Pakistan Journal of Humanities & Social Sciences Research
Volume No. 05, Issue No. 01 (June, 2022)

ISSN (P): 2663-9211 (E): 2663-922X
DOI:https://doi.org/10.37605/pjhssr.v5i1.330

Date of Submission: 4th February, 2022
Date of Acceptance: 15th April, 2022
Date of Publication: June, 2022

SELF-EFFICACY AND COPING STYLES OF INFERTILE WOMEN IN PESHAWAR

Dr. Saima Parwez[*] & Alia Banaras[†]

Abstract

The current study investigated the impact of the type of infertility (primary and secondary) on the self-efficacy and coping strategies of infertile women. The study also investigated the relationship between coping and self-efficacy. A sample of (N = 100) was included in the study out of which (n = 50) were women with primary infertility and (n = 50) were females having secondary infertility. The sample was taken from different gynecological clinics and hospitals as well as from the general population. A demographic sheet along the Infertility Self-Efficacy (ISE) and Coping Strategy Inventory (CSI) was used to measure self-efficacy and coping. Independent sample t-tests were conducted for data analysis. It was assumed that the self-efficacy of women having secondary infertility will be better than women having primary infertility. It was also hypothesized that infertile women with high self-efficacy would use adaptive coping strategies as compared to infertile women with low self-efficacy. The results of the study indicated that the self-efficacy of women having secondary infertility is better than women having primary infertility. our findings also supported our assumption that infertile women with high self-efficacy would use adaptive coping strategies as compared to infertile women with low self-efficacy.

Keywords: Infertility, Self-efficacy, Coping strategies, Primary infertility, Secondary infertility.

[*] Assistant Professor, SBBWU, Peshawar.
[†] M.Phil Scholar, SBBWU, Peshawar.

Introduction

The ability to have children and experience motherhood is something that every woman hopes for in the future, as well as something that others demand of her. A woman desires to marry, have children, and start her own family. It is only natural to have such a feeling. It is instinctive for a woman to want children; to be able to bring a child into the world and care for it is a belief that every woman strongly holds (Ulrich *et al.,* 2000). It is not only an expectation women have of themselves, but it is also a measure of what is normal or ideal, but what if a woman is unable to have the honor and prestige of motherhood? What happens when a woman is unable to conceive or produce the desired number and sex of children due to infertility? This is an extremely emotional problem, especially in a country like Pakistan, where the next logical step for a woman once she marries is to have a child as soon as feasible.

Infertility poses a threat to one's future in Pakistan, which has a collectivistic and patriarchal culture (Hofstede, 2001) where children, especially males, are socially, economically, and culturally valued. A woman is deemed incomplete in society, and there is a void in the woman's and couple's life that is difficult to fill (Hess *et al.,* 2018). This issue affects all parts of a woman's life, including her mental and physical health, social relationships, and her relationship with her husband, among others (Onat, 2012). As a result, a couple, particularly the woman, finds themselves in tough situations, and she suffers from a variety of psychological issues such as stress, despair, and anxiety (Ramazanzadeh, Noorbala, Abedinia, & Nazhizadeh, 2009).

Infertility is a reproductive system disorder marked by the inability to conceive following at least 12 months of unprotected regular coitus (WHO-ICMART, 2009). Infertility can be primary or secondary. Primary infertility occurs when a couple is unable to conceive for a minimum of 12 months without using birth control or is unable to carry a pregnancy to term, and secondary infertility occurs when a couple is unable to conceive after trying for a minimum of a year after already having a child or is unable to carry a secondary pregnancy to term. As a result, infertility is certain to have an impact on women's quality of life (Karabult*et al.,* 2013). According to Teskereci and Oncel (2012), life quality is poor among Turkish infertile women.

Self-efficacy is defined by Albert Bandura (1997) as an individual's appraisal of his or her ability to accurately pursue a course of action in order to deal with a potentially tough scenario. It is a reflection of belief in one's own inherent talents to achieve one's goals or ambitions. Self-efficacy beliefs are, in essence, an individual's self-perception of their own talents (Akhtar, 2008).

Self-efficacy influences well-being, personal change, choices, and personal accomplishments because people have little motivation to act or endure hardships and challenges unless they believe or trust that their activities and behaviors will create the intended results. Self-efficacy beliefs influence whether or not a person considers making positive changes in their life. These ideas are based on the concept of "can" (Can I solve this problem?) (Schunk & Pajares, 2010). Because self-efficacy is linked to healthy habits, it is critical in lifestyle intervention programs (Holloway, & Watson, 2002).

In the context of infertility, self-efficacy refers to a patient's confidence in cognitive, emotional, and behavioral components as well as skills related to infertility and its medical treatment. The Infertility Self-Efficacy (ISE) scale is a self-efficacy assessment for dealing with infertility diagnosis and treatment (Cousineau*et al.*, 2006).

Infertility and its treatment can be devastating to both women and men who are dealing with it. Couples may struggle to cope with this stressful situation and experience despair and anxiety as a result (Kim, Park, Kim, Chung, & Hong, 2017). Women with higher degrees of self-efficacy view infertility as a task rather than a threat, and approach it with constructive and positive attitudes and emotions (Kim *et al.*, 2017). Infertile women who have a high sense of perceived self-efficacy believe that their bodies can withstand treatment, making it easier to keep up with medical procedures like monitoring body temperature, keeping track of ovulation, and giving themselves scheduled injections, as well as the follow-up care (Elsworthy, 2010). Positive thoughts about infertility and its treatment boost a woman's sense of self-efficacy while reducing negative feelings (Arsalan-Ozkan*et al.*, 2013).

When an individual experiences obstacles and stress, Bandura (1999) claimed that perceived self-efficacy impacts what coping activity is initiated, as well as how much effort would be exerted and for how long. As a result, higher levels of self-efficacy imply a stronger ability to demonstrate coping behavior and a tendency to deal with a difficult situation for a longer period of time. According to Cousineau *et al.*, (2006), self-efficacy has a significant impact on infertile women's coping behavior as well as their emotional, cognitive, and behavioral abilities. Self-efficacy can support a person's belief in their ability to carry out a desired coping activity (Lazarus, &Folkman, 1984). Those who believe they can adequately deal with a possible stressor cope with stress more effectively and adopt a more productive and effectual coping strategy (Bandura, 1989).

Coping refers to techniques that a person uses to manage or work through a stressful circumstance and that may assist the person in dealing with the problem. Coping refers to the cognitive and behavioral responses to a stressful situation (Lazarus, & Folkman, 1984). It refers to a person's ability to withstand stress. It also denotes the ability to reduce and alleviate difficulties and stress via deliberate effort. Coping mechanisms are also known as coping

strategies or skills in psychology. Coping can be positive and adaptive, such as finding time to exercise throughout a busy day, or negative, maladaptive, or avoidant, such as failing to seek medical help when signs of a serious illness appear or continue.

Coping abilities and methods can be categorized in a variety of ways and at different levels. Emotional and problem-based coping were distinguished by Richard S. Lazarus and Susan Folkman (1984). Emotional coping entails lowering the emotional response to a stressful situation. The emphasis is on coping with a negative emotional reaction to a stressor. Rather than attempting to change the stressor, a person attempts to manage or control feelings by a variety of cognitive and behavioral tactics, such as praying, positive reframing, meditation, wishful thinking, self-blame, social disengagement, or seeking social support.

Problem-focused coping focuses on the source of the problem. It is centered on the problem or stressor that caused the situation. In order to decrease and eliminate the stress, attempts are undertaken to adjust or directly face the situation. Problem resolution and confrontation are two examples. For example, a student who is worried about an upcoming exam might cope by studying harder and attending every session to ensure that he or she fully comprehends the course material (Lazarus, &Folkman, 1984).

Infertility affects one out of every four couples in underdeveloped countries (WHO, 2004), and female infertility diagnoses are rising year after year (Newman, 2016). In Pakistan, the infertility rate is reported to be 22% (4 percent primary and 18 percent secondary) (Ali *et al.*, 2011). The psychological, physical, social, and emotional repercussions of infertility on a person's life are numerous. Infertility is regarded to be an issue that is inherent in women, and she is the primary target of a variety of medical procedures and drugs (Cousineau*et al.*, 2004). Females feel more stress than men, according to many studies (Chehreh, Ozgoli, Abolmaali, Nasiri, & Mazaheri, 2018), and report higher levels of anxiety and depression than fertile females (Chehreh, Ozgoli, Abolmaali, Nasiri, & Mazaheri, 2018). (Doyle, & Carballedo, 2014). Infertile women are more likely to experience anxiety, despair, loneliness, feelings of worthlessness, guilt, hopelessness, and conflict (Hasanpoor-Azghdy, Simbar, & Vedadir, 2019). Infertility has long piqued researchers' interest, and numerous studies have been conducted on it. However, most of these studies focus on the psychological distress and psychosocial consequences of infertility, whereas the current study examines the relationship between the type of infertility, self-efficacy and coping. In order to better understand the consequences of these variables and to work toward improving the general health of infertile women. Women who are infertile are in a vulnerable psychological state, which predisposes them to psychological difficulties. Understanding the various emotional responses and challenges that patients face may give specialists the insight they need to manage fertility cases more holistically and recognize the importance of

psychology and counselling in the overall treatment. This study may also allow patients to become more aware of themselves and thus learn to increase their self-efficacy by employing better better-coping.

Literature Review

According to research, infertility generates higher stress in women than in males (Brenan D.P *et al.,* 2006; Tarlatzis*et al.,* 1993), and whatever the cause of infertility, the woman is regarded to be the primary culprit (Sami *et al.,* 2006), and this is mostly related to a woman's social identity. Turner *et al.,* (2013) discovered that women with high self-efficacy had higher pregnancy rates than women with low self-efficacy after undergoing IVF. Self-efficacy is a mental health term that is critical to how a person experiences and, more significantly, copes with infertility. Galhardo, Cunha, Pinto-Gouveia, and Matos (2010) sought the help of 162 women who had been diagnosed with primary infertility. The researchers wanted to see if infertility self-efficacy (ISE) played a role in regulating the relationship between internal and external shame, stress, and depression. Results showed that both internal and external shame were significantly correlated with ISE, infertility stress and depression whereas depression and infertility stress also correlated strongly with ISE.

Ozkan, Okumus, and Buldukoglu (2013) conducted a randomized control trial to evaluate how nursing care, based on Watson's theory, affected infertile women's self-efficacy, distress, and adjustment. Data was collected from 105 infertile women using distress, self-efficacy, and adjustment questionnaires. The participants were split into two groups: experimental and control. Watson's Theory of Human Attention was used to provide particular care to the experimental group. According to the findings, such intervention reduces the negative consequences of infertility and increases self-efficacy and adaptability.

Faramarzi *et al.,* (2014) conducted a study with a group of 89 infertile women. The study's goal was to see if there was a link between various behavior scales and infertility self-efficacy (ISE). The average score for fertility-related self-efficacy was in the middle range for the majority of the women (6.18±1.39), according to the findings. There was also a significant link discovered between self-efficacy and employment. Women who were employed exhibited stronger self-efficacy than women who were unemployed. The ISE was found to have an inverse relationship with several behaviour scales such as the Depression Inventory (BDI), Anxiety Scale (CAS), and the Fertility Problem Inventory's social and marital sub-scales. . However, a positive correlation was found between ISE and GHQ (general health questionnaire). Rokke, Fleming-Ficek, Siemens, and Hegstad (2003) investigated the relationship between coping strategy choice and self-efficacy and discovered that having a choice of coping strategy does not provide an

advantage to those who already have low self-efficacy; rather, choosing a coping strategy is dependent on prior beliefs about one's ability to cope.

A positive relation was found by Nicholas (2007), between the use of active coping strategies of the Coping Strategies Questionnaire self-efficacy and an inverse correlation with passive strategies (e.g., praying/hoping and catastrophizing)

Masood (2008) investigated at self-efficacy and coping mechanisms under stressful conditions. The study's goal was to see if there was a link between self-efficacy and coping under stressful conditions. A total of 373 people were chosen for the investigation. The study employed the Coping Strategies Scale-Revised (CSS-R), the General Self-Efficacy Scale (GSES), the Social Readjustment Rating Scale (SRRS), and the Multidimensional Assessment of Stressful Life Events Scale (MASLES). In terms of self-efficacy, there were significant variances across participants.

Objectives

- To measure the self-efficacy of women having infertility.
- To find out the impact of self-efficacy on coping strategies of infertile women.

Hypotheses

- Self-efficacy of women having secondary infertility is better than women having primary infertility.
- Infertile women with high self-efficacy would use adaptive coping strategies as compared to infertile women with low self-efficacy.

Methodology

Sample

Participants were chosen using a purposive sampling strategy from various gynecology clinics, hospitals, educational institutions, and the public of Peshawar. The total sample size was 100 (N = 100), with an equal number of females (n=50) suffering from primary and secondary infertility.

Inclusion Criteria

The study included females between the ages of 20 and 40 who had primary and secondary infertility for a maximum of ten years, had the capacity to read and write.

Exclusion Criteria

Females with any physical, or psychological illnesses and illiterate were excluded.

Instruments

Demographic Sheet: Age, education, family type, duration of marriage, infertility duration, infertility type, number of children, employment status and socioeconomic status were the variables included in the demographic sheet.

Coping Strategies Inventory (CSI) 1984: David L. Tobin (1984) developed the Coping Strategy Inventory .It consists of 14 subscales divided in to 8 primary, 4 secondary and 2 tertiary scales and total items in the scale are 32. The answers range from 1= A little to 5 = Very Much. The 8 primary subscales areproblem solving, problem avoidance,cognitive restructuring, wishful thinking, express emotions, self-criticism, social support and social withdrawal. The 4 secondary scales include Emotion and Problem Engagement and Emotion and Problem Disengagement. The 2 tertiary scales include the Disengagement and Engagement scales. Reliability ranges from .71 to .94 (Tobin, 1984).

The Infertility Self Efficacy Scale (ISE) 2006: The infertility self-efficacy scale was developed by Cousineau *et al.* (2006). Total items are 16. The minimum score is 16 and the maximum score is 144. Scoring is on a scale of 1 to 9. High score is an indication of greater self-efficacy whereas low scores indicate low self-efficacy levels. Cronbach alpha is 0.91 (Cousineau*et al.*, 2006).

Field Experience: Formal permission was taken for the collection of the data from different gynecologist clinics, hospitals (LRH, CMH, KTH, RMI, and North West hospital) and educational institutions of Peshawar. Data was also collected from the general population. Firstly, rapport was developed with the participants after which they were briefed about the purpose of the study. Consent given to the participants to confirm their willingness for participation in the study. The demographics sheet was given to the participants first, after that the Coping Strategies Inventory (CSI) and the Infertility Self Efficacy Scale (ISE) were administered. Participants were also assured about the confidentiality of the data provided, that it would be used only for research purposes.

Results

Table-1: Mean, Standard Deviation, Skewness, Kurtosis and Alpha Co-efficient the Infertility Self-Efficacy (ISE), Adaptive and Maladaptive Coping of the Coping Strategy Inventory (CSI).

Scales	No. of Items	N	Mean	Std. deviation	Skewness	Kurtosis	Alpha Co-efficient
ISE	16	100	90.7100	23.11862	-.353	-.300	.92
Cope A	16	100	50.1500	9.802247	-.125	-.476	.87
Cope M	16	100	45.1100	10.31219	.399	-.772	.85

Table 1 shows values of arithmetic mean, standard deviation, skewness, kurtosis, and alpha co-efficient of reliability. The kurtosis and skewness values indicate that the data is normally distributed and the alpha values indicate high reliability.

Table-2: Mean, Standard Deviation and t-Value scores of females having Primary and Secondary infertility on the Infertility Self Efficacy scale (ISE) (N=100).

Groups Infertility Type	N	Mean	Std. Deviation	t	p	95% CI		Cohen's d
						LL	UL	
Primary	50	71.6600	14.86210	-14.627	.000	-43.26	-32.93	2.92
Secondary	50	109.7600	10.87885			-43.27	-32.92	

Table 2 shows mean differences between women with primary and secondary infertility the Infertility Self Efficacy scale, that is significant (<0.05), with p-value of .000, thus the table shows that the self-efficacy of secondary infertile women is greater than women with primary infertility.

Table-3: Mean, Standard Deviation and t-Value scores of females having High and Low Self Efficacy on Adaptive Coping scale of Coping Strategy Inventory (N=100).

Groups Infertility Self Efficacy	N	Mean	Std. Deviation	t	p	95% CI		Cohen's d
						LL	UL	
Low	48	43.83	7.99	-7.86	.000	-15.21	-9.08	1.57
High	52	55.98	7.44			-15.22	-9.07	

Table 3 shows mean differences between women with high and low self-efficacy, that is significant (<0.05) with a p vale of .000, thus the table shows that women having high self-efficacy use adaptive coping as compared to women with low self-efficacy.

Discussion

The study was aimed to understand the differences between the type of infertility (primary and secondary) in women self-efficacy and as to investigate the relationship between self-efficacy and coping.

Mastery experiences provide the most authentic evidence of whether a person can muster whatever it takes to succeed and is the most influential source of efficacy information. Success fosters a strong belief in one's own ability to succeed. Failures undermine it, particularly if they occur before a strong sense of efficacy has been established (Bandura, 1997). Females with secondary infertility have been through the journey of motherhood once and are aware of their capabilities and believe that they can experience pregnancy and childbirth again. They have confidence in themselves and their abilities and are motivated to take initiatives, thus reflecting high self-efficacy, whereas primary infertile women perceive themselves as helpless, are unhappy and are not motivated for action.

The first hypothesis stated that self-efficacy of women having secondary infertility is better than women having primary infertility.

Results of the study revealed (Table 3) a significant difference between females with primary and secondary infertility on self-efficacy, that is, females having secondary infertility have higher self-efficacy levels. The results supported the First hypothesis of the study.

Justo, Vieira, and Costa (2010) examined self-efficacy and stigma consciousness in a sample of fifty-nine infertile couples. The study found negative correlation between self-efficacy and stigma consciousness in both

men and women. It was also found that the female partner experiences lower levels of self-efficacy and higher levels of stigma consciousness.

Tabrizi, and Feizbakhsh (2014) selected 210 infertile women for evaluation of self-efficacy and self-esteem. The study established a positive relation between the two variables and found that the average score for these variables was higher for working women and these variable had a negative correlation with duration of infertility.

Ozkan*et al.* (2017) used the ISE scale, depression and anxiety scales and a scale for fertility adjustment with a sample of 59 women having primary infertility to the determine self-efficacy, distress and adjustment of infertile women. The results indicated lower levels of efficacy and adjustment and greater levels of depression and anxiety in the sample.

Altiparmak, and Derya (2018) studied how training in fertility support influences self-efficacy and behavior choices of women having infertility. The study design consisted of experimental and control groups. After participating in training for fertility support the experimental group varied significantly on self-efficacy and behavior in comparison to the control group.

High levels of self-efficacy have been related to a variety of benefits in everyday life, including resistance to adversity and stress, as well as healthy living practices. Self-efficacy is essential in determining what action one chooses and how much effort one invests in the chosen course of action. Women with high self-efficacy believe in their ability to cope and deal with adverse situations, they are motivated to take action and believe that they can produce important results. This belief leads them to use of coping strategies that are productive and functional. Higher levels of self-efficacy may be linked to higher levels of adaptive coping. Individuals who have a higher sense of self-efficacy may employ more task-oriented or adaptive coping strategies, which research suggests are more effective than disengagement strategies (Nicholls *et al.*, 2006).

The second hypothesis stated that infertile women with high self-efficacy would use adaptive coping strategies as compared to infertile women with low self-efficacy.

Results of the study (Table 4) supported this hypothesis, showing a significant difference between the coping of females with high self-efficacy and those with low self-efficacy.

Brown and Nicassio (1987) conducted research to design a questionnaire for assessing active and passive coping in chronic pain patients. The goal of the study was to look at active and passive coping with chronic pain that ranged from mild to severe. 361 rheumatoid arthritis patients provided reliable scales for active and passive coping.

Brands, Kohler, Stapert, Wade, and Heughten (2014) stated that greater levels of self-efficacy shields against adverse impact of emotion based coping, that is, self-efficacy is a protective factor against the harmful effects of emotion-focused coping thus improving self-efficacy having long-term benefits.

According to Salas, Rodriguez, Urbieta, and Cuadrado (2017), self-efficacy is favourably associated with positive coping (cognitive restructuring and problem solving) and negatively associated with negative coping (wishful thinking, self-criticism and social withdrawal).

Taiwo (2015) in his paper on problem focused coping, self-efficacy and performance reported that problem-focused coping was found to be the main strategy that had a positive correlation with both self-efficacy and performance.

Khalid, and Dawood (2020) conducted a study with a sample of one hundred and fifty-eight infertile women. The purpose of their study was to investigate the relationship of psychological distress with self-efficacy, social support and coping. Self-efficacy and active coping had a negative and avoidance coping had a positive relationship with depression, anxiety and stress.

References

Akhtar, M. (2008). What is self-efficacy? Bandura's 4 sources of efficacy beliefs. Positive Psychology. Retrieved from http://positivepsychology.org.uk/self-efficacy-definition-bandura-meaning/

Ali, S., Sophie, R., Imam, A.M., Khan, F.I., Ali, S.F., Shaikh, A., & Farid-ul-Hasnain, S. (2011). Knowledge, perceptions and myths regarding infertility among selected adult population in Pakistan: a cross-sectional study. *BMC Public Health*, 11(1). doi:10.1186/1471-2458-11-760. https://americanpregnancy.org/getting-pregnant/female-infertility/

Altiparmak, S., & Derya, Y.A. (2018). The effects of fertility supporting health training on healthy lifestyle behaviors and self-efficacy in infertile women. *European Journal of Integrative Medicine*,20, 146-153.

Arnstein, P., Caudill, M., Mandle, C.L., Norris, A., & Beasley, R. (1999). Self efficacy as a mediator of the relationship between pain intensity, disability and depression in chronic pain patients. *Pain*, 80(3):483-491.

Arslan-Özkan, İ., Okumuş, H., Lash, A.A., & Firat, M.Z. (2013). Cultural Validation of the Turkish Version of the Infertility Self-Efficacy Scale–Short Form (TISE-SF). *Journal of Transcultural Nursing*, 25(3), 232–240. doi:10.1177/1043659613508784

Arslan-Özkan, İ., Okumuş, H., & Buldukoğlu, K. (2013). A randomized controlled trial of the effects of nursing care based on Watson's Theory of Human Caring on distress, self-efficacy and adjustment in infertile women. *Journal of Advanced Nursing*, 70(8), 1801–1812. doi:10.1111/jan.12338

Bandura, A. (1994). Self-efficacy. In V.S. Ramachaudran (Ed.), Encyclopedia of human behavior (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], Encyclopedia of mental health. San Diego: Academic Press, 1998).

Bandura, A. (1997). Self-Efficacy: The exercise of control. New York, NY: W.H. Freeman.

Batinic, B., Lazarevic, J., &Dragojevic-Dikic, S. (2017). Correlation between self-efficacy and well-being, and distress, in women with unexplained infertility. *European Psychiatry*, 41, S899. doi:10.1016/j.eurpsy.2017.01.1836.

Brands, I., Köhler., Sebastian, S.,Wade, D., Van Heugten, C. (2014). Influence of Self-Efficacy and Coping on Quality of Life and Social Participation After Acquired Brain Injury: A 1-Year Follow-Up Study. *Archives of Physical Medicine and Rehabilitation*, 95(12), 2327–2334. doi:10.1016/j.apmr.2014.06.006.

Brown, G.K., & Nicassio, P. M. (1987). Development of a questionnaire for the assessment of active and passive coping strategies in chronic pain patients.Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/3696743.

Chehreh, R., Ozgoli,G., Abolmaali, K., Nasiri, M., &Mazaheri, E. (2018). Comparison of the Infertility-Related Stress Among Couples ad its Relationship with Infertility Factors. *International Journal of Women's Health and Reproduction Sciences*. 7(3), 313–318.

Cousineau, T., Green, T., Corsini, E., Barnard, T., Seibring, A., &Domar, A. (2006). Development and validation of the Infertility Self-Efficacy scale. *Fertility and Sterility*, 85(6), 1684–1696. doi:10.1016/j.fertnstert.2005.10.077.

Doyle, M., & Carballedo, A. (2014). Infertility and mental health. *Advances in Psychiatric Treatment*, 20(5), 297–303. doi:10.1192/apt.bp.112.010926

Elsworthy, L. (2010). The relationship between income, motivation, and self-identity and ability to cope with IVF treatment. School of Psychology, University of Queensland.

Faramarzi, M., Pasha, H., Esmailzadeh, S., Kheirkhah, F., Hajian-Tilaki, K. and Salmalian, H. (2014). A Survey of Correlation Infertility Self-Efficacy with Behavioral Health Scales in Infertile Women. Health, 6, 943-949. doi: 10.4236/health.2014.610119.

Galhardo, A., Cunha, Marina & Pinto-Gouveia, José & Matos, Marcela. (2014). Infertility self-efficacy: the Mediator Effect between Shame and Infertility Related stress and Depressive Symptoms.

Hasanpoor-Azghdy, S. B., Simbar, M., &Vedadhir, A. (2014). The emotional-psychological consequences of infertility among infertile women seeking treatment: Results of a qualitative study. *Iranian journal of reproductive medicine*, 12(2), 131–138.

Hess, R.F., Ross, R., & Gililland, J.L. (2018). Infertility, Psychological Distress, and Coping Strategies among Women in Mali, West Africa: A Mixed-Methods Study. *African Journal of Reproductive Health*, 22 (1), 60. DOI: 10.29063/ajrh2018/v22i1.6.

Hofstede, G. (2001). What about Pakistan. Retrieved from https://www.hofstede-insights.com/country/pakistan/. 8(11), 2061–2068. https://doi.org/10.1016/j.socscimed.2009.03.008

Holloway, A., & Watson, H.E. (2002). Role of self-efficacy and behaviour change. *International Journal of Nursing Practice*, 8(2), 106–115. doi:10.1046/j.1440-172x.2002.00352.x

ICMART and WHO. (2009). The International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) Revised Glossary on ART Terminology. *Human Reproduction*, 24(11), 2683–2687.

Jamshidimanesh, M., Alimanesh, N., Moghaddam, Z., & Haghani, H. (2015). Effect of an Educational package on self-efficacy of infertile women. *Payesh*; 14 (2) :227-237.

Justao, J., Vieira. F.A., & Costa, E. (2010). Stigma consciousness and self-efficacy in infertile couples: Correlation and gender differences. *International Journal of Developmental and Educational Psycholog*,17-44.

Karabulut, A., Özkan, S., &Oğuz, N. (2013). Predictors of fertility quality of life (FertiQoL) in infertile women: analysis of confounding factors. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 170(1), 193–197. doi:10.1016/j.ejogrb.2013.06.029.

Kim, J.H., Park, H.J., Kim, J.H., Chung, S., & Hong, H.J. (2017). Psychometric Properties of the Korean Version of the Infertility Self-Efficacy Scale. *Asian Nursing Research*, 11(3), 159–165. doi:10.1016/j.anr.2017.06.002.

Khalid, A., & Dawood, S. (2020). Social support, self-efficacy, cognitive coping and psychological distress in infertile women. *Archives of Gynecology and Obstetrics* **302,** 423–430 (2020). https://doi.org/10.1007/s00404-020-05614-2.

Lazarus, R.S., &Folkman, S. (1984). Stress, Appraisal and Coping. Springer Publishing Company, Inc. New York.

Masood, I. (2008). Perceived Self-efficacy and Coping Strategies in Stressful Situations. *Iranian Journal of Psychiatry & Clinical Psychology* ,13 (4), 405-415.

Nicholas, M.K. (2007). The pain self-efficacy questionnaire: Taking pain into account. *European Journal of Pain*, 11(2), 153–163. doi:10.1016/j.ejpain.2005. 12.008.

Onat, G., & Kizilkaya, N. (2012). Effects of infertility on gender differences in marital relationship and quality of life: a case-control study of Turkish couples. *European Journal of Obstetrician, Gynecology, Reproduction Biology*, 165(2), 243–8. doi:.10.1016/j.ejogrb.2012.07.033.

Özkan , S., Turkcu, S., Serceku , P., Alata, E., Kayhan, Ö., & Oguz, N. (2017). The determination of perceived self-efficacy, adjustment and distress. *Congress of the European Society of gynecology.*

Pajares (2002). Overview of social cognitive theory and of self•efficacy. Retrieved from http://www.emory.edu/EDUCATION/mfp/eff.htm

Pasha, H., Faramarzi, M., Esmailzadeh, S., Kheirkhah, F., & Salmalian, H. (2013). Comparison of pharmacological and nonpharmacological

treatment strategies in promotion of infertility self-efficacy scale in infertile women: A randomized controlled trial. *IJRM*; 11 (6) :495-0.

Ramazanzadeh, F., Noorbala, A., Abedinia, N. & Naghizadeh, M. (2009). Emotional adjustment in infertile couples. *Iranian Journal of Reproductive Medicine*,7 (3),97-103.

Rokke, P.D., Fleming-Ficek, S., Siemens, N.M., & Hegstad, H.J. (2004). Self-Efficacy and Choice of Coping Strategies for Tolerating Acute Pain. *Journal of Behavioral Medicine*, 27(4), 343–360. doi:10.1023/b:jobm.0000042409.81856.5c

Salas, B.L., Rodriguez, B.Y., Urbieta, C.T. & Cuadrado, E. (2017). *Psicothema*, 29(1), 55-60. doi: 10.7334/psicothema2016.96

Sami, N., & Ali, T. (2006). Psycho-Social Consequences of Secondary Infertility in Karachi. Department of Community Health Sciences, Aga Khan University, Karachi, 56(1), 9-21.

Scheier, M.F., Weintraub, J.K., & Carver, C.S. (1986). Coping with stress: Divergent strategies of optimists and pessimists. *Journal of Personality and Social Psychology*, 51(6), 1257–1264. doi:10.1037/0022-3514.51.6.1257.

Schunk, D.H., & Pajares, F. (2010). Self-Efficacy Beliefs. *International Encyclopedia of Education*, 668–672. doi:10.1016/b978-0-08-044894-7.00620-5.

Tabrizi, F.M., & Feizbakhsh, N. (2014). Self-esteem, self-efficacy and treatment outcome in infertile women undergoing invitro fertilization. *Journal of Urmia Nursery and Midwifery*,13(6): 535-543.

Taiwo, J. (2015). Relationship between self-efficacy, problem-focused coping and performance. *Behavioural Sciences Undergraduate Journal*, 2(1), 37-41.

Teskereci, G., & Oncel, S. (2013). Effect of Lifestyle on Quality of Life of Couples Receiving Infertility Treatment. *Journal of Sex & Marital Therapy*, 39(6), 476–492. doi:10.1080/0092623x.2012.665817.

Tobin, D.L., Holroyd, K.L., Reynolds, R.V., &Wigal, J.K. (1989). The Hierarchical Factor Structure of the Coping Strategies Inventory. *Cognitive Therapy and Research*, 13(4), pp. 343-361.

Turner, K., Reynolds-May, M.F., Zitek, E.M., Tisdale, R.L., Carlisle, A.B., & Westphal, L.M. (2013). Stress and Anxiety Scores in First and Repeat IVF Cycles: A Pilot Study. PLoS ONE, 8(5), e63743. doi:10.1371/journal.pone. 0063743.

Ulrich, M. &Weatherall, A. (2000). Motherhood and Infertility: Viewing Motherhood Through the Lens of Infertility. *Feminism & Psychology*, 10(3),323-336. DOI: 10.1177/0959353500010003003.

Zeitlin, S. (1980). Assessing coping behavior. *American Journal of Orthopsychiatry*, 50(1), 139–144. doi:10.1111/j.1939-0025.1980.tb03269.