

**EXPLORING THE RELATIONSHIP BETWEEN  
RESILIENCE AND INFERTILITY-RELATED STRESS  
IN MARRIED COUPLES IN PAKISTAN**

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**ABSTRACT**

*Present study was planned to find out the predictive relationship between resilience and infertility-related stress in married couples in Pakistan. A sample consists of 100 wives and husbands (i.e., 50 married couples) of ages 20-40 years ( $M=32.3$ ;  $SD= 3.12$ ), undergoing fertility challenges was selected using purposive sampling technique. The study variables were measured through Urdu translated-version of the Resilience scale-25 (Wagnild & Young, 1993) and the Infertility-Related Stress Scale (Casu & Gremigni, 2016). Socio-demographic characteristics of the sample were analyzed through descriptive statistics and Regression analysis was used to make inference from the data. Results showed strong predictive association between resilience and infertility stress. The study reflected the significance of resilience and infertility-related stress which play a crucial role in shaping couples' experiences with fertility issues. The results also have imperative implications for the provision of empathetic and efficient care, designing and utilizing the personalized interventions and support programs for those with fertility issues.*

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**Keywords:** *Resilience, Infertility-Related Stress, Married Couples*

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## **INTRODUCTION**

Infertility is a global reproductive-health issue, that affect a substantial number of couples, divided into two types (i.e., primary and secondary infertility). the former type define as a condition in which an individual after at least 12 months of regular, unprotected sexual intercourse remain incapable to achieve a clinical pregnancy (zegers-hochschild et al., 2017). the later one has been defined as failure to become pregnant or camplete a pregnancy to a live birth after a prior conception (who, 2020). both, primary and secondary infertility are found to be very challenging conditions affecting 15–20% of couples worldwide. it has adverse impact on biological strain as well as lead to profound psychosocial distress (saleem & yaqoob, 2023). infertility also presented a substantial psychological and social crisis that create impact on identity, marital dynamics, and overall well-being mainly for women in pakistani culture, where motherhood is strongly tied to social status and womanly identity (ali et al., 2018).

Infertility also leave psychological effect on self-esteem, interpersonal relations, and person's mental health (Cui et al., 2021). Dyer (2007) reported that in Muslim cultures, infertility can be especially distressing for women because it permit men to have more than one spouse at the same time and women's fertility issue gives the men a good justification to remarry. Women, in particular, often bear the brunt of societal pressure, emotional distress, and blame in patriarchal contexts (Ibrahim et al., 2021). Research in Pakistan corroborates the psychological burden of infertility. For instance, a cross-sectional study found that infertile men and women attending fertility clinics in Karachi reported significantly lower quality of life (QoL), greater depression, anxiety, and social stigma than the general population (Bhamani et al., 2020).

In this context, resilience works as a protective resource, and it has important role in clinical practice. The abilities to bounce back from challenges and failure or even positive events are known as resilience (Youssef-Morgan 2015). In the context of infertility, resilience may buffer individuals and couples from the stress, grief, and diminished quality of life that often accompany involuntary childlessness. According to Martínez-Martí (2017) adaptive individuals are usually considered to possess self-worth, have confidence in their capabilities and effective problem-solving skills to deal with distress. Different studies have showed that resilience has positive and direct effects on individuals (Li, 2016). Resilience demonstrates a significant and positive association with quality of life in women having infertility (Herrmann, 2011).

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Research study conducted by Herrmann et al. (2011) stated that among couples having infertility issues, higher resilience was associated with lower infertility-specific distress for both partners. Another a systematic review concluded that resilience significantly predicts quality of life in infertile patients, reinforcing the notion that resilient individuals are less susceptible to the adverse psychological effects of infertility (Liu et al., 2024). Furthermore, resilience has been identified as a protective mechanism that not only alleviates stress associated with infertility but also the symptoms of anxiety and depression (Herrmann et al., 2011). A study conducted in Pakistan reported an inverse correlation between resilience and depression signifying that resilience assisted as a protective buffer (Saleem & Yaqoob, 2023). Furthermore, higher level of resilience is linked with lower emotional distress and better fertility-related quality of life.

In view of the previous studies and the pressing necessity to identify reasons that might alleviate distress among individuals experiencing infertility, the present study has been designed to examine the relationship between resilience and stress related to infertility in married couples facing fertility issues. Getting to know the variables influencing stress level can guide to the development of targeted interventions envisioned to improve the psychological well-being of this population.

Learning stress caused by infertility in Pakistani cultural context gives insight in how norms and societal pressure play key role in stress experience (Yusuf, 2016). Current study also provides valuable knowledge in the discussion on fertility issues, particularly in Pakistani societal framework. The findings also play a role in providing a bases for interventions development to efficiently addressing stress related to infertility, thus reducing its psychological impact. Although, various studies across Pakistan have documented the challenges of emotional and psychological nature, faced by the individuals having fertility issues, the effect of resilience remains underexplored. Building on this gap, the present study seeks to explore the association whether resilience would predict stress in married couples facing fertility issues.

## **METHOD**

### ***Participants***

The sample comprised of 100 participants (50 married couples with infertility) decided through G-Power. Various Obstetrics and Gynecology departments of several public and private hospitals, as well as infertility clinics in Karachi, Pakistan were approach to seek permission and after approval from the authorities the consented couples were taken as a sample. The age of the participants was ranged from 20–40 years ( $\bar{X}$ =32.3;  $SD$ =3.12), and they were selected using purposive sampling based on preestablished inclusion and exclusion criteria:

- Only married couples were included in this study.
- Participants who were married for 1 year at least.
- Participants diagnosed with primary infertility, and who have not yet started IVF treatment were included.
- Participants with age range of 20–40 years were included.
- Those with marriage of less than one year were not included.
- Those couples diagnosed with any psychological, and/or chronic medical diseases were excluded.

### ***Measures***

#### **Semi-Structured Interview Form**

Semi-structured interview form was used to obtain information related to participants' age, gender, education, marriage duration, type of infertility and treatment details.

#### **Resilience Scale-25**

The resilience scale (Wagnild & Young, 1993) was design to measure individual's ability to deal with life challenges. The scale comprises of 25 items with a 7-point Likert scale (*1=Strongly Disagree* to *7=Strongly Agree*). The Resilience Scale demonstrated internal consistency reliability, with Cronbach's alpha coefficients ranging from .72 to .94. The Urdu version of the scale (Shahzad & Mansoor, unpublished article) was used in this study. In current data showed good internal consistency ( $\alpha$ = .93).

### **Infertility-Related Stress Scale**

The Infertility-Related Stress Scale (Casu & Gremigni, 2016) is a self-report measure design to measure stress related to infertility. The scale comprises 12 items, assessed on a 7-point likert scale (1 = 'no stress at all' to 7 = 'a significant amount of stress'). IRSS has been found psychometrically sound measure i.e., 0.93 (95% CI 0.92–0.94). In the current study, Urdu version of this scale (Mushtaq & Ghafoor, unpublished article) was used that also showed good internal consistency ( $\alpha = .94$ ).

### ***Procedure***

First of an approval from the departmental research committee was sought via thorough review of the material and proposal. Then authors of the measure were contacted to seek permission. The authorities of different institutes, hospitals and clinics for infertility were accessed to get permission for the recruitment of sample from the respective organizations. All the participants were then informed about the objectives of the study. Those who fulfilled the inclusion criteria and showed willingness to voluntarily become participants of the study were included in the sample. They were also assured about the confidentiality and no harm associated with the participation in this study. The Resilience scale and Infertility-Related Stress scales were administered followed by the administration of semi-structured interview form. After data collection, all the participants were thanked for their participation in the research. Scoring for the scales were then scored as per the standard scoring criteria.

### ***Statistical Analysis***

The Socio-demographic characteristics were analyzed by using descriptive, while Linear regression analysis was utilized make inference from the data.

## RESULTS

Table 1  
*Sociodemographic Characteristics of the Sample (N=102)*

Variables	<i>f</i>	%
Gender		
Male	50	50
Female	40	50
Education		
Matriculation	10	10.0
Intermediate	30	30.0
Graduation	28	28.0
Masters	25	25.0
Postmasters	07	7.0
Occupation		
Student	01	01
Government Employ	19	19
Private Employ	43	43
Homemaker	33	33
Other	04	04
Marriage Duration		
1-5 years	42	42
6-10 years	52	52
11-15 years	06	06

Table 2  
*Linear Regression Analysis with Resilience as Predictor of Infertility-Related Stress*

Predictor Variable	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	<i>F</i>	<i>Sig.</i>
Constant	94.72	4.78				
Resilience	-.44	.04	-.76	.58	162.27	.00*

\* $p < .05$

## DISCUSSION

Infertility has been found as a significant issue in Asian culture, particularly for the couples depriving of their role as parent and encounter social obstacles. Due to the experience of infertility mental health issues may arise among couples. The results of the study have yielded significant conclusion and have been examined in the context of earlier studies to investigate the relationship between resilience and infertility-related stress in married couples. The findings exhibited a significant predictive association between resilience and infertility-related stress (Table 2) suggesting lower stress level when the couples with fertility issues, have the ability to deal with the challenges. This infers that when facing infertility issues, resilience plays a protective role, help couples to adjust, and preserve mental well-being.

These results are consistent with prior findings showed that resilience works as a protecting factor against stress in infertile populations. For instance, couples with high resilience stated better quality of life and little infertility-specific anxiety (Herrmann et al., 2011). Bhamani et al. (2020) also found an inverse relationship of resilience and emotional distress, and depression among individuals with infertility. By highlighting this, resilience functions as a sturdy predictor of reduced stress levels in relationships rather focusing only on the experiences of women or individuals.

Resilience as a support factor to adaptive coping mechanisms may account for its protective effects. Couples having higher resilience are more likely to effectively deal with the emotional as well as interpersonal issues related to

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infertility, keep the hope high, and utilizes problem-solving methods that ultimately decrease the psychological effects of infertility. Moreover, resilience also increases people's skills to explore as well as use social support, which has been continually demonstrating as a buffer against stress associated to fertility problem (Saleem & Yaqoob, 2023).

The significance of resilience while facing infertility challenges may be further highlighted by Pakistani cultural and socioeconomic variables. People living in collectivist cultures, where expectations are high for parenthood prevalence and infertility is stigmatized, face societal pressure, criticism, and less marital satisfaction besides personal distress (Saeed, et al., 2022). Despite having infertility, resilient people are better able to deal with these demands, sustain emotional balance, and maintain satisfaction in conjugal relationship.

The study also has significant implications for the clinical and psychosocial interventions. Participating in the programs focusing on promoting building resilience, managing stress and emotion control, couples with fertility issues may become able to manage the distress adequately. Implication also focuses on the developing strategies to facilitate resilience by combining with medical treatments offered by fertility clinics and mental health experts to improve the quality of life and general well-being of effected couples. Promoting resilience may also encourage people to find social support, use adaptive coping, and maintaining their purpose and optimism throughout their reproductive journey. This study concludes highlighting the critical role resilience plays in decreasing stress of infertility in Pakistani married couples. They may well manage the psychological and social hitches of infertility, preserve the emotional and relational well-being, and improve their general quality of life by elevating resilience. These results focus on the need of resilience-focused, culturally relevant therapies in infertility care, laying the groundwork for ameliorating clinical results and psychosocial support amenities for couples dealing with infertility issues.

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