can vary from person to person (WHO, 2022). Nevertheless, a notable correlation exists between these factors. Higher levels of marital adjustment and perceived social support are linked to improved selfesteem in married women dealing with infertility. These findings underscore the significance of providing support and interventions aimed at enhancing marital adjustment and social support, thereby improving the psychological well-being and self-esteem of women facing infertility. It is important to acknowledge that individual experiences may differ, and further research is necessary to explore additional factors that may influence the relationship between these variables within the context of infertility.

The role of self-esteem is vital for women who are experiencing infertility. Self-esteem refers to how individuals perceive themselves in terms of positive qualities and self- confidence. It encompasses their views on physical appearance, thoughts about abilities and accomplishments, personal standards, and how they believe others perceive and respond to them (APA, 2022). Numerous studies in the field of infertility have highlighted the negative impact of infertility on self-esteem, indicating a decrease in individuals' self-worth (Dhandapani et al, 2016). Since many people consider the ability to conceive and have children as a fundamental aspect of their identity, the inability to do so can be perceived as a personal failure, leading to lower self-esteem (Erato et al., 2022)

The relationship between marital adjustment, perceived social support, and self-esteem among married women facing infertility can vary from person to person (WHO, 2022). However, there is a significant correlation between these factors. Married women who experience higher levels of marital adjustment and perceive greater social support tend to have better self-esteem when dealing with infertility. These findings underscore the importance of providing support and interventions that enhance marital adjustment and social support to improve the psychological well-being and self-esteem of women facing infertility. It should be noted that individual experiences may differ, and further research is necessary to explore additional factors that may influence the relationship between these variables in the context of infertility.

Literature review

Infertility has been a Common problem observed among females over the years. Women who are infertile struggle with issues related to marital adjustment. Marriage adjustment is a way by which two people with very different personalities learn to work together effectively to achieve happiness and shared objectives (Burgess & Cottrell,1998). If they are unable to establish marital adjustment, there may be issues with the family's unity and solidarity, which could cause conflict, emotional damage, and family dissolution (Terziolu, 1987). The issue of investigation for the researchers has frequently been marital adjustment with infertility. Perceived social support is another factor that plays an important role in the well-being of infertile females. Perceived social support is the awareness or knowledge that alleged societal support is available if somebody likes to reach the care of an additional individual (Ghasemzadeh & Peyvandi 2017).

Causes of infertility

Infertility can be caused by various biological factors, including:

In **Ovulation disorders**, irregular or absent ovulation can prevent the release of mature eggs necessary for fertilization. Conditions like polycystic ovary syndrome (PCOS) and hypothalamic dysfunction can lead to ovulation disorders (Allyse, 2018). **Structural abnormalities** are the Structural problems in the reproductive organs that can interfere with the fertilization or implantation of embryos. Examples include blocked fallopian tubes, uterine abnormalities, and fibroids (Pfeifer et al., 2016). **Endocrine disorders** are also Hormonal imbalances that can disrupt the reproductive process. Conditions like hypothyroidism, hyperprolactinemia, and polycystic ovary syndrome can affect fertility by impairing ovulation or disrupting the menstrual cycle. (WHO., 2019). **Genetic disorders** are the causes in which Certain genetic conditions can cause infertility. Examples include Turner syndrome, a condition where a female is born with only one X chromosome, and Klinefelter syndrome, where a male is born with an extra X chromosome. (Visser et al., 2009). In **Age-related factors**, an individual's age, both men and women experience a decline in fertility. Women experience a gradual decline in the number and quality of eggs, while men may experience a decrease in sperm quality and quantity (Inhorn, 2003).

Primary and Secondary Infertility

According to Inhorn MC in 2003, men are responsible for over 50% of infertility cases. Primary infertility is more common in specific regions like North Africa and the Middle East, while secondary infertility is less prevalent. However, Orth et al., noted in 2016 that the opposite trend exists in other areas such as Central and Western Europe. A study conducted from 1990 to 2010, as reported by K et al. in 2009, discovered that global rates of primary infertility ranged from 0.6% to 3.4%, whereas rates of secondary infertility ranged from 8.7% to 32.6%. Moridi et al., (2019) indicated that a different study in 2009-2010 found the prevalence of primary infertility to be between 1.5% and 2.6%, which was lower than the prevalence of secondary infertility (7.2% to 18%). According to Mascarenhas in 2012, approximately 10.5% of women worldwide experienced primary infertility from 1982 to 2010, while 2% experienced secondary infertility.

Reports suggest that infertility rates vary between developed and underdeveloped countries. Ali et al., 2011 conducted a meta-analysis of population surveys since 1990, predicting infertility prevalence to be between 3.5% and 16.7% in industrialized regions and between 6.9% and 9.3% in underdeveloped countries. It is important to note that data on infertility prevalence is limited in many parts of the world, and therefore, the available statistics do not provide a comprehensive global overview. In summary, there is significant variation in primary and secondary infertility rates within and between countries across different continents and regions.

Marital Adjustment

A research study explored the consequences of everyday challenges on marital adjustment and satisfaction. The findings revealed that the stress arising from daily hassles harmed the marital adjustment of both spouses, leading to reduced relationship satisfaction and diminished personal well-being (Bodenmann et al., 2019). In another study, newlywed couples were observed over the first decade of their marriage to examine the pattern of changes in marital quality. The study discovered that marital adjustment initially declined but gradually improved over time, with various factors such as personality traits, social support, and stress influencing this trajectory (Kurdek, L. A., 1999).

Factors that impact marital adjustment

One common cause of marital adjustment is **Communication** in which effective communication is crucial for a healthy marriage. Poor communication can lead to misunderstandings, conflict, and dissatisfaction (Markman et al., 2010). **Compatibility** is another cause of marital adjustment that can be influenced by the compatibility between partners in terms of their values, goals, interests, and personalities. When couples share common ground and can understand and appreciate each other's differences, it contributes to positive marital adjustment (Razavi et al., 2018). **Conflict resolution** is also a cause of marital adjustment that is affected by how couples handle conflicts and disagreements. Constructive conflict resolution strategies, such as active listening, compromise, and problem-solving, contribute to better adjustment and marital satisfaction (Martins et al., 2020).

A couple is happy or not

As a researcher studying marital adjustment among infertile females, several indicators may suggest a couple is not happy based on the data collected using a marital adjustment scale. Firstly, the scale itself likely includes items that tap into various aspects of marital satisfaction, communication, and overall relationship quality. Lower scores on these items would indicate poorer adjustment and potentially less happiness within the relationship.

In the context of infertility, couples often face unique stressors and challenges that can impact their marital adjustment and overall happiness. Research has consistently shown that infertility can place significant strain on couples' relationships, leading to increased levels of stress, decreased communication, and diminished satisfaction with the relationship. For example, a study by Peterson, Newton, and Rosen (2003) found that infertility was associated with higher levels of marital distress and lower marital satisfaction compared to fertile couples.

Furthermore, the inability to conceive may exacerbate pre-existing issues within the relationship or create new sources of tension, such as disagreements over treatment options, financial strain related to fertility treatments, and feelings of guilt or inadequacy. These stressors can contribute to decreased intimacy, feelings of isolation, and ultimately, reduced marital satisfaction.

Gender Differences in Marital Adjustment

Marital adjustment refers to the process by which married couples adapt to the challenges and changes within their relationship. According to research, women tend to engage in more self-disclosure and use more positive communication strategies than men, which can contribute to higher levels of marital adjustment. Men, on the other hand, maybe more likely to withdraw during conflict or use avoidant coping strategies, which can negatively impact marital adjustment (Canary et al., 2003).

Perceived Social Support

The subjective evaluation of individuals regarding the extent of support they receive from others, such as friends, family, and the wider social network, is referred to as perceived social support. A research study was conducted to investigate the relationship between perceived social support and mental health outcomes over a specific period. The study involved 500 adults aged 18-35 who completed surveys assessing perceived social support, symptoms of depression, and symptoms of anxiety at three different time points over two years. The findings indicated a correlation between higher levels of perceived social support and lower levels of depression and anxiety symptoms at each assessment. Furthermore, individuals who reported an increase in social support over time experienced a reduction in mental health symptoms. These results highlight the importance of nurturing supportive social relationships and emphasize the significant role that the perception of social support plays in promoting mental well-being (Xiang et al., 2020).

Effects of Perceived Social Support

Social support plays a crucial role in shaping an individual's well-being and overall quality of life. Numerous studies have highlighted the significant effects of how people perceive the assistance they receive from others on various aspects of their physical and mental health.

Firstly, the way individuals perceive social support has been found to have a positive impact on their mental health. Research indicates that those who feel they have greater social support experience lower levels of psychological distress, such as symptoms of anxiety and depression. These individuals are better equipped to cope with challenges because the perceived social support offers emotional solace, guidance, and practical aid during times of stress or adversity (Cohen et al., 2020).

Additionally, the perception of social support is closely linked to physical health outcomes. Studies consistently demonstrate that individuals who believe they have stronger social support networks report better physical well-being and lower mortality rates. The perception of social support can promote healthier behaviors, including regular exercise, adherence to medical treatments, and overall adoption of healthier lifestyles. Moreover, it can mitigate the negative impact of stressful life events on physical health, leading to improved immune functioning and faster recovery from illnesses (Yang et al., 2016).

Gender Differences in Perceived Social Support

Differences in perceived social support between genders can be attributed to a range of factors. Typically, women have larger social networks and engage in more frequent and intimate communication, which may contribute to their heightened perception of support. Moreover, societal expectations and gender roles could influence men's hesitancy to seek or acknowledge social support, leading to lower levels of perceived support (Taylor et al., 2007). A study was conducted to explore how gender impacts individuals' perceptions of social support. The findings indicated that women tend to report higher levels of perceived social support in comparison to men. Additionally, the study emphasized the significance of considering gender differences in social support research and interventions to ensure effective support networks for both genders (Tarasick et al., 2019).

Self-Esteem

Self-esteem pertains to an individual's overall personal assessment of their value and importance. It encompasses one's beliefs and emotions toward oneself, including self-regard, self-acceptance, and self-assurance (Eurich, T., 2018). A research study aimed to explore the influence of self-compassion on both self-esteem and psychological well-being. The results indicate that self-compassion plays a vital role in promoting positive self-esteem and decreasing psychological distress. The study underscores the significance of self-compassion as a valuable asset for sustaining a healthy sense of self-worth and psychological well-being (Neff et al., 2009).

Impact of Self-Esteem

The role of self-esteem in shaping an individual's thoughts, emotions, and actions is crucial and has a significant impact on various aspects of life, including relationships, accomplishments, mental well-being, and overall happiness. A strong sense of self-worth is linked to greater emotional resilience and positive feelings. People with high self-esteem are less likely to experience anxiety, depression, and stress because they possess a positive self-perception and are better equipped to handle life's challenges (Orth, 2016).

Self-esteem also influences interpersonal relationships by affecting their quality. Individuals with high self-esteem tend to have healthier and more satisfying relationships. They are more capable of establishing boundaries, communicating effectively, and displaying assertive behavior. Moreover, they are less likely to tolerate abusive or toxic relationships (Orth, 2012).

Academic and professional performance can also be impacted by self-esteem. Those with high self-esteem are more motivated, set ambitious goals, and exhibit greater persistence in the face of obstacles. They actively seek out opportunities for growth and development (Baumeister et al., 2003). Another study focused on the influence of self-esteem on academic achievement. It involved adolescents from a high school in the United States and another in the Philippines to examine potential cultural differences. The study found a positive correlation between self-esteem and academic performance in both samples, indicating that higher self-esteem was associated with better academic achievements. This study emphasizes the significance of self-esteem as a factor in academic success among adolescents, irrespective of cultural context (Mruk et al., 2006).

Gender Differences in Self-Esteem

It is essential to emphasize that these patterns are based on statistical averages and do not universally apply to every individual in a specific gender group. A research study aimed to investigate gender differences in self-esteem as individuals progress from adolescence to young adulthood. Over ten years, a sample of 1,527 participants was followed, and their self-esteem was assessed at various points in time. The results suggest that females' self-esteem catches up with that of males during the transition from adolescence to young adulthood (Ort her al., 2012). Another study was conducted to explore gender differences in self-esteem across different age groups. The study found a small but significant gender difference in self-esteem, with males generally reporting higher self-esteem than females. (Gentile et al., 2009).

Self-Esteem and Marital Adjustment

The relationship between self-esteem and marital adjustment has been investigated using the actor-partner interrelationship model in five separate samples of couples. According to the findings by Khalilijan et al.,(2018), individuals with high self-esteem tend to have partners who report higher satisfaction with their marriages, whereas those with low self-confidence are more likely to have partners who are generally dissatisfied. Another study conducted by Lakey & Cohen (2000) examined the correlation between self-esteem and marital adjustment, revealing a significant relationship between these variables.

To further explore the influence of self-esteem on marital adjustment over time, a longitudinal study was conducted. The research involved 300 married couples recruited from a diverse urban community. The results, as reported by Cirhinlioglu et al. (2017), demonstrated that higher levels of self-esteem were significantly associated with higher levels of marital adjustment. These findings suggest that individuals with higher self-esteem are more likely to experience improved marital adjustment as time progresses.

Marital Adjustment and Perceived Social Support

To explore the connection between marital adjustment and perceived social support, various studies have been conducted. These studies indicate that perceiving higher levels of social support is linked to positive marital adjustment, both directly and indirectly through relationship dynamics. This association also reduces the risk of depression by enhancing marital satisfaction. Surra (1988) argues that family members who serve as a source of social support can either improve or diminish the quality of marital interactions. Family support plays a vital role in validating the relationship, socially accepting the couple, and providing assurance that they can overcome challenges together (Lewis, 1973).

To investigate the relationship between marital adjustment and perceived social support over five years, a longitudinal study was conducted. The study included a diverse sample of 300 married couples who completed assessments of marital adjustment and perceived social support at multiple time points. The results demonstrated a positive reciprocal relationship between higher levels of marital adjustment and perceived social support, indicating that they have a mutually influencing effect. These findings hold significant implications for understanding the dynamics of marital relationships and the role of social support in promoting marital well-being (Abbas et al., 2019).

Furthermore, another study focused on couples dealing with infertility and examined the relationship between marital adjustment and perceived social support. The results revealed that marital adjustment was positively associated with perceived social support from one's spouse in this context. However, there was a negative relationship between perceived social support from friends and marital adjustment, suggesting that support from friends may not be as beneficial as support from a spouse in such circumstances (Peterson et al., 2009).

Perceived Social Support and Self-Esteem

A longitudinal investigation was carried out to examine the interconnection between perceived social support and self-esteem over an extended period. The study involved 500 adults aged 18 to 30 who were assessed for their perceived social support and self-esteem at three different time points over two years. The results demonstrated a significant link between higher levels of perceived social support and elevated self-esteem during each assessment. Furthermore, an increase in perceived social support over time was associated with a corresponding increase in self-esteem. These findings emphasize the crucial role of perceived social support in the development and maintenance of self-esteem over a prolonged duration (Shaw et al., 2019)

In a cross-cultural study aiming to investigate the impact of perceived social support on adolescents' self-esteem. The participants completed assessments measuring their perceived social support and self-esteem. The findings revealed a positive correlation between perceived social support and self-esteem in all three cultural groups. These results suggest that while perceived social support universally influences self-esteem, cultural factors may influence the magnitude of this association (Luo et al., 2020). Akhtar (2016) found a significant positive relationship between self- esteem and social support from family. Fiesee et al., (2019) identified a strong correlation between self-esteem and three types of social support: family support, peer support, and support from significant others. Similarly, Tahir et al. (2015) reported robust findings indicating a correlation between self-esteem and social support.

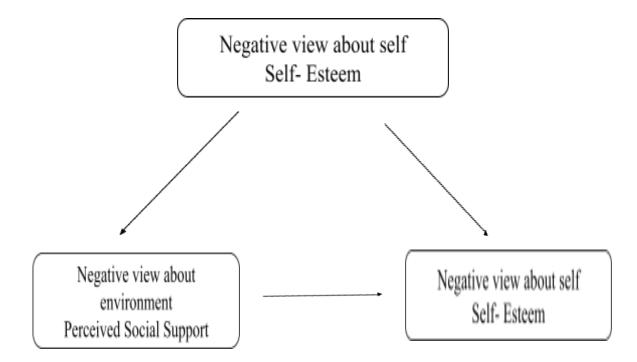
Rationale

Infertility is an important issue faced by most females globally. The purpose of this study is to find the relationship between marital adjustment, perceived social support, and self-esteem among infertile married females of Pakistan. It is important to conduct this study in Pakistan because the prevalence of infertility is increasing and there is a need for more research on this topic. Currently, Pakistan is a developing country, and it is facing an economic depression. People here are deprived of basic needs. Women are not provided with adequate nutrition which affects their health and causes fertility problems. Moreover, the frequent exposure to pollution and environmental toxins in Pakistan also causes fertility problems among Pakistani females. Religiously, most people believe that the main purpose of marriage is having children and society does not accept females who can't have children. They are observed as unhappy by society, or even have their wedding dissolved (Ali et al., 2011). So, to work on this issue is critically important.

Exploring the relationship between marital adjustment, perceived social support, and self-esteem among infertile married females holds significant relevance in both psychological and sociological domains. Infertility often poses multifaceted challenges to individuals and couples, impacting various aspects of their lives including marital dynamics, social interactions, and self-perception. By investigating how marital adjustment, perceived social support, and self-esteem intersect within the context of infertility among married women, this study aims to offer valuable insights into the complex interplay of psychosocial factors influencing their well-being. Understanding these relationships can inform the development of targeted interventions and support systems to enhance coping mechanisms and improve the overall quality of life for infertile women within their marital and social contexts.

Theoretical framework

Through Beck's cognitive trial, you can gain a valuable understanding of the current study. Aaron Beck first suggested it in 1967. The triad refers to thoughts about self, world, and future. In all three instances, depressed individuals tend to have negative views. Thus, a depressed individual would tend to think they are a worthless person living in a futile and unforgiving world with a hopeless future. Infertile females often have negative views about themselves and have low self-esteem. They are less socially acceptable in society. This leads to lower levels of perceived social support. Lack of social support causes psychological problems. This also impacts their marital adjustments in the future. Especially in a country like Pakistan, the main purpose of getting married is to have a child. When it is not fulfilled, it causes poor marital adjustments, lower self-esteem, and a lower level of perceived social support.



Beck's cognitive triad

Social support theory is a vital framework for understanding the dynamics of interpersonal relationships and their impact on individuals' well-being. In the context of infertility among married females, the theory provides a lens through which we can examine the intricate interplay between marital adjustment, perceived social support, and self-esteem.

Marital adjustment, a cornerstone in the social support framework, refers to the degree of satisfaction and harmony within a marital relationship. In the context of infertility, couples may face increased stressors, and the level of marital adjustment becomes crucial. Social support theory posits that a supportive marital environment can serve as a buffer against the challenges associated with infertility. Partners who navigate this journey together, sharing emotions and coping strategies, may experience higher levels of marital adjustment, fostering resilience in the face of adversity.

Perceived social support, another key component of the theoretical framework, extends beyond the marital relationship to encompass broader social networks. The theory suggests that individuals, including infertile married females, draw strength not only from their spouses but also from friends, family, and community. Perceived social support acts as a protective factor, influencing coping mechanisms and psychological well-being. For infertile women, a robust support network can offer understanding, empathy, and practical assistance, mitigating the emotional toll of infertility and contributing to overall well-being.

Self-esteem, the third variable in this framework, is intricately linked to both marital adjustment and perceived social support. Social support theory suggests that positive interactions within a marriage and broader social circles contribute to individuals' self-esteem. In the context of infertility, where women may grapple with feelings of inadequacy or failure, a supportive marital environment and perceived social support can play a pivotal role in bolstering self-esteem. The encouragement and understanding received from the spouse and the broader social network can counteract negative self-perceptions, fostering a sense of worth and resilience.

The synergy between these variables is dynamic. Marital adjustment, perceived social support, and self- esteem are interconnected, creating a complex web of influences on the well-being of infertile married females. A high level of marital adjustment can positively impact perceived social support, as a harmonious marital the relationship often extends to the broader social context. Similarly, perceived social support contributes to self-esteem, as external validation and empathy reinforce an individual's sense of worth. Conversely, low levels of marital adjustment or perceived social support may negatively affect self-esteem, amplifying the emotional toll of infertility.

Objectives

The following were the objectives of the study.

1. To find a relationship between marital adjustment and perceived social support among infertile married females.

2. To find a relationship between marital adjustment and self-esteem among infertile married females.

3. To find a relationship between self-esteem and perceived social support among infertile married females.

4. To explore the significant mean difference in the type of infertility (primary and secondary infertility) and study variables (Self-Esteem, Perceived Social Support, and Marital Adjustment.

Hypotheses

Following were the hypotheses of the study.

H1: There would be a significant positive relationship between marital adjustment and perceived social support among infertile married females.

H2: There would be a positive relationship between marital adjustment and selfesteem among infertile married females.

H3: There would be a positive relationship between self-esteem and perceived social support among infertile married females.

H4: There would be a significant mean difference in the type of infertility (primary and secondary infertility) and study variables (Self-Esteem, Perceived Social Support, and Marital Adjustment.)

CHAPTER 2 - METHOD

Research Design

A cross-sectional research design was used in the study.

Sampling technique

A sample of 150 infertile females was taken from the gynecology departments of different hospitals in Rawalpindi and Islamabad through a purposive sampling technique.

Inclusion criteria

The following inclusion criteria were followed in the study.

1. Females who have been trying for more than 12 months but are unable to conceive whether they belong to any age group, religion, or ethnicity were included.

2. Females having an age range of 25 to 40 years were included.

Exclusion criteria

The following exclusion criteria were followed in the study.

1. Mothers who were unable to understand English or Urdu were excluded.

2. Females having any physical or mental disability which hinders participation in the study were excluded.

Instruments

Following self-report instruments were used in the study.

Demographic sheet

Demographic data was taken which includes age, duration of marriage, and type of infertility.

Locke-Wallace Marital Adjustment Scale (MAT)

Locke and Wallace created the Locke-Wallace Marital Adjustment Test (MAT) in 1959. It measures the overall quality or pleasure of a marriage as well as agreement or disagreement on typical issues that lead to arguments between partners. It is a self-report assessment with 15 items that are scored using several scales. More satisfaction is indicated by higher scores. The MAT has a Cronbach alpha score of 0.83.

The Multidimensional Scale of Perceived social support (MSPSS)

GD Zimet created the Multidimensional Scale of Perceived Social Support (MSPSS) in 1988. It is a self-report questionnaire with 12 items that are each scored on a 7-point Likert scale. It reveals the degree to which a person perceives receiving social support from friends, family, and close relationships. Its Cronbach alpha value is 0.92.

Rosenberg Self-Esteem Scale (RSES)

Morris Rosenberg created the Rosenberg Self-Esteem Scale (RSES) in 1965. It is a 10-item self-report tool that measures both positive and negative attitudes toward oneself as well as an individual's overall self-esteem. Each response is given a score on a 4-point Likert scale (0–3), with 0 denoting a strong disagreement and 3 denoting a strong agreement. Its Cronbach alpha value is 0.74. The scores for items 3,5,8,9 and 10 are reversed. High scores reflect a healthy sense of self.

Procedure

Purposive sampling was done to recruit 150 women from gynecology departments of hospitals in Rawalpindi and Islamabad as well as through online social media platforms. After getting a support letter from the university, private hospitals were contacted through reference. In-person data collection was done from hospitals which provided the permission for data. Participants were given a brief introduction to the study. They were given an informed consent form to ensure the agreement of participation in the research and then a demographic sheet was provided to get the demographics of the participants.

They were provided with self-report questionnaires For online data collection google form was made on a Google document where a brief introduction of the study, and an informed consent form. Scales were administered in both English and Urdu languages. After data collection data was analyzed using SPSS

Ethical Considerations

This present study was conducted with permission from the Department of Psychology of Capital University of Science and Technology. Scales were used with the permission of the authors. Permission for scale translation was taken from the author of the original scale. Administrative approval from the hospitals was taken after receiving a support letter from the university department.

Respondents were briefed about the rationale of the study and to make them aware of how their information was further utilized. A consent form was taken for participation in the study. The confidentiality of the participants was ensured by anonymizing the information obtained from data collection. Participants were given the right to withdraw from the study at any time. Ethical guidelines provided by the American Psychological Association were carried out.

Statistical Analysis

Statistical Package for Social Sciences (SPSS 21) was used for the analysis. Before analysis, data was entered in SPSS. After that data was cleaned. The data was further analyzed using this software.

For the Distribution of data of categorical variables, descriptive statistics was used where frequency and percentages of demographic variables were found. For continuous variables, descriptive statistics were found where mean, median, mode, standard deviation, skewness, and kurtosis were computed. To check the normality of data the value of skewness, kurtosis, Kolmogorov-Smirnov, and normal curve on histogram were analyzed. Reverse items were recorded. Scales were computed. Cronbach's Alpha (α) reliability of the scales was calculated. Pearson Correlation was calculated to test the hypotheses. Lastly, the independent sample T-test was computed.

CHAPTER 3 - RESULTS

In this chapter results findings of the study are presented in the form of frequency and percentages of demographic variables, descriptive statistics and alpha reliability of measures, correlation, and t-test for testing the hypothesized relationship.

Sample characteristic

Table 1

Frequencies and percentages of demographic variables of the participants (N=150).

Demographic variable		f	%
Age			
	24-30 years	51	34
	31-35 years	66	44
	36 - 40 years	33	22
Duration of marriage			
	1-5 years	34	22.6
	6-10 years	51	34
	10-15 years	43	28.6
	15-20 years	22	14.6
Type of infertility			
	Primary	80	53.3
	Secondary	70	46.7

Note: *f* = *Frequency*, % = *Percentage*.

Table 1 exhibits the demographic variables and their frequency and percentage. The variable includes age, duration of marriage, and type of infertility. It shows that participants having primary infertility (f = 80, % = 53.3) were greater in frequency than those with secondary infertility (f = 70, % = 46.7). the frequency of participants from the age range 30 - 35 was higher in frequency than in other age groups. Similarly, participants who have been married for 6-10 years were higher in frequency than other groups (f = 51, % = 34).

Table 2

Descriptive statistics and alpha reliability of the measures (N=150)

Measures	Items	α	М	SD	Rang	je	Skew	Kurt	K-S	р
					Actual	Potentia	1			
RSES	10	.79	23.33	5.23	10-36	10-40	09	50	1.12	.16
MSPSS	12	.78	4.33	.80	3-6	12-84	.07	70	.63	.72
MAT	15	.69	78.05	21.81	27-114		57	56	1.33	.06

NOTE: M = mean, SD = Standard Deviation, $\alpha = Alpha Reliability$, Kurt = Kurtosis, Skew = Skewness, K-S = Kolmogorov - Smirnov, RSES = Rosenberg self-esteem scale, MSPSS = Multidimensional Scale ofPerceived social support, MAT = Marital Adjustment Scale.

Table 2 shows the item numbers, Alpha reliabilities, Mean, Standard Deviation, Skewness, and Kurtosis of all the scales used in the present study. All three scales are reliable according to Nunnally and Bernstein's (1994) criteria, that 0.7 and above alpha value means highly reliable which indicates RSES (M = 23.33, SD = 5.23), MSPSS (M = 4.33, SD = .80) and MAT (M = 78.05, SD = 21.81) to be reliable.

Skewness and kurtosis show the data is normally distributed. Lastly, Kolmogorov-Smirnov was calculated because the sample size was more than 50. Its value is significant (>.05) which also shows the data is normally distributed.

Distribution curve

Following are the figures representing the shape of the distribution curve for Rosenberg's self-esteem scale (RSES), Multidimensional Scale of Perceived social support (MSPSS), and Marital Adjustment Scale (MAT) where the total number of participants (N) for all three measures is 150.

Figure 1

Distribution of scores for Rosenberg self-esteem scale (RSES) (N = 150)

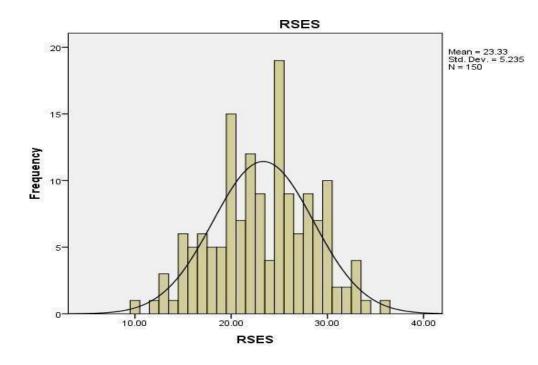


Figure 2

Distribution of scores for Multidimensional Scale of Perceived Social Support (MSPSS)

(N = 150)

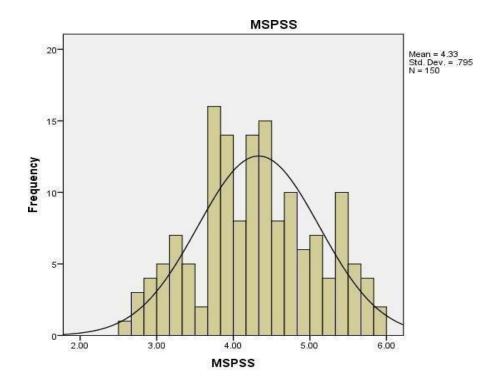
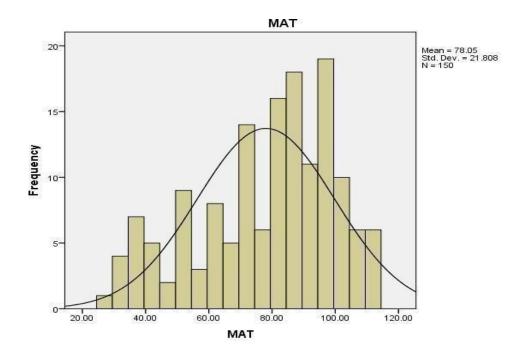


Figure 3

Distribution of scores Marital Adjustment Scale (MAT) (N = 150)



Correlation analysis

Table 3

Pearson correlation of Marital adjustment, Perceived social support, and Self-Esteem among Infertile Married Females (N= 150).

Variables	Ν	М	SD	1	2	3
1. RSES	150	23.33	5.23	1	-	-
2.MSPSS	150	4.33	.80	.10	1	-
3.MAT	150	78.05	21.81	.11	.12	1

Table 3 shows that Marital Adjustment has a weak positive nonsignificant relationship with Perceived social support (r = .12, p = .15). Marital Adjustment has a weak positive non-significant relationship with Self-Esteem (r = .11, p = .19). Perceived social support has a weak positive non-significant relationship with Self-Esteem (r = .10, p = .25).

INDEPENDENT sample T-test

An Independent sample t-test was found to compare the mean difference between two groups (Primary and secondary infertility) concerning marital adjustment, perceived social support, and Self-Esteem.

Table 4

Mean difference (t-test) in marital adjustment, perceived social support, and Self-Esteem among primary and secondary infertility (N=150).

Variable	Prin infer	nary tility		ndary rtility	t (148)	р	95%	CI	Cohen's d
	М	SD	М	SD	-		LL	UL	
RSES	23.48	5.37	23.17	5.11	.35	.72	-1.39	2.00	.06
MSPSS	4.43	.79	4.21	.79	1.68	.10	04	.47	.28
MAT	78.03	22.85	78.09	20.72	02	.99	-7.14	7.02	.00

Note: RSES = Rosenberg self-esteem scale, MSPSS = Multidimensional Scale of Perceived social support, MAT = Marital Adjustment Scale, <math>M = mean, SD = standard deviation, CI = Confidence Interval, LL = Lower Limit, UL = Upper Limit

Table 4 shows the mean, standard deviation, t value, and Cohen's d for *marital* adjustment, perceived social support, and Self-Esteem across the types of infertility i.e., primary and secondary infertility. Results revealed a non-significant mean difference t (148) = .35, p = .72 in primary and secondary infertility across Self-Esteem. It also shows a non-significant mean difference t (148) = 1.68, p = .10 in primary and secondary infertility across Social Support. Lastly, the result shows a non-significant mean difference t (148) = -.02, p = .99 in primary and secondary infertility across Marital Adjustment. The value of Cohen's d for the three scales is \leq .2 which shows a small effect size. This means mean difference between the two groups is very small.

CHAPTER 4 - DISCUSSION

The present study aims to find the Relationship between Marital Adjustment, Perceived Social Support, and Self-Esteem among Infertile Married Females. 150 females from different households, living in Islamabad and Rawalpindi were taken for this research. At first frequency and percentage of categorical variables which include age, type of infertility, and duration of marriage were found. Then descriptive i.e., Mean, Standard Deviation, Skewness, Kurtosis, Kolmogorov-Smirnov, and alpha reliability analysis of the continuous variables was found.

Age was divided into 3 categories i.e., 24-30 years, 30-35 years, and 35-40 years. The two categories of type of infertility were primary and secondary. Lastly, the duration of marriage was divided into 1-5 years, 5-10 years, 10-15 years and 15-20 years

The alpha coefficients for all 3 scales were greater than .70, which indicated that the scales are reliable to use. The values of skewness and kurtosis were computed to confirm that the data was normally distributed. It is recommended that the value of skewness and kurtosis should be less than -1 and +1. The measures exceeding this limit are considered problematic and are not considered as normally distributed (Cisar & Cisar, 2010). The data shows that the values of skewness and kurtosis are less than 1 for the scales used in the study. Further, the normality of data was found using a normal distribution on a histogram. Figures 1,2 and 3 showed data from all three measures was normally distributed. Kolmogorov-Smirnov value is significant (>.05) which also shows the data is normally distributed.

After that Pearson correlation, independent sample T-test, and one-way ANOVA were found to test the hypotheses of the current study. Some findings of the study may contradict the previous research due to some confounding variables and other factors. Most of the findings of this research are in line with the previous research.

Following is the discussion based on the research Hypotheses

There would be a significant positive relationship between marital adjustment and perceived social support among infertile married females.

It was hypothesized that there would be a significant positive relationship between marital adjustment and perceived social support among infertile married females. The result of the correlation reveals a non-significant positive relationship between Marital Adjustment and Perceived Social Support. This means with the increase in perceived social support, marital adjustment also increases and vice versa. Hence hypothesis 1 has been supported by research from the study that both the variables that there exists a positive relationship between the two.

A result from a recent study state that there exists a positive reciprocal relationship between higher levels of marital adjustment and perceived social support, indicating that they have a mutually influencing effect (Abbas et al., 2019). Another result reveals a positive relationship between marital adjustment and perceived social support from the spouse (Peterson, B. D. et al.).

There would be a positive relationship between marital adjustment and selfesteem among infertile married females.

It was hypothesized that there would be a significant positive relationship between marital adjustment and self-esteem among infertile married females. The result of the correlation reveals a non-significant positive relationship between Marital Adjustment and self-esteem. This means with the increase in self-esteem, marital adjustment also increases and vice versa. Hence hypothesis 1 has been supported by research from the study that both variables that there exists a positive relationship with the two.

Research reveals the results that individuals with high self-esteem tend to have partners who report higher satisfaction with their marriages (Erol & Orth, 2013). A recent study reveals a significant correlation between self-esteem and marital adjustment (Cirhinlioglu et al. 2017; Robinson & Cameron, 2012).

There would be a positive relationship between self-esteem and perceived social support among infertile married females.

It was hypothesized that there would be a significant positive relationship between perceived social support and Self-Esteem among infertile married females. The result of the correlation reveals a non-significant positive relationship between Perceived Social Support and Self-Esteem. This means with the increase in Self-Esteem, perceived social support also increases and vice versa. Hence hypothesis 1 has been supported by research from the study that both the variables that there exists a positive relationship between the two.

Findings reveal that an increase in perceived social support over time was associated with a corresponding increase in self-esteem (Shaw et al., 2019). A strong correlation between self-esteem and three types of social support: family support, peer support, and support from significant others (Arsalan, 2009; Tahir et al., 2015).

There is a significant mean difference in the type of infertility (primary and secondary infertility) and study variables (Self-Esteem, Perceived Social Support, and Marital Adjustment.)

It was hypothesized that there is a significant mean difference in the type of infertility (primary and secondary infertility) and study variables (Self-Esteem, Perceived Social Support, and Marital Adjustment.). The result of the independent sample T-test revealed a non-significant mean difference between primary and secondary infertility across three study variables. The effect size is small which means this is very less difference between the two. A study discovered that global rates of primary infertility ranged from 0.6% to 3.4%, whereas rates of secondary infertility ranged from 8.7% to 32.6% (K et al. 2016).

CONCLUSION

In recent times, infertility has become an increasingly important issue. The present study aims to find the Relationship between Marital Adjustment, Perceived Social Support, and Self-Esteem among Infertile Married Females. It has been concluded that there is a non-significant association between Marital Adjustment, Perceived Social Support, and Self-Esteem. This means that with the increase in Perceived social support and Self-esteem, Marital Adjustment also increases. Moreover, with the increase in perceived Social Support, self-esteem also increases.

Women and their families must deal with the terrible impacts of infertility. For a woman who experiences severe consequences of infertility in the form of depression, every single time when she experiences exhaustion, grief, worry, or stress it is advised that she seek professional counseling and the appropriate medication.

LIMITATIONS

The following are the limitations of the study.

- 1. Self-report questions were used; they might have been subjected to desirability bias.
- Data was collected from twin cities only so results may not be generalized on a large level.
- 3. Some participants refused to share complete information.
- The population sample was limited only to females; hence the study findings would not apply to males

IMPLICATIONS

Following are the implications of the study

- 5. This research will be very helpful in creating awareness among families about the mental health of infertile females.
- 6. This will help families and husbands to change their attitude towards their wives.
- This research can help in creating policies regarding providence of mental health facilities and emotional support needed by females at this period.

APPENDICES

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SUPPORT LETTER FOR DATA COLLECTION

Ref. CUST/IBD/PSY/Thesis-01,

November,2023

TO WHOM IT MAY CONCERN

Capital University of Science and Technology (CUST) is a federally chartered university. The university is authorized by the Federal Government to award degrees at Bachelor's, Master's and Doctorate level for a wide variety of programs.

Ms/Mr , registration number is a bona fide student in BS Psychology program at this University from till date. In partial fulfillment of the degree, he/ she is conducting research on "Topic of research". He/ she is required to collect data from (e.g., students, managers, supervisors etc.) of your organization. In collecting this data, your cooperation and help is required.

I hope that you will allow him/ her to collect data/ information from your organization/ institute. Your cooperation in this regard is highly appreciated. Please feel free to contact undersigned if you have any query in this regard.

Best Wishes,

Dr. Sabahat Haqqani

Head, Department of Psychology Ph no. 111-555-666 Ext: 178 sabahat.haqqani@cust.edu.pk

Informed Consent

I am Laiba Naeem, Student of Capital University Of Science and Technology Islamabad. For my research purpose I am collecting data from Pakistani infertile married females. The data will be kept confidential and privacy will be maintained. The data collected will be used for research purpose only. The participation in this study is purely voluntary. You may withdraw at any period through the duration of the study. The withdrawal will not incur any penalty on the part of the participant. Your participation will be highly appreciated. Please confirm that you want to participate in this interview by providing your consent below.

Date:

Sign:

DEMOGRAPHIC SHEET

- Please answer the following questions
- Age:
- Type of infertility: Primary Secondary
- Duration of marriage

Marital Adjustment Scale

Instructions: 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			Нарру			Perfectly
Unhappy						Нарру

Instructions: State the approximate extent of agreement or disagreement between you and your mate on the following items.

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling Family Finances	r5	4	3	2	1	0
2. Matters of Recreation	5	4	3	2	1	0
3. Demonstration of Affection	8	6	4	2	1	0
4. Friends	5	4	3	2	1	0
5. Sex Relations	15	12	9	4	1	0
6. Conventionality (right, good or proper conduct)	5	4	3	2	1	0

7. Philosophy of life	5	4	3	2	1	0
8. Ways of dealing with In-	5	4	3	2	1	0
laws						

When disagreements arise, they usually result in:

husband giving in	wife giving in	agreement by mutual give and take
0	2	10

Do you and your mate engage in outside interests together?

All of them	some of them	very few of them	None of
			them.
10	8	3	0

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?

(Stay at home for both, 10 points; "on the go" for both, 3 points; disagreement, 2 points.)

Do you ever wish you had not married?

Frequently	occasionally	rarely	never
0	3	8	15

If you had your life to live over, do you think you would:

marry the same person	marry a different person	not marry at all
15	0	1

Do you confide in your mate:

almost never	rarely	in most things	in everything
0	2	10	10

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you Very Strongly Disagree Circle the "2" if you strongly Disagree Circle the "3" if you mildly disagree

Circle the "4" if you are Neutral Circle the "5" if you mildly agree Circle the "6" if you strongly agree

Circle the "7" if you Very Strongly Agree

1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

ROSENBERG SELF-ESTEEM SCALE

Instructions

Below is a list of statements dealing with your general feelings about yourself. Please indicatehow strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
2. At times I think I am no good at all.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
3. I feel that I have a n	I feel that I have a number of good qualities.								
Strongly Agree	Agree	Disagree	Strongly Disagree						
4. I am able to do things as well as most other people.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
5. I feel I do not have a	5. I feel I do not have much to be proud of.								
Strongly Agree	Agree	Disagree	Strongly Disagree						
6. I certainly feel useless at times.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
7. I feel that I'm a perso	7. I feel that I'm a person of worth, at least on an equal plane with others.								
Strongly Agree	Agree	Disagree	Strongly						
Disagree	Disagree								
8. I wish I could have	. I wish I could have more respect for myself.								
Strongly Agree	Agree	Disagree	Strongly Disagree						
9. All in all, I am inclined to feel that I am a failure.									
Strongly Agree	Agree	Disagree	Strongly Disagree						
10. I take a positive attitude toward myself.									
Strongly Agree	Agree	Disagree	Strongly Disagree						