



Negative Psychological States, Coping Strategies, Self-esteem, and Life Satisfaction of Individuals with Infertility

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Abstract

Infertility is when an individual experiences failure to conceive even after a year of unprotected sex; it affects millions of people not only physically but also emotionally, socially, and psychologically. It can harm a person's self-worth and overall well-being, leading to distress that is often difficult to cope with. Based on this rationale, the following objectives were formulated: the study intended to examine the gender difference and relationship between negative psychological states (stress, depression, anxiety), coping strategies, self-esteem, and life satisfaction among infertile individuals. A cross-sectional design was employed. Sixty-two participants completed self-report questionnaires that assessed life satisfaction, self-esteem, coping strategy, and negative psychological states. Independent sample t-tests and Pearson correlation coefficients were employed to explore gender differences and relationships between variables. Men revealed higher life satisfaction and self-esteem than women. Women experienced greater levels of stress, depression, and anxiety than men. Coping strategies also differed, with men relying more on problem-focused coping and women on emotion-focused coping. The correlation results showed that infertile men with higher stress, depression, anxiety, or avoidance coping reported lower life satisfaction. At the same time, greater self-esteem and problem-focused coping were associated with better life satisfaction. Among women, life satisfaction was lower when stress, depression, anxiety, or emotion-focused coping was higher, but higher when self-esteem was strong. Stress was closely positively tied to depression, anxiety, and emotion-focused coping, while self-esteem showed a significant negative association with depression and anxiety. It underscores the importance of gender sensitive interventions in addressing the unique challenges and psychological needs faced by infertile men and women.

INTRODUCTION

Infertility is the inability of the reproductive system to conceive, and unable to have children. The failure to conceive after a year of consistent, unprotected sexual activity is known as infertility, and it is a serious and upsetting disorder that affects one in six people of reproductive age worldwide (World Health Organisation [WHO], 2023).

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Approximately 15% of Indian couples are having trouble getting pregnant (Indian Society of Assisted Reproduction [ISAR], 2022). According to Abbey et al. (1995), involuntary childlessness is often viewed as a life crisis that imposes physical and psychological stress on those affected. Infertility can harm a person's emotional as well as physical health (Greil et al., 2011). A man is considered infertile if, after 12 months of regular unprotected sex, he is unable to conceive with his partner because of sperm motility issues, low sperm count, or abnormal sperm shape (World Health Organization [WHO], 2020; National Institute of Child Health and Human Development [NICHD], 2022). Accordingly, a woman is considered infertile if she has regular unprotected sex for at least 12 months but is unable to conceive or carry a pregnancy to term because of ovulation problems, blocked fallopian tubes, uterine abnormalities, or other reproductive health issues (WHO, 2020; NICHD, 2022; American Society for Reproductive Medicine [ASRM], 2023). Women may carry feelings of guilt or pressure to fulfil traditional roles, while men might feel ashamed or deny their distress due to societal ideas about masculinity (Patel et al., 2018). Infertility creates depression, anxiety, and stress in both genders, but often higher in women (Khorasani et al., 2025). Fertility is associated with women's ability to conceive and carry a pregnancy to success. This becomes an important issue when they start to plan a family. Conversely, men may consider fertility valuable for reasons outside the scope of reproduction. It often goes towards building their identity, masculinity, and social value. This happens regardless of whether they want kids or not (Entwistle, 2020). Since infertility affects multiple aspects of a person's life, it is closely related to overall life satisfaction, which reflects one's evaluation of well-being. Ed Diener (1984) defined life satisfaction as an overall assessment of feelings and attitudes about one's life at a particular point in time, ranging from negative to positive. Infertility brings broad erosion in multiple dimensions of life; as a result, infertile couples experience elevated levels of anxiety and depression (Gourounti et al., 2010), which is associated with a lower quality of their life (Rooney & Domar, 2018), making satisfaction with life crucial to study. Infertility can have a detrimental effect on self-esteem in addition to life satisfaction because it can cast doubt on a person's identity and sense of value. Rosenberg (1989) defined global self-esteem as the overall attitude one holds about oneself, ranging from negative to positive. Studying self-esteem can reveal how infertility affects one's perception of self and personal value. However, the

way individuals cope with infertility plays a crucial role in determining the extent to which their life satisfaction and self-esteem are affected. Lazarus and Folkman (1984) define coping as a series of cognitive and behavioural efforts that change over time to manage internal and external demands. Taken together, infertility, its impact on life satisfaction and self-esteem, and the coping strategies used by individuals contribute significantly to the development of negative psychological states such as stress, anxiety, and depression. A negative psychological state refers to emotional or mental conditions that are generally associated with distress, discomfort, or dysfunction (Chachamovich et al., 2010). Infertility is consistently associated with elevated levels of stress, anxiety, and depressive symptoms (Sharma & Shrivastava, 2022).

These mental health issues arising from infertility need immediate attention to tailor intervention techniques. Unfortunately, while the emotional burden is real, most infertility-related care in India still centers on physical treatment. To truly understand how infertility affects people, it's important to ponder on self-esteem, life satisfaction, negative psychological effects, and their coping strategies.

Rationale

Infertility is a widespread problem of recent times affecting both women and men. Being parents is most people's desire at some point in life, but the inability to have children hinders a person's life, leading to disruption in life contentment. It affects their self-esteem, as in Indian culture, procreation is seen as a duty to carry forward the family lineage, and an inability to do so is regarded as personal failure, resulting in negative psychological states. Such negative life events are associated with higher psychological distress and lower Life satisfaction (Marum et al., 2013). Thus, it is important to objectively evaluate distress levels in order to achieve successful infertility treatment. This study looks for differences in the coping mechanisms that men and women use to manage the stress, anxiety, and despair brought on by infertility. Numerous studies have examined its psychological effects; however, the majority of them exclusively included female subjects (Halkola et al., 2021; Taebi et al., 2021). Therefore, it is important to study both genders facing infertility. When viewed through the prism of gender roles in a particular

society, the social pressure linked to infertility becomes more apparent. Hence, the present study aimed to compare and examine the relationship between life satisfaction, self-esteem, coping strategy, and negative psychological states, which include stress, depression, and anxiety, among infertile men and women.

METHODS

Objectives of the study

- To study gender differences in life satisfaction, self-esteem, coping strategies, and negative psychological states (e.g., depression, anxiety, and stress) among infertile individuals.
- To investigate the relationship between life satisfaction, self-esteem, coping strategies, and negative psychological states among infertile men.
- To investigate the relationship between life satisfaction and self-esteem, coping strategies, and negative psychological states among infertile women.

Hypothesis

- **H₁:** There will be significant gender differences in self-esteem, coping strategies, negative psychological states (e.g., depression, anxiety, and stress), and life satisfaction among infertile individuals.
- **H₂:** There will be a significant positive relationship between self-esteem, coping strategies, negative psychological states, and life satisfaction among infertile men.
- **H₃:** There will be a significant positive relationship between self-esteem, coping strategies, negative psychological states, and life satisfaction among infertile women.

Participations

The sample consisted of 62 infertile patients (30 men and 32 women) recruited through purposive sampling from different hospitals and IVF clinics in Rewa (Madhya Pradesh).

Inclusion Criteria

- Individuals diagnosed with infertility by a qualified medical professional.
- Age range between 21 and 45 years.

- Desire to have kids.
- Undergoing infertility treatment.
- Cohabiting with the partner during ovulation period.

Exclusion Criteria

- Individuals with diagnosed severe psychiatric disorders or cognitive impairments.
- Those unwilling to participate or unable to provide informed consent.
- Using contraceptives.
- Inability to read and understand the questionnaire (Hindi/English).

Measures

Socio demographic Sheet: A specially designed semi-structured proforma was used to obtain the personal and clinical profile of the participants. This sheet included items to record basic demographic data such as name (used only for identification and kept confidential), age, gender, and educational qualification. Furthermore, specific variables related to the study's context were recorded, namely the duration of marriage and the total duration of infertility treatment undergone by the participants.

The Satisfaction with Life Scale (Diener et al., 1985): A 5-item scale designed to measure global cognitive judgments of one's life satisfaction. The Hindi adaptation has been used in this study, showing a reliability of 0.90 (Cronbach's Alpha).

The Depression, Anxiety and Stress Scale (Lovibond & Lovibond, 1995): The DASS- 21 is a shortened form of the DASS-42 and includes 7 items from each of the 3 subscales. Respondents rate each state on a 4-point scale based on their experiences over the past week. The Hindi version of the Satisfaction with Life Scale showed strong reliability in this study, with a Cronbach's alpha of 0.94.

The Brief-COPE-Coping Orientation to Problems Experienced Inventor (Charles S. Carver, 1997): This is a 28-item self-report questionnaire that measures how people cope with stressful life

events. The Brief-COPE consists of 28 items that measure 14 different subscales. The Hindi adaptation used in this study showed modest reliability, with a Cronbach's alpha of 0.60 for coping strategies.

The Rosenberg Self-Esteem scale (Morris Rosenberg, 1965): The purpose of the 10-item RSE scale is to measure self-esteem. The scale has a Guttman scale coefficient of reproducibility of 0.92, excellent internal consistency, and test-retest reliability of 0.85 and 0.88. The Hindi adaptation showed modest reliability, with a Cronbach's alpha of 0.60.

Statistical Analysis

In the present study, independent t-tests and correlation analyses were conducted to explore gender differences and the relationships between the variables.

Procedure

The coping strategies scale, DASS, self-esteem scale, and satisfaction with life scale have been administered by distributing them to men and women with infertility issues from different hospitals and IVF clinics of Rewa (Madhya Pradesh). Before administering the scales, rapport was established, confidentiality was explained, printed instructions were read out, demographics were completed, and any questions were addressed.

RESULTS

Table 1: Socio demographic characteristics of the sample

	Variables	Frequency
Age	Years	30.00 ± 9.65
Gender	Men	30
	Women	32
Education	Intermediate	9
	Graduation	32
	Post Graduation	21
Residence	Urban	38
	Rural	24
Duration of treatment	1 years	35
	2 years	27
Duration of marriage	3 years	19
	4 years	24
	5 years	19

Table 2: Independent Samples t-test comparing Men and Women on Life Satisfaction, Coping Strategies, Depression, Anxiety, Stress, and Self-Esteem

Variable	Female M (±SD)	Male M (±SD)	t-test	p
Life Satisfaction	11.25 ± 8.02	16.50 ± 8.13	2.558*	.013
Emotional Coping	29.59 ± 2.24	23.90 ± 4.21	6.713**	.000
Avoidant Coping	15.28 ± 2.91	15.60 ± 4.53	-0.327	.745
Problem-Solving Coping	13.63 ± 3.72	18.23 ± 6.35	3.457**	.001
Stress	13.56 ± 6.01	8.10 ± 4.76	3.982**	.000
Depression	12.47 ± 6.12	9.20 ± 5.62	2.193*	.033
Anxiety	10.75 ± 6.20	6.83 ± 6.82	2.361*	.022
Self-Esteem	20.28 ± 5.93	23.80 ± 7.67	2.012*	.049

*p < .05, **p < .01

A comprehensive analysis of Table 2 reveals that a significant difference was found in life satisfaction scores, $t(59.63) = 2.56, p = .013$, with males ($M = 16.50, SD = 8.13$) reporting higher satisfaction than females ($M = 11.25, SD = 8.02$). For emotional coping, females ($M = 29.59, SD = 2.24$) scored significantly higher than males ($M = 23.90, SD = 4.21$), $t(60) = 6.71, p < .001$. Males scored significantly higher in problem-solving

coping ($t(46.21) = 3.46, p = .001$), while no significant gender difference was observed for avoidant coping ($p = .745$). Significant gender differences were also found in stress ($t(58.42) = 3.98, p < .001$), depression ($t(59.98) = 2.19, p = .033$), anxiety ($t(58.48) = 2.36, p = .022$), and self-esteem ($t(54.55) = 2.01, p = .049$), with females reporting higher psychological distress and lower self-esteem

Table 3: Correlation of life satisfaction, anxiety, stress, depression, avoidance coping strategy, problem-focused coping strategy, emotion-focused coping strategy, and self-esteem among Infertile Men.

Variables	1	2	3	4	5	6	7	8
1. Life satisfaction	1							
2. Stress	-.423*	1						
3. Depression	-.681**	.688**	1					
4. Anxiety	-.366*	.660**	.818*	1				
5. Self esteem	.801**	-.582**	-.833**	-.670**	1			
6. Avoidance coping	-.484**	.447**	.643**	.499**	-.693*	1		
7. Problem-focused coping	.733**	-.388*	-.727**	-.490**	.827**	-.639**	1	
8. Emotion-focused coping	.123	.138	.010	.151	-.019	.257	.232	1

A comprehensive analysis of Table 3 reveals that for males (upper right): Life satisfaction was significantly and negatively associated with stress ($r = -.423, p < .05$), depression ($r = -.681, p < .01$), anxiety ($r = -.366, p < .05$), and avoidant coping ($r = -.484, p < .01$) and positively associated with self-esteem ($r = .801, p < .01$) and with problem-focused coping ($r = .733, p < .01$). Stress was significantly and positively associated with depression ($r = .688, p < .01$), anxiety ($r = .660, p < .01$), avoidance coping ($r = .447, p < .01$) and negatively associated with self-esteem ($r = -.582, p < .01$) and problem focus coping ($r = -.388, p < .05$). Depression was significantly and positively associated with anxiety ($r = .818, p < .01$) and

avoidance coping ($r = .643, p < .01$) and negatively associated with self-esteem ($r = -.833, p < .01$) and problem focused coping ($r = -.727, p < .01$). Anxiety was significantly and positively associated with avoidance coping ($r = .499, p < .01$) and negatively associated with self-esteem ($r = -.670, p < .01$) and problem focused coping ($r = -.490, p < .01$). Self-esteem was significantly and negatively associated with avoidance coping ($r = -.693, p < .05$) and positively associated with problem focused coping ($r = .827, p < .01$). Avoidance coping was negatively associated with problem focus coping ($r = -.639, p < .01$).

Table 4: Correlation of life satisfaction, anxiety, stress, depression, avoidance coping strategy, problem-focused coping strategy, emotion-focused coping strategy, and self-esteem among Infertile Women.

Variables	1	2	3	4	5	6	7	8
1 Life satisfaction	1							
2 Stress	-.861**	1						
3 Depression	-.885**	.835**	1					
4 Anxiety	-.745**	.761**	.819**	1				
5 Self esteem	.759**	-.700**	-.742**	-.631**	1			
6 Avoidance coping	-.007	-.039	-.069	-.057	-.059	1		
7 Problem-focused coping	.176	-.126	-.193	.021	.178	-.181	1	
8 Emotion-focused coping	-.398*	.423*	.287	.257	-.193	-.284	.248	1

* $p < .05$; ** $p < .01$

A comprehensive analysis of **Table 4** for females: Life satisfaction was significantly and negatively associated with stress ($r = -.861, p < .01$), depression ($r = -.885, p < .01$), anxiety ($r = -.745, p < .01$), and emotion- focused coping ($r = -.398, p < .05$) and positively associated with self- esteem ($r = .759, p < .01$). Stress was significantly and positively associated with depression ($r = .835, p < .01$) anxiety ($r = .761, p < .01$), and emotion focus coping ($r = .423, p < .05$) and negatively associated with self-esteem ($r = -.700, p < .01$). Depression was significantly and positively associated with anxiety ($r = .761, p < .01$) and negatively associated with self-esteem ($r = -.742, p < .01$). Anxiety was significantly and negatively associated with self-esteem ($r = -.631, p < .01$).

DISCUSSION

The present study intended to examine the gender difference and relationship between life satisfaction, coping strategies, negative psychological states, and self-esteem among infertile individuals. The significant gender difference was found in life satisfaction, coping

strategies (emotion-focused coping and problem-focused coping), negative psychological states (depression, anxiety, and stress), and self-esteem. It suggested that infertile men have higher life satisfaction and self-esteem as compared to infertile women and employ problem-focused coping strategies, whereas women reported higher levels of negative psychological states and rely on emotion-focused coping strategies.

Infertile men reported significantly higher life satisfaction than infertile women may be because in a country like India, women's identity is strongly tied to motherhood, and failure to achieve it causes distress, whereas although men have low life satisfaction too, their identity as per society focuses more on career and financial roles. Women are believed to be responsible for childbearing and are often blamed for infertility regardless of whether the issues lie in men or women (Turner et al., 2020). These findings align with Teskereci and Oncel (2013), who found that infertile women have a lower quality of life than infertile men.

The infertile women reported high levels of depression, anxiety, and stress compared to infertile

men; however, men report low but significant levels of negative psychological states, while men tend to internalize distress. They frequently face social and self-stigma, along with feelings of guilt for not conceiving, which threaten their psychosocial well-being and self-esteem, ultimately leading to stress, depression, and anxiety (Taebi et al., 2021).

The results indicate that females reported lower self-esteem than men. The reason may be that women internalize the inability to conceive as a personal failure, which leads to isolation and negative self-image. Infertility in women leads to feelings of shame, hopelessness, self-doubt, and self-blame, which negatively affect self-worth (Greil et al., 2010) and cause depression, anxiety, and stress (Irani et al., 2023). The present results are consistent with earlier studies that found infertile women consistently have lower self-esteem than men (Lakatos et al., 2017).

The significant gender difference in coping strategies was found with infertile men using problem-focused coping, and infertile women relying more on emotion-focused coping. It may be because men find it difficult to express infertility, as it might harm their masculinity, so they focus on medical solutions, whereas women experience infertility as a threat to identity and social roles, leading them to manage their emotional responses rather than the problem itself. Men focus more on problem-solving and self-reliant coping, whereas infertile women seek social support and engage in religious activities (McCreight, 2004).

The correlation analyses produced a number of notable findings that highlight both differences and similarities between genders in their psychological responses to infertility.

Among infertile men, life satisfaction was negatively associated with stress, depression, anxiety, and avoidant coping and positively associated with self-esteem and with problem-focused coping. This may be attributed to the fact that men with high infertility-related psychological distress and those frequently relying on avoidance coping instead of problem-focused coping tended to be less satisfied with life and have low self-esteem. The present study results agree with those of at least three other studies. *First*, Mahmoud et al. (2016) found a negative association of life satisfaction with stress, depression, and anxiety. *Second*, Karnaz et al. (2020) suggested that

there are positive, moderately effective, and significant effects between life satisfaction and self-esteem. *Third*, Reyes et al. (2021) reported that problem-focused coping is adaptive and enhances life satisfaction.

Stress was significantly and positively associated with depression, anxiety, avoidance coping, and negatively associated with self-esteem and problem focus coping. This may be attributed to the fact that stress increases reliance on avoidance coping, which further leads to depression and anxiety. Similar results are found in the study Schmidt et al. (2005). This finding is also in agreement with Cui et al. (2021), who reported that the effect of infertility-related stress on depression and anxiety diminished progressively as self-esteem increased.

Depression was significantly and positively associated with anxiety and avoidance coping and negatively associated with self-esteem and problem-focused coping. This suggests that infertile men with depression are more likely to report anxiety and to depend on avoidance coping. At the same time, they tend to have lower levels of self-esteem and are less likely to use problem-focused coping that would ease their distress. This aligns with findings reported by Cong et al. (2019).

Anxiety was significantly and positively associated with avoidance coping and negatively associated with self-esteem and problem-focused coping. This demonstrates the adverse effect of anxiety symptoms on self-perception and aligns with findings reported by Mruk (2006) and Orth et al. (2008). Anxiety in infertile men makes them more likely to withdraw or avoid facing stressors instead of actively engaging with challenges posed by infertility, which is consistent with the findings of previous research reported by Dias et al. (2012).

Self-esteem was significantly and negatively associated with avoidance coping and positively associated with problem-focused coping. This may be attributed to the fact that individuals with high self-esteem actively solve problems, whereas avoidance may serve as a coping mechanism for individuals with low self-esteem. This finding is also in agreement with Carver et al. (1989) and Lazarus and Folkman (1984).

Avoidance coping was significantly and negatively associated with problem-focused

coping. This may be attributed to the fact that both represent two fundamentally different approaches to managing distress, implying that infertile men who have problem-focused coping strategies are less likely to use avoidance coping strategies. The result is in accordance with the findings of Hussain and Ishaq (2022).

Life satisfaction in infertile women was significantly and negatively associated with stress, depression, anxiety, and emotion-focused coping and positively associated with self-esteem. This may be because marital disharmony, stigma, or the attitude of the family or society due to infertility causes stress, depression, and anxiety, which undermines life satisfaction among infertile women (Anupriya et al., 2025). This agrees with the results reported by Ghazwin et al. (2016), and Ehsani et al. (2014). Emotion-focused coping provides short-term relief but fails to resolve core concerns. This aligns with the finding reported by Atif et al. (2024). However, these results contradict those of Tamini et al. (2014), who found no significant relationship between life satisfaction and emotion-focused coping. Women with lower self-esteem find it difficult to manage challenges posed by infertility, leading to lower life satisfaction. This agreement with the result reported by Poorbaferani et al. (2018).

Stress was significantly and positively associated with depression, anxiety, and emotion-focused coping and negatively associated with self-esteem. This may be because high stress often leads women to use emotion-focused coping, while infertility can make them question their self-worth. A similar result was observed by Leandro and Castillo (2010), who reported that emotion-focused coping is used more by participants with high stress, low self-esteem, and high depression. In addition, this result is in accordance with the finding of Moksnes et al. (2016).

Depression was significantly and positively associated with anxiety and negatively associated with self-esteem. This is consistent with the findings of previous research done by Sowislo and Orth (2012).

Anxiety was significantly and negatively associated with self-esteem, which is in agreement with the result reported by Matthews and Orth (2012). This may be attributed to the fact that infertile women often feel lonely and unsupported,

which adds to anxiety and prevents the development of positive self-esteem.

CONCLUSION

The study revealed significant gender differences where men reported higher life satisfaction and self-esteem than women. Women reported significantly higher anxiety, depression, and stress than men. Men use problem-solving coping strategies, and women are more inclined towards emotion-focused coping strategies. Correlation analysis revealed life satisfaction has a positive relationship with self-esteem and problem-focused coping and a negative relationship with negative psychological states, emotion-focused coping, and avoidance coping. This study underscores the importance of intervention for the psychological well-being of people undergoing infertility treatment.

Limitations and future suggestions

The limitation of this study is a smaller number of participants and only from a particular area of Madhya Pradesh, which limits the generalizability of the findings, as the participants may not adequately represent the broader population. Further study should include a larger number of participants from different areas of India. Additionally, the study did not implement any intervention strategies meant to enhance participants' well-being, which may be taken into account in subsequent studies for more comprehensive growth.

Implications

Policy frameworks should promote gender-sensitive interventions, ensuring that women receive targeted emotional and psychological support, while men are encouraged to engage actively in coping and support programs rather than being viewed only as secondary stakeholders. Healthcare management systems should promote collaborative care models involving psychologists, counselors, medical professionals, and social workers. Such an approach allows simultaneous attention to medical treatment and psychological well-being, reducing treatment dropout rates and improving overall patient satisfaction.

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REFERENCES

- Abbey, A., Andrews, F. M., & Halman, L. J. (1995). Provision and receipt of social support and disregard: What is their impact on the marital life quality of infertile and fertile couples? *Journal of Personality and Social Psychology*, 68(3), 455–469. <https://doi.org/10.1037/0022-3514.68.3.455>
- American College of Obstetricians and Gynecologists. (2020). Female infertility: Causes and treatments. <https://www.acog.org/womens-health/faqs/infertility>
- American Society for Reproductive Medicine. (2023). *Definition of infertility. A committee opinion*. <https://www.asrm.org/practice-guidance/practice-committee-documents/definition-of-infertility/>
- Anupriya, Siddiqui, A., Singh, R., & Lata, S. (2025). Role of resilience and stigma on psychological well-being of infertile women. *Journal of Psychosocial Research*, 20(2).
- Atif, Z., & Gul, A. (2024). Stress, anxiety, depression, coping strategies, and quality of life of infertile women in Lahore, Pakistan. *Forman Journal of Social Sciences*, 4(1), 1–21.
- Aziz, S., & Tariq, N. (2019). Depression, anxiety, and stress in relation to life satisfaction and academic performance of adolescents. *Pakistan Journal of Psychology*, 50(1), 1–18. <https://doi.org/10.69656/pjp.v15i1.859>
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267–283. <https://doi.org/10.1037/0022-3514.56.2.267>
- Cong, C. W., Ling, W. S., & Aun, T. S. (2019). Problem-focused coping and depression among adolescents: Mediating effect of self-esteem. *Current Psychology*, 40(11), 5587–5594. <https://doi.org/10.1007/s12144-019-00522-4>
- Cui, C., Wang, L., & Wang, X. (2021). Effects of Self-Esteem on the associations between Infertility-Related Stress and Psychological Distress among infertile Chinese women: a Cross-Sectional study. *Psychology Research and Behavior Management*, Volume 14, 1245–1255. <https://doi.org/10.2147/prbm.s326994>
- Cousineau, T. M., & Domar, A. D. (2007). Psychological impact of infertility. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 21(2), 293–308. <https://doi.org/10.1016/j.bpobgyn.2006.12.003>
- Dias, C., Cruz, J. F., & Fonseca, A. M. (2012). The relationship between multidimensional competitive anxiety, cognitive threat appraisal, and coping strategies: A multi-sport study. *International Journal of Sport and Exercise Psychology*, 10(1), 52–65. <https://doi.org/10.1080/1612197x.2012.645131>
- Đurašková, G., Hampl, R., & Dostál, D. (2025). Infertility stress and coping strategies in women and men undergoing in vitro fertilization treatment. *Česká gynekologie*, 90(1), 14–21. <https://doi.org/10.48095/cccg202514>
- Entwistle, P. A. (2020). Gender differences in infertility and their impact on male counselling needs. *Journal of Fertility Counselling*, 27(2), 16–18. <http://researchonline.ljmu.ac.uk/id/eprint/16140/>
- Ehsani Sarvkolai, H., Shahidi, M., & Yaghoubi, A. (2014). The comparison of depression, anxiety, self-esteem, and life satisfaction between fertilized and unfertilized women. *Trends in Life Sciences: An International Peer-reviewed Journal*, 3(Special Issue 1), 97–103. DAMA International.
- Eunice Kennedy Shriver National Institute of Child Health and Human Development. (2022, July 18). *What is infertility?* U.S. Department of Health and Human Services. <https://www.nichd.nih.gov/health/topics/infertility/conditioninfo>

- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2010). The experience of infertility: A review of recent literature. *Sociology of Health & Illness*, 32(1), 140–162. <https://doi.org/10.1111/j.1467-9566.2009.01213.x>
- Greil, A. L., Slauson-Blevins, K., & McQuillan, J. (2011). The experience of infertility: A review of recent literature. *Sociology of Health & Illness*, 33(1), 1–21. <https://doi.org/10.1111/j.1467-9566.2010.01250.x>
- Ghazwin, M. Y., Kaviani, M., Ahmadloo, M., Jarchi, A., Javadi, S. G., Latifi, S., Tavakoli, S. A. H., & Ghajarzadeh, M. (2016, April 1). The Association between Life Satisfaction and the Extent of Depression, Anxiety and Stress among Iranian Nurses: A Multicenter Survey. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4947220/>
- Gourounti, K., Anagnostopoulos, F., & Vaslamatzis, G. (2010). Psychosocial predictors of infertility related stress: A review. *Current Women's Health Reviews*, 6(4), 318–331. <https://doi.org/10.2174/157340410793362159>
- Halkola, S., Koivula, M., & Aho, A. L. (2021). A qualitative study of the factors that help the coping of infertile women. *Nursing Open*, 9(1), 299–308. <https://doi.org/10.1002/nop2.1062>
- Hamarta, E. (2009). A prediction of self-esteem and life satisfaction by social problem solving. *Social Behavior and Personality an International Journal*, 37(1), 73–82. <https://doi.org/10.2224/sbp.2009.37.1.73>
- Hussain, Z., & Ishaq, M. (2022). Problem-focused coping, avoidance coping and emotional coping: Coping Strategies for daily stressors among operational and non-operational rescue workers in Punjab, Pakistan. *Review of Applied Management and Social Sciences*, 5(4), 511–523. <https://doi.org/10.47067/ramss.v5i4.265>
- Indian Society of Assisted Reproduction. (2022). Infertility in India: An overview. <https://isarindia.net>
- Irani, F., Amini, L., Mohammadbeigi, R., & Haghani, H. (2023). Comparing happiness between infertile women and wives of infertile men. *Journal of Client-centered Nursing Care*, 9(2), 135–142. <https://doi.org/10.32598/jccnc.9.2.434.1>
- Khorasani, F., Iranifard, E., & Roudsari, R. L. (2025). Gender differences in psychological status of infertile couples: a systematic review and meta-analysis. *BMC Public Health*, 25(1). <https://doi.org/10.1186/s12889-025-23314-x>
- Kurnaz, M. F., Teke, E., & Günaydin, H. A. (2020, December 30). Relationship between Self-Esteem and Life Satisfaction: A Meta-Analysis Study. <https://dergipark.org.tr/en/pub/rep/issue/57721/824239>
- Lakatos, E., Szigeti, J. F., Ujma, P. P., Sexty, R., & Balog, P. (2017). Anxiety and depression among infertile women: A cross-sectional survey from Hungary. *BMC Women's Health*, 17, 48. <https://doi.org/10.1186/s12905-017-0410-2>
- Leandro, P. G., & Castillo, M. D. (2010). Coping with stress and its relationship with personality dimensions, anxiety, and depression. *Procedia - Social and Behavioral Sciences*, 5, 1562–1573. <https://doi.org/10.1016/j.sbspro.2010.07.326>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer Publishing Company.
- Mahmoud, J. S. R., Staten, R. “., Hall, L. A., & Lennie, T. A. (2012). The Relationship among Young Adult College Students' Depression, Anxiety, Stress, Demographics, Life Satisfaction, and Coping Styles. *Issues in Mental Health Nursing*, 33(3), 149–156. <https://doi.org/10.3109/01612840.2011.632708>
- Marum, G., Clench-Aas, J., Nes, R. B., & Raanaas, R. K. (2013). The relationship between negative life events, psychological distress, and life satisfaction: a population-based study. *Quality of Life Research*, 23(2), 601–611. <https://doi.org/10.1007/s11136-013-0512-8>

- Matthews, D. B., & Odom, B. L. (1989). anxiety: a component of self-esteem. *Elementary School Guidance & Counseling*, 24(2), 153–159. <http://www.jstor.org/stable/42868906>
- Mayo Clinic. (2021). Male infertility. <https://www.mayoclinic.org/diseases-conditions/male-infertility/symptoms-causes/syc-20374773>
- McCreight, B. S. (2004). A grief ignored: narratives of pregnancy loss from a male perspective. *Sociology of Health & Illness*, 26(3), 326–350. <https://doi.org/10.1111/j.1467-9566.2004.00393.x>
- Moksnes, U. K., Eilertsen, M. B., & Lazarewicz, M. (2016). The association between stress, self-esteem and depressive symptoms in adolescents. *Scandinavian Journal of Psychology*, 57(1), 22–29. <https://doi.org/10.1111/sjop.12269>
- Mruk, C. J. (2006). *Self-esteem research, theory, and practice: Toward a positive psychology of self-esteem* (3rd ed.). New York, NY: Springer
- Orth, U., Robins, R. W., & Roberts, B. W. (2008). Low self-esteem prospectively predicts depression in adolescence and young adulthood. *Journal of Personality and Social Psychology*, 95(3), 695–708. <https://doi.org/10.1037/0022-3514.95.3.695>
- Patel, A., Sharma, P. S. V. N., & Narayan, P. (2018). Prevalence and predictors of infertility-specific stress in patients undergoing fertility treatments: A clinic-based study from India. *Journal of Human Reproductive Sciences*, 11(3), 287–294. https://doi.org/10.4103/jhrs.JHRS_98_17
- Peterson, B. D., Newton, C. R., Rosen, K. H., & Skaggs, G. E. (2006). Gender differences in how men and women who are referred for IVF cope with infertility stress. *Human Reproduction*, 21(9), 2443–2449. <https://doi.org/10.1093/humrep/del145>
- Poorbaferani, Z., Mazaheri, M. A., & Hasanzadeh, A. (2018). Life satisfaction, general self-efficacy, self-esteem, and communication skills in married women. *Journal of Education and Health Promotion*, 7(1), 173. https://doi.org/10.4103/jehp.jehp_108_18
- Reyes, M., Satorres, E., Delhom, I., Bueno-Pacheco, A., & Meléndez, J. C. (2021). Coping and life satisfaction in Colombian older adults. *International Journal of Environmental Research and Public Health*, 18(20), 10584. <https://doi.org/10.3390/ijerph182010584>
- Rooney, K. L., & Domar, A. D. (2018b). The relationship between stress and infertility. *Dialogues in Clinical Neuroscience*, 20(1), 41–47. <https://doi.org/10.31887/dcns.2018.20.1/klrooney>
- Schmidt, L., Holstein, B., Christensen, U., & Boivin, J. (2005). Communication and coping as predictors of fertility problem stress: cohort study of 816 participants who did not achieve a delivery after 12 months of fertility treatment. *Human Reproduction*, 20(11), 3248–3256. <https://doi.org/10.1093/humrep/dei193>
- Sharma, A., & Shrivastava, D. (2022). Psychological problems related to infertility. *Cureus*, 14(10), e30320. <https://doi.org/10.7759/cureus.30320>
- Sowislo, J. F., & Orth, U. (2012). Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychological Bulletin*, 139(1), 213–240. <https://doi.org/10.1037/a0028931>
- Taebe, M., Kariman, N., Montazeri, A., & Majd, H. A. (2021). Infertility Stigma: A qualitative study on feelings and experiences of infertile women. *PubMed*, 15(3), 189–196. <https://doi.org/10.22074/ijfs.2021.139093.1039>
- Tamini, B. K., & Ansari, A. (2014). Relationship of stress coping strategies and life satisfaction among students. *International Journal of Psychology*, 8(1), 156–165.
- 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.

<https://doi.org/10.1080/0092623X.2012.665817>

Turner, K. A., Rambhatla, A., Schon, S., Agarwal, A., Krawetz, S. A., Dupree, J. M., & Avidor-Reiss, T. (2020). Male Infertility is a Women's Health Issue—Research and Clinical Evaluation of Male Infertility Is Needed. *Cells*, 9(4), 990. <https://doi.org/10.3390/cells9040990>

World Health Organization. (2023). Infertility. <https://www.who.int/news-room/fact-sheets/detail/infertility>

World Health Organization. (2020, February 4).

Infertility definitions and terminology. WHO.

<https://www.who.int/news/item/04-02-2020-multiple-definitions-of-infertility>

Ying, L. Y., Wu, L. H., & Loke, A. Y. (2015). Gender differences in experiences with and adjustments to infertility: A literature review. *International Journal of Nursing Studies*, 52(10), 1640–1652. <https://doi.org/10.1016/j.ijnurstu.2015.05.004>.