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KEYWORDS	ABSTRACT
Perceived social stigma, psychological resilience, mental health, transgender, khwaja sira, Pakistan	The social stigma, rejection and discrimination experienced by transgender (khwaja sira) people in Pakistan is widespread and puts them at a higher risk of psychological issues. The present study was based on Minority Stress Theory and the psychological mediation theory, which was based on perceived social stigma and mental health of transgender people in Pakistan, and to test the mediating role of psychological resilience between perceived social stigma and mental health. The study used a cross sectional correlational design and the sample consisted of 250 self-identified transgender persons (aged 18-54) who were selected from Lahore using purposive sampling and snowball sampling technique through community gatekeepers. Participants filled out a demographic form and the following scales: the Connor-Davidson Resilience Scale (CD-RISC-25), and Depression, Anxiety and Stress Scale (DASS-21), which included 14 items for perceived transgender stigma (enacted and felt normative stigma). Perceived social stigma was significantly and positively correlated with mental health problems ($r = .69, p < .01$) and significantly and negatively correlated with psychological resilience ($r = -.53, p < .01$) after application of the Pearson correlation analysis. The model accounted for 59% of the variance in mental health problems and the mediation analysis, using Hayes' PROCESS macro (Model 4) with 5,000 bootstrap samples, revealed that the relationship between perceived social stigma and mental health problems was significantly and partially mediated by psychological resilience (indirect effect = 0.76, 95% Boot CI [0.52, 1.04]). The results indicated a direct impact of stigma on the mental health of transgender people and that stigma also diminishes psychological resilience, and that alongside structural interventions to reduce stigma towards the khwaja sira community in Pakistan, there is need for mental health intervention that focuses on psychological resilience and is culturally responsive to the transgender community.
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Introduction

In Pakistan, locally known as khwaja sira, hijra or khusra, transgender people are one of the most marginalized and historically stigmatized groups of South Asian society (Mahesar et al., 2025). While khwaja sira served significant ceremonial and advisory functions in pre-colonial subcontinent, colonial laws like the Criminal Tribes Act of 1871 started a long pattern of legal criminalization and social exclusion that has continued to influence their status today (Mahesar et al., 2025). The khwaja sira population is estimated to be in the tens of thousands in modern-day Pakistan, but the official census is believed to be a significant underestimate of the actual size (Ali & Ashraf 2026). Although the Transgender Persons (Protection of Rights) Act of 2018 explicitly bans discrimination in education, healthcare and employment, implementation of the legislation is still shaped by inconsistencies and is largely symbolic in practice (Ali & Ashraf, 2026). This means that khwaja sira people are still routinely subjected to rejection by their families, exclusion from the mainstream school and labour market, and widespread mistreatment in public and institutional institutions (Azhar et al., 2024).

Minority Stress Theory posits that the psychological distress experienced by transgender individuals is greater than that experienced by the majority of cisgender individuals, because there is more socially imposed stress on the transsexual and transgender individual in the form of prejudice, rejection, and discrimination that builds over the lifespan of a person (Meyer, 2013). Hendricks and Testa (2012) furthered this perspective when they framed it specifically for transgender and gender-nonconforming communities, stating that enacted discrimination and violence – which can be called distal stressors – can combine with internalized transphobia and the expectation of rejection – which can be called proximal stressors – to create disproportionately high rates of psychological distress. In this context, perceived stigma means the subjective experience and the expected devaluation, exclusion, or mistreatment of an individual based on their gender identity, and is seen as a key and quantifiable part of the minority stress process (Bockting et al., 2013). There is an increasing international body of research showing consistently that transgender people who report higher levels of perceived and enacted stigma are more likely to experience higher levels of depression, anxiety, and suicidality (Bockting et al., 2013; Nemoto et al., 2011; Reisner et al., 2015).

Qualitative and descriptive studies have recently started to investigate specific experiences of stigma of khwaja sira in Pakistan in a South Asian context. In their in-depth interviews with khwaja sira participants in Swat, Khyber Pakhtunkhwa, Azhar et al. (2024) found that there are three interrelated dimensions of gender-nonconformity stigma: internalized stigma (felt shame and reduced self-worth), perceived stigma (felt others have negative views about them as workers or Muslims), and enacted stigma (actual experiences of being excluded from family, schools, mosques, and health centers). With respect to the khwaja sira, a descriptive cross-sectional study of these individuals in Islamabad revealed that 68% had higher psychological distress scores than the clinical cut-off on a structured mental health screening tool, and unemployment and illiteracy strongly correlated with psychological distress scores (Ali & Ashraf, 2026). In line with this, Mahesar et al. (2025) found that transgender people in Pakistan continue to face

disproportionately high rates of depression, anxiety, and suicidality, largely attributed to the lack of legal enforcement, families' support, and access to mental health care. This literature suggests that perceived social stigma is not a peripheral phenomenon, but is a central and pervasive aspect of the life of khwaja sira in Pakistan and has direct implications on mental health.

While stigma-related adversity is severe and pervasive, not all transgender people who encounter stigma experience clinically significant psychological problems, which has led to growing theoretical and empirical focus on the importance of psychological resilience as a protective factor (Singh et al., 2011). Psychological resilience is defined as a person's ability to respond positively, to maintain his/her psychological equilibrium and to bounce back from extreme stress, trauma and chronic stress (Connor & Davidson, 2003). In the minority stress literature, resilience has been defined as a general coping mechanism (individual-level) and a buffer or interruption to the pathway between stigma exposure and negative mental health outcomes (group-level) such as pride in gender identity or connectedness to a supportive community (Testa et al., 2015). This buffering effect has been observed internationally, for example, among transgender adults who exhibited greater resilience were significantly lower levels of psychological distress, even after controlling for demographic and stigma-related factors (Bariola et al., 2015). Similarly, in a psychological mediation framework, Scandurra et al. (2018) showed that, at the individual level, resilience was an important coping strategy to mitigate the link between anti-transgender discrimination and depressive and anxious symptoms among transgender participants in Italy.

However, the majority of studies that have investigated the mediating or protective effect of psychological resilience on the relationship between stigma and mental health have been carried out within Western, high-income and relatively settingally protected contexts, such as the USA, Australia, and Italy (Bariola et al., 2015; Scandurra et al., 2018; Testa et al., 2015). The psychological pathways between stigma and mental health in Pakistan may be different due to religious conservatism, collectivist family norms, weak law enforcement, and economic marginalization, requiring further empirical investigation (Mahesar et al., 2025). Previous Pakistani studies on these individuals have been mostly descriptive or qualitative, qualitatively documenting stigma and psychological distress without formally testing variables potentially influencing the relationship between stigma and psychological distress, including resilience (e.g., Azhar et al., 2024; Ali & Ashraf, 2026). The present study was thus undertaken to quantitatively investigate the relationship between perceived social stigma and mental health problems among transgender people in Pakistan and to test whether psychological resiliency might mediate this relationship, thereby adding to the minority stress and psychological mediation models, but this time to a significant but under-studied non-Western population.

Literature Review

Stigma and mental health have been extensively documented in many stigmatized groups, and Parker and Aggleton (2003) have theorised that stigma exists not only as an individual attitude but as a social process that can be seen as a form of power politics which generates inequalities

and marginalisation. For sexual and gender minorities, Hatzenbuehler (2009) hypothesized the psychological mediation framework: exposure to distal stressors related to stigma leads to general and group-specific psychological processes such as emotion dysregulation, social isolation, and negative cognitive schemas, which results in increased rates of depression and anxiety. Empirical evidence for the pathways outlined by minority stress and psychological mediation frameworks indicates that both enacted stigma (direct experiences of stigma) and felt stigma (anticipation of future stigma) were strongly related to psychological distress and lower psychological resilience in Bockting et al. (2013) study of the U.S. transgender population drawn from a large online sample. Since then, these results have been replicated in many cultures, and discrimination consistently appears as one of the strongest and most consistent predictors of poor mental health among transgender communities (Nemoto et al., 2011; Reisner et al., 2015).

In Pakistan more specifically, qualitative evidence now supports these more general theoretic assertions. Azhar et al. (2024), who analyzed the content of thematic analysis within the framework of Minor Stress Theory, found that the khwaja sira participants in Swat experienced extreme feelings of exclusion from family, education, religious institutions, and healthcare, with some participants reporting that the multi-generational and cumulative nature of the stigma made life unlivable. Drawing on a study of the psychological response of the khwaja sira to these challenges, Azhar et al. (2025) identified a strong coping strategy that involved seeking support from chosen family networks, engaging in spiritual coping, and participating in collective advocacy, as key coping resources in the context of continued discrimination, highlighting the role that community-based and personal coping mechanisms can have in high-stakes and highly stigmatizing settings. In line with these qualitative results, Ali and Ashraf's (2026) descriptive study was quantitative, reaching similar findings that the psychological distress was significantly high among Islamabad's khwaja sira community and was closely correlated with unemployment, low education, and discomfort in healthcare environment, which are all indicative of structural stigma. Together, this literature resembles the international minority stress literature in which stigma is present as a common and always negative factor of transgender mental health and in which some of the structural stressors unique to Pakistan, such as family rejection and religious conservatism, strengthen the association between stigma and mental health (Mahesar et al., 2025).

Although stigma has been well established to be associated with poor mental health outcomes, a growing body of research has aimed to understand how individual differences in mental health outcomes occur among people with similar stigma. Connor and Davidson (2003) defined psychological resilience as a multidimensional composite of personal competence, toleration of negative affect, positive acceptance of change, and a sense of control, and they created a widely-used scale to measure this construct in clinical and community samples. In a qualitative study, Singh et al. (2011) identified a number of strategies that transgender people typically use to deal with their experience of hardship: building self-esteem without relying on another's affirmation; engaging in supportive transgender community and activist groups; and changing one's view of transgender identity as a source of strength and not shame. Bariola et al. (2015) showed

quantitatively that psychological resilience was significantly related to psychological distress scores among transgender adults, even after controlling for demographic and stigma-related stressors, thereby offering direct empirical evidence that psychological resilience is a protective factor, and not just the result of positive circumstances. In an attempt to put this work into a formal mediation framework, Scandurra et al. (2018) discovered that resilience played an important buffering role in the pathway from anti-transgender discrimination to depressive and anxious symptoms among Italian transgender people, providing empirical support for the theoretical proposal that resilience is an active intervention point within the relationship between stigma and mental health.

Even with this evidence, most of the quantitative studies that have tested the mediation role of the stigma-resilience-mental health relationship are conducted within a western, legally protective, and individualist cultural context, and the effects of the same psychological processes on the mental health of people from LGBTQ+ communities in more collective, religious conservative, and legally inconsistent places like Pakistan remains unclear (Scandurra et al., 2018; Testa et al., 2015). Despite the significant contribution of the available Pakistani literature, it has mainly been based on qualitative or purely descriptive designs and reported on the presence of stigma and distress without performing any statistical testing of the mechanisms that link these concepts (Azhar et al., 2024; Ali & Ashraf, 2026; Mahesar et al., 2025). This is an important gap as knowing whether the stigma-mental health relationship was meaningfully mediated by psychological resilience would have important implications for the cultural design of mental health interventions that focus on resilience (Mahesar et al., 2025).

Rationale

While the adverse psychological outcomes of stigma have been documented globally among transgendered people (Bockting et al., 2013; Hatzenbuehler, 2009; Meyer, 2013), there are limited studies on these relationships in Western populations of transgendered people, and even fewer studies in Pakistan involving khwaja sira (Mahesar et al., 2025). Existing Pakistani literature has mostly used qualitative methods (such as interviews) or descriptive cross-sectional designs which identified the presence of stigma and psychological distress but failed to formally test psychological mechanisms through which stigma may lead to distress (Azhar et al., 2024; Ali & Ashraf, 2026). Furthermore, no study to date has analysed the role of psychological resilience as a mediator of the relationship between stigma and mental health in the socio-cultural context of Pakistan, where family structures are collectivist, religious conservativeness is high and legal protection is inconsistent, which might affect the power and type of these relationships compared to Western contexts (Hendricks & Testa, 2012). The present study aims to fill this gap by exploring the direct association between perceived social stigma and psychological resilience with mental health and to test for the mediation role of psychological resilience between perceived social stigma and mental health among transgender in Pakistan. The project seeks to apply Minority Stress Theory and the psychological mediation model to an under-researched group of people from a non-Western background and provide empirical evidence that will be utilized in the

creation of culturally responsive, culturally affirming mental health interventions for the khwaja sira community.

Hypotheses

H1: There will be a significant positive relationship between perceived social stigma and poor mental health (depression, anxiety, and stress) among transgender individuals in Pakistan.

H2: There will be a significant negative relationship between perceived social stigma and psychological resilience among transgender individuals in Pakistan.

H3: Psychological resilience will significantly mediate the relationship between perceived social stigma and mental health among transgender individuals in Pakistan.

Method

Research Design

The present research will employ a cross sectional, quantitative, correlational study design due to its appropriate use in examining relationships among perceived social stigma, psychological resilience, and mental health in a defined sample at a single point in time (Creswell & Creswell, 2017).

Participants and Sampling

The study population will include the self-identified transgendered (khwaja sira) people who live in major urban centres of Pakistan such as Lahore, Karachi and Islamabad/Rawalpindi. A purposive sampling strategy will be used and will involve snowball sampling, as this approach has been used in prior Pakistani studies on khwaja sira individuals that utilized trusted community leaders known as "Gurus", which are generally non-gender community members like neighbours, relatives, and/or friends. (Ali & Ashraf, 2026; Azhar et al., 2024) Around 200 participants will be sampled using registered khwaja sira community based organizations, drop-in centers and Guru-led networks in the selected cities. The participants will be included in the study if they self-identify as transgender, khwaja sira or any related third gender identity, have been living in Pakistan for at least a year, and can read and understand either Urdu or English or can complete the questionnaire with the help of the interviewers, and give informed consent to participate by voluntarily. On the other hand, people will not be included in the study if they are under 18 years old, active psychosis or a severe psychiatric illness has been diagnosed, or if they refuse or cannot give informed consent to participate in the study.

Measures

The participants will be asked for their demographics using a demographic information sheet, then the three standardized measures listed below will be used.

Everyday Discrimination Scale (EDS) The Everyday Discrimination Scale (Williams, Yu, Jackson and Anderson, 1997) will be used to measure perceived social stigma, as it was designed to assess the frequency of subtle, chronic, day-to-day experiences of unfair treatment and discrimination. The EDS is a 9-item self-report instrument, with respondents rating both the frequency of experiencing the same mistreatments as others (e.g., “You are treated with less respect than other people”) on a 6-point Likert scale from 0 (never) to 5 (almost every day). As in past adaptations for sexual and gender minority populations, item wording will be modified to specifically reflect gender identity as the source of these experiences. Total scores are the sum of all items: possible scores range from 0–45, with higher scores representing higher levels of perceived stigma and discrimination. There are no reverse-scored items on the scale. Cronbach's alpha coefficients for the EDS have been good on various populations, generally between .85 and .90 (Williams et al., 1997).

Connor-Davidson Resilience Scale (CD-RISC-25) Psychological resilience will be evaluated by the Connor-Davidson Resilience Scale developed by Connor and Davidson (2003) that assesses an individual's ability to deal with and positively adapt to adversity, stress and trauma. The CD-RISC-25 is a 25-item self-reported instrument with 5-point Likert scale (0 = not true at all; 4 = true nearly all of the time) that evaluates the 5 dimensions of resilience: personal competence, trust in one's instincts, positive acceptance of change, control, and spiritual influences. Items are totalled to give a total score that can range from 0 to 100 where higher scores indicate more psychological resilience. The scale does not contain any reverse-scored items. The CD-RISC-25 has been found to have good internal consistency in the original validation sample ($\alpha = .89$) and in many subsequent studies (Connor & Davidson, 2003).

The Depression, Anxiety and Stress Scale (DASS-21) was used. The Depression, Anxiety and Stress Scale-21 developed by Lovibond and Lovibond (1995), which is a shorter version of the 42-item DASS, will be used to assess mental health based on the negative emotional states of depression, anxiety and stress over the past week. The DASS-21 is made up of 21 items divided into three separate 7-item subscales each rated on a 4-point Likert scale from 0 (did not apply to me at all) to 3 (applied to me very much, or most of the time). Subscale scores are obtained by adding together the items relevant to each subscale and multiplying by 2, ranging from 0 to 42 with higher scores reflecting increased level of depression, anxiety, or mental distress; a total mental health/distress score can be obtained by adding together the three subscales. There are no reverse-scored items on the DASS-21. Previous research has shown the scale to have good to excellent internal consistency with Cronbach's alpha coefficients ranging from .81 for stress, .88 for depression, and .89 to .94 for the anxiety and total scales respectively (Henry & Crawford, 2005; Lovibond & Lovibond, 1995).

Procedure and Ethics

Formal ethical approval from the Institutional Review Board (IRB)/Ethics Committee of the affiliated university will be achieved before data collection; permissions will be requested from the relevant khwaja sira community-based organizations and from the Guru networks to

facilitate access to participants in a culturally sensitive and respectful manner. The demographic form and consent documents will be translated into Urdu using standard forward-translation and back-translation techniques with any discrepancies resolved by an expert committee as was done in previous studies conducted in Pakistan with this population (Ali & Ashraf, 2026).

Data collection will be carried out by trained researchers, preferably individuals that are familiar with the khwaja sira community, in order to build trust and reduce social-desirability bias. Potential participants will be engaged through community gatekeepers and informed about the study, the voluntary nature of participation and the confidentiality of their responses before signing up, with consent forms and questionnaires read to them if they cannot read. Participants will be informed that their answers will be anonymous and confidential, and that no personally identifying information will be connected to their answers, that participation is voluntary, and that they can exit at any time without being penalized or losing access to community services. A list of easily accessible mental health and psychosocial support resources will be provided to all participants at the conclusion of data collection, and details of the contacts for the research team provided should any participant require follow up support.

Completed questionnaires will be placed in password protected electronic files that will be accessible to the research team only and paper copies will be locked in a locked cabinet and destroyed after the retention period. IBM SPSS Statistics will be used to analyze the collected data with descriptive statistics to describe sample characteristics, Pearson product-moment correlation to analyze the bivariate relationships between perceived social stigma, psychological resilience, and mental health, and PROCESS macro (Model 4) and bootstrapped confidence intervals to formally test psychological resilience as a mediator between perceived social stigma and mental health (Hayes, 2013). Properly using effect sizes and 95% confidence intervals will be reported and follow current reporting requirements for all statistical findings.

Results

Table 1: Demographic Characteristics of the Participants (N = 250)

Characteristics	f	%
Education		
Uneducated	107	42.8
Middle	39	15.6
Intermediate	51	20.4
Graduation	53	21.2
Employment status		
Unemployed	61	24.4
Begging	140	56.0
Performing (dancing/singing)	49	19.6
Family acceptance		
Fully accepted	19	7.6

Partially accepted	85	34.0
Rejected	146	58.4
City of residence		
Lahore	250	100.0

Note. f = frequency; % = percentage. Age of the participants: $M = 37.07$, $SD = 10.75$ (range 18–54 years). Duration of gender identification: $M = 7.38$, $SD = 3.84$ (range 1–14).

Table 1 shows the demographic features of the sample. The total number of respondents in the study was 250 transgender (khwaja sira) aged between 18 and 54 years (mean age of 37.07 years, $SD = 10.75$). The highest percentage of respondents (42.8%) did not receive any formal education, while 15.6% received middle-level, 20.4% received intermediate-level and 21.2% received graduation-level. The majority of the respondents stated begging as their major source of income (56.0%), 24.4% were jobless, and 19.6% indicated performing (dancing/singing) as their major income source. As far as being accepted by the family the majority of participants indicated that they were rejected by their family (58.4%), 34.0% were partially accepted by their families and 7.6% were fully accepted by their family.

Descriptive Statistics, Normality and Reliability of Study Variables

Table 2: Descriptive Statistics, Normality and Reliability of Study Variables (N = 250)

Variables	k	M	SD	Min	Max	Skewness	Kurtosis	α
Perceived social stigma	14	34.84	6.80	17	56	0.07	−0.13	.90
Enacted stigma	5	12.50	2.54	6	20	−0.02	−0.08	.75
Felt normative stigma	9	22.35	4.52	11	36	0.09	−0.22	.86
Psychological resilience	25	50.14	15.39	4	90	−0.06	−0.13	.97
Depression	7	20.60	8.59	0	42	0.14	−0.28	.87
Anxiety	7	20.58	9.00	0	42	0.08	−0.22	.89
Stress	7	20.45	8.38	0	42	0.08	−0.15	.87
Mental health problems (DASS total)	21	61.63	24.93	2	126	0.12	−0.19	.96

Note. k = number of items; M = mean; SD = standard deviation; Min = minimum; Max = maximum; α = Cronbach's alpha. Depression, anxiety and stress scores were multiplied by two in line with DASS-21 scoring guidelines.

The descriptive statistics, normality indices and internal consistency of the study variables are presented in Table 2. All variables have skewness values between −0.06 and 0.14 and kurtosis values between −0.28 and −0.08, which are well within the limits of ± 2 , and are therefore appropriate for parametric analyses because they are close to the normal distribution. The internal consistency of all scales and subscores were satisfactory to excellent with Cronbach's alpha coefficients ranging from .75 to .97, which was higher than the recommended alpha coefficient of .70. There was acceptable to excellent internal consistency for all scales and

subscores in the present sample with Cronbach's alpha ranging from .75 to .97, which is higher than the recommended level of .70. The mean scores for depression ($M = 20.60$), anxiety ($M = 20.58$) and stress ($M = 20.45$) suggest that, on average, the participants reported moderate levels of depression and stress, and extremely severe anxiety levels, based on the severity classification for the DASS (Lovibond & Lovibond, 1995).

Relationship between Perceived Social Stigma, Psychological Resilience and Mental Health (H1 and H2)

Table 3: Pearson Correlation among Perceived Social Stigma, Psychological Resilience and Mental Health ($N = 250$)

Variables	1	2	3	4	5	6	7	8
1. Perceived social stigma	—							
2. Enacted stigma	.93**	—						
3. Felt normative stigma	.98**	.84**	—					
4. Psychological resilience	-.53**	-.54**	-.49**	—				
5. Depression	.67**	.67**	.63**	-.63**	—			
6. Anxiety	.67**	.67**	.63**	-.61**	.87**	—		
7. Stress	.66**	.66**	.62**	-.62**	.89**	.88**	—	
8. Mental health problems	.69**	.70**	.65**	-.65**	.96**	.96**	.96**	—

*Note. Mental health problems = DASS-21 total score. ** $p < .01$ (2-tailed).*

Pearson correlation coefficients of the different variables of the study are given in Table 3. Results showed a significant strong positive correlation between perceived social stigma and mental health problems ($r = .69$, $p < .01$), depression ($r = .67$, $p < .01$), anxiety ($r = .67$, $p < .01$) and stress ($r = .66$, $p < .01$). Enacted stigma ($r = .70$, $p < .01$) and felt normative stigma ($r = .65$, $p < .01$) were also both positively correlated with mental health problems. The results showed that transgender individuals who experienced more social stigma had higher depression, anxiety, and stress scores, thus supporting H1.

In addition, perceived, enacted, and felt normative stigma were all significantly and moderately negatively correlated with psychological resilience ($r = -.53$, $p < .01$; $r = -.54$, $p < .01$; $r = -.49$, $p < .01$, respectively). This suggests that there was a negative relationship between perceived stigma and psychological resilience, supporting H2. Moreover, psychological resilience was significantly and negatively correlated with mental health problems ($r = -.65$, $p < .01$), depression ($r = -.63$, $p < .01$), anxiety ($r = -.61$, $p < .01$) and stress ($r = -.62$, $p < .01$), indicating that higher psychological resilience was associated with fewer psychological difficulties.

Mediating Role of Psychological Resilience (H3)

Table 4: Direct and Total Effects of Perceived Social Stigma and Psychological Resilience on Mental Health Problems ($N = 250$)

Causal path	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI	Hypotheses
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					<i>LL</i>	<i>UL</i>	
Perceived social stigma → Psychological resilience (<i>a</i>)	-1.19	0.12	-9.75	<.001	-1.43	-0.95	Supported
Psychological resilience → Mental health problems (<i>b</i>)	-0.64	0.08	-8.24	<.001	-0.79	-0.49	Supported
Perceived social stigma → Mental health problems (<i>c</i> , total effect)	2.54	0.17	15.14	<.001	2.21	2.87	Supported
Perceived social stigma → Mental health problems (<i>c'</i> , direct effect)	1.78	0.18	10.16	<.001	1.44	2.13	Supported

Note. B = unstandardized coefficient; SE = standard error; CI = confidence interval; LL = lower limit; UL = upper limit. Mental health problems = DASS-21 total score. Model for psychological resilience: $R^2 = .28$, $F(1, 248) = 95.06$, $p < .001$. Model for mental health problems: $R^2 = .59$, $F(2, 247) = 179.41$, $p < .001$. Total effect model: $R^2 = .48$, $F(1, 248) = 229.08$, $p < .001$.

Table 4 shows the direct and total effect results of the mediation analysis. Overall, social stigma was a significant and negative predictor of psychological resilience ($B = -1.19$, $SE = 0.12$, $t = -9.75$, $p < .001$, 95% CI $[-1.43, -0.95]$), accounting for 28% of the variance in psychological resilience. Psychological resilience in turn significantly and negatively predicted mental health problems after controlling for perceived social stigma ($B = -0.64$, $SE = 0.08$, $t = -8.24$, $p < .001$, 95% CI $[-0.79, -0.49]$). The overall effect of perceived social stigma on mental health problems was significant and positive ($B = 2.54$, $p < .001$, 95% CI $[2.21, 2.87]$), accounting for 48% of the variance. Entry of psychological resilience into the model saw the direct effect of perceived social stigma on mental health problems become less, but still significant ($B = 1.78$, $p < .001$, 95% CI $[1.44, 2.13]$). The variance in mental health problems was 59% accounted for by their joint contribution of perceived social stigma and psychological resilience.

Table 5: Indirect Effect of Perceived Social Stigma on Mental Health Problems through Psychological Resilience ($N = 250$)

Indirect path	Effect	BootSE	95% Boot CI		Hypotheses
			<i>LL</i>	<i>UL</i>	
Perceived social stigma → Psychological resilience → Mental health problems	0.76	0.13	0.52	1.04	Supported

Note. BootSE = bootstrapped standard error; Boot CI = percentile bootstrap confidence interval based on 5,000 bootstrap samples; LL = lower limit; UL = upper limit. An indirect effect is significant when the confidence interval does not include zero.

Table 5 shows the indirect effect of perceived social stigma on mental health problems via psychological resilience. The indirect effect was significant (Effect = 0.76, BootSE = 0.13, 95% Boot CI $[0.52, 1.04]$) with the 95% Bootstrap confidence interval not including zero. This suggests that increased perceived social stigma was related to decreased psychological resilience, which was related to increased depression, anxiety and stress. Psychological resilience was one mechanism that explained about 30% of the total effect ($0.76 / 2.54$) in the relationship between perceived social stigma and mental health problems. Hence, the support was given for H3.

To summarize, the hypotheses of the study were supported. Mental health problems were positively correlated with perceived social stigma (H1), psychological resilience was negatively correlated with perceived social stigma (H2) and the relationship between perceived social stigma and mental health problems was partially mediated by psychological resilience for transgender people in Pakistan (H3).

Discussion

The present study investigated the relationship between perceived social stigma and mental health among the transgender in Pakistan and whether psychological resilience plays a mediating role in this relationship. The results confirmed all three hypotheses and suggested that perceived social stigma is a significant risk factor for depression, anxiety and stress in khwaja sira, and part of its detrimental influence is through a decrease in psychological resilience.

In accordance with the first hypothesis (H1), the results revealed a significant strong positive relationship between perceived social stigma and mental health problems, indicating that participants who perceived greater stigma reported higher levels of depression, anxiety and stress. This is in line with the Minority Stress Theory, which states that gender minorities are at risk for increased psychological distress due to the added stress of prejudice and discrimination, not the gender minority itself (Meyer, 2013; Hendricks & Testa, 2012). It is also aligned with international research demonstrating that transgender people with higher levels of stigma consistently have higher levels of depression, anxiety and psychological distress (Bockting et al., 2013; Nemoto et al., 2011; Reisner et al., 2015). The present finding aligns with the studies of Ali and Ashraf (2026), reporting that a majority of participants in Islamabad, Pakistan, exceeded the clinical cut-off for psychological distress as khwaja sira, and Azhar et al. (2024), who reported that the participants presented a sense of the accumulated weight of stigma as making life feel unbearable within Pakistan. Most important, both stigma—normative and enacted—were significantly associated with mental health problems, supporting Bockting et al. (2013) and Hendricks and Testa (2012) that both types of stigmas can cause psychological suffering. The strong mean scores of the present sample for anxiety might be linked to this persistent tendency to be on guard and to suspect rejection in everyday life for khwaja sira.

The second hypothesis (H2) that states there would be a significant negative relationship between perceived social stigma and psychological resilience was also supported. Those who believed there was more stigma showed less ability to positively adapt and overcome adversity. This finding is consistent with Bockting et al. (2013), who identified both enacted and felt stigma as associated with lower levels of resilience among transgender people and with psychological mediation, in which chronic exposure to stigma gradually diminishes psychological resources that people have for coping with stress (Hatzenbuehler, 2009). This pattern could be attributable to the demographic profile of the present sample. Over half of the respondents have reported rejection from their families, most of whom were living by begging and a significant number of which lacked formal education. This situation mirrors the structural exclusion of khwaja sira individuals from family, education and employment that has been documented in previous

Pakistani research (Azhar et al., 2024; Mahesar et al., 2025), which is what compromises access to the social and personal resources – such as family support and personal competence – that typically support resilience development (Connor & Davidson, 2003; Singh et al., 2011).

Last, the third hypothesis (H3) that suggested that psychological resilience would act as a mediator between perceived social stigma and mental health was confirmed. The mediation analysis indicated that social stigma contributed to the decrease of psychological resilience and that this decrease in psychological resilience was a significant factor in the increase in depression, anxiety and stress. The results also align with previous studies conducted by Scandurra et al. (2018) who showed that resilience was a protective factor in the relationship between anti-transgender discrimination and depressive and anxious symptoms in Italian transgender people, and with Bariola et al. (2015) who found that resilience was related to reduced psychological distress among transgender adults, even after controlling for stigma-related stressors. It also aligns with Testa et al. (2015) who theorized that resilience could be a break in the chain between minority stress and poor mental health. The direct effect of perceived social stigma on mental health problems persisted after controlling for resilience, however, as it did not fully mediate the relationship, the total effect was around 30%. This means that while there is a protective pathway to resilience, this pathway can't completely counteract the psychological effects of stigma. Individual-level coping resources are not likely to be able to shield khwaja sira individuals from the impact of stigma, as stigma is embedded in social power dynamics and structural inequality (Parker & Aggleton, 2003) and legal measures like the Transgender Persons (Protection of Rights) Act of 2018 are not consistently being enforced (Ali & Ashraf, 2026).

In general, the results presented here confirm the Minority Stress Theory and the psychological mediation approach which have been tested largely in Western and less legally protective environments (Bariola et al., 2015; Scandurra et al., 2018; Testa et al., 2015), and were applied to the Pakistani context of the khwaja sira community which is collectivist, religiously conservative, and economically marginalized. The study also quantitatively tests the mediation of psychological resilience and moves beyond the predominantly qualitative and descriptive literature on stigma and poor mental health among the Pakistani population (Azhar et al., 2024; Ali & Ashraf, 2026), offering empirical evidence of one of the pathways by which stigma leads to poor mental health in this population.

Strengths and Limitations

There are a number of strengths of the present study. It is one of the first studies in Pakistan that quantitatively explored the concept of perceived social stigma, psychological resilience and mental health in one mediational model among transgender population. It was conducted with a relatively large sample of a hidden and hard to reach population via trusted community gatekeepers. All indices exhibited acceptable to high internal consistency in the present sample ($\alpha = .75-.97$) and the mediation effect was tested with strictness with Hayes' PROCESS macro using 5,000 bootstrap samples (Hayes, 2013).

However, there are some restrictions to be noted. First, the cross sectional design makes it impossible to draw causal inferences, and second, it is possible that people who have poorer mental health may see their social world as more stigmatizing. Longitudinal research is needed to establish the temporal order of these relationships. Secondly, the participants were identified using purposive and snowball sampling and therefore, the findings are not generalizable to the khwaja sira in other cities and in the rural areas of Pakistan. Third, the study was self-reported, with some items administered with the assistance of the interviewer, resulting in social desirability and common method bias. Fourth, group specific resilience factors including community connectedness and pride in one's identity (Testa et al., 2015) and the chosen-family and Guru networks (Azhar et al., 2025) were not measured. Future studies should thus take a longitudinal or multi-city design and incorporate family-specific resilience and/or social support as a secondary mediator or moderator and explore the potential variation in these relationships by family acceptance and by education and employment status.

Implications

The findings have implications for practice. Psychological resilience levels were found to partially mediate the impact of stigma on mental health, suggesting a need for interventions that strengthen the psychological resources of khwaja sira people such as culturally responsive and psychological resilience-focused programs and services including coping skills training, peer support groups and psychoeducation, to be delivered via community services, drop-in centers and Guru networks. Additionally, mental health practitioners need to be trained to be affirming and non-judgemental to this community. Concurrently, given that stigma also had a strong direct impact on mental health, it was suggested that individual-level interventions should be complemented by structural interventions, such as the effective implementation of the Transgender Persons (Protection of Rights) Act of 2018, anti-discrimination policies in health care, education, and employment, and family-centered awareness programmes to prevent rejection faced by most of the participants in the present study.

Conclusion

The present study found that the perceived social stigma, a significant predictor of poor mental health among transgender people in Pakistan, was partially mediated by psychological resilience. Transgender people who felt more stigma reported more depression, anxiety and stress, either directly or indirectly due to decreased psychological resilience. These findings show that resilience is considered as an important psychological pathway across the Pakistani cultural context and suggest that psychological well-being of khwaja sira community can be enhanced through intervention and promotion of resilience along with wider social and legal initiatives to mitigate stigma and discrimination.

References

- Ali, E, & Ashraf, M. (2026). Health disparities and socioeconomic challenges faced by the Khawaja Sira (intersex and gender-diverse) community in Islamabad, Pakistan: A

- descriptive cross-sectional study. *PLOS Global Public Health*, 6(7), e0005798. <https://doi.org/10.1371/journal.pgph.0005798>
- Azhar, S., Ahmad, I., Guzman Herrera, M. M., Tariq, N., & Lerner, R. (2024). "I would prefer to be dead than to live this way": Lived experiences of stigma and discrimination against khwaja sira in Swat, Pakistan. *Cambridge Prisms: Global Mental Health*, 11, e60. <https://doi.org/10.1017/gmh.2024.53>
- Azhar, S., Ahmad, I., Guzman Herrera, M. M., Tariq, N., & Lerner, R. (2025). "We are raising our voices": Coping strategies used by khwaja sira in Swat, Pakistan. *International Journal of Psychology*. Advance online publication. <https://doi.org/10.1002/ijop.70026>
- Bariola, E., Lyons, A., Leonard, W., Pitts, M., Badcock, P., & Couch, M. (2015). Demographic and psychosocial factors associated with psychological distress and resilience among transgender individuals. *American Journal of Public Health*, 105(10), 2108–2116. <https://doi.org/10.2105/AJPH.2015.302763>
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943–951. <https://doi.org/10.2105/AJPH.2013.301241>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76–82. <https://doi.org/10.1002/da.10113>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730. <https://doi.org/10.1037/a0016441>
- Hayes, A. F. (2013, August). *Introduction to mediation, moderation, and conditional process analysis*.
- Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, 43(5), 460–467. <https://doi.org/10.1037/a0029597>
- Henry, J. D., & Crawford, J. R. (2005). The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 44(2), 227–239. <https://doi.org/10.1348/014466505X29657>
- Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd ed.). Psychology Foundation of Australia.
- Mahesar, R. A., Anjum, R., & Shoib, S. (2025). Mental health of sexual variant people in Pakistan. *Sexuality Research and Social Policy*. Advance online publication. <https://doi.org/10.1007/s13178-025-01190-9>

- Meyer, I. H. (2013). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Nemoto, T., Bödeker, B., & Iwamoto, M. (2011). Social support, exposure to violence and transphobia, and correlates of depression among male-to-female transgender women with a history of sex work. *American Journal of Public Health*, 101(10), 1980–1988. <https://doi.org/10.2105/AJPH.2010.197285>
- Parker, R., & Aggleton, P. (2003). HIV and AIDS-related stigma and discrimination: A conceptual framework and implications for action. *Social Science & Medicine*, 57(1), 13–24. [https://doi.org/10.1016/S0277-9536\(02\)00304-0](https://doi.org/10.1016/S0277-9536(02)00304-0)
- Reisner, S. L., Hughto, J. M. W., Dunham, E. E., Heflin, K. J., Bejenyi, J. B. G., Coffey-Esquivel, J., & Cahill, S. (2015). Legal protections in public accommodations settings: A critical public health issue for transgender and gender-nonconforming people. *Milbank Quarterly*, 93(3), 484–515. <https://doi.org/10.1111/1468-0009.12127>
- Scandurra, C., Amodeo, A. L., Valerio, P., Bochicchio, V., & Frost, D. M. (2018). Internalized transphobia, resilience, and mental health: Applying the psychological mediation framework to Italian transgender individuals. *International Journal of Environmental Research and Public Health*, 15(3), 508. <https://doi.org/10.3390/ijerph15030508>
- Singh, A. A., Hays, D. G., & Watson, L. S. (2011). Strategies in the face of adversity: Resilience strategies of transgender individuals. *Journal of Counseling & Development*, 89(1), 20–27. <https://doi.org/10.1002/j.1556-6678.2011.tb00057.x>
- Testa, R. J., Habarth, J., Peta, J., Balsam, K., & Bockting, W. (2015). Development of the gender minority stress and resilience measure. *Psychology of Sexual Orientation and Gender Diversity*, 2(1), 65–77. <https://doi.org/10.1037/sgd0000081>
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socio-economic status, stress and discrimination. *Journal of Health & Psychology*, 2(3), 335–351. <https://doi.org/10.1177/135910539700200305>