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THE INTERPLAY BETWEEN CAREGIVER BURDEN AND PSYCHOLOGICAL DISTRESS: THE MEDIATING ROLE OF FAMILY CONFLICT AMONG CAREGIVERS OF INDIVIDUALS WITH PSYCHOSIS

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Abstract

OBJECTIVE

To examine whether caregiver burden is linked to psychological distress in caregivers of people with psychosis in Pakistan, and whether family-conflict measured through conflict-management styles mediates this relationship.

STUDY DESIGN

Correlational study.

PLACE AND DURATION OF STUDY

The data was gathered in the six-month period in psychiatric outpatient wards and rehabilitation centers in Faisalabad.

METHOD

There was a purposive sample of 120 family caregivers of clinically diagnosed psychosis patients. Zarit burden Interview (ZBI), Kessler psychological distress scale (K10) and Conflict management style assessment scale were used. Data were then analyzed in SPSS-27 using Pearson correlations, multiple regression, and mediation analysis through the PROCESS macro.

RESULTS

Caregiver burden showed strong positive relationships with psychological distress (r =.62, p=. 01) and was also a strong predictor of distress in regression analyses (b=.62, p=. 001). Burden made a negative prediction of collaborating style (b= -.19, p=.034), but other conflict styles did not do so. Psychological distress was also greatly predicted by conflict-management styles (b= -.30, p= -.001). Mediation analysis showed that conflict styles were not significantly mediate the burden-distress relationship (indirect effect B=0.02, 95% CI= -0.02, 0.07). Women caregivers claimed to have more depressive symptoms, whereas men caregivers used collaborating and competing styles frequently.

CONCLUSION

Caregiver burden is a major predictor of psychological stress among the caregivers of the psychotic patients in Pakistan. Despite the linkage of conflict-management styles to distress, it does not mediate the burden-distress relationship. This highlights the need of caregiver strain-specific interventions.

INTRODUCTION

Psychotic disorders including schizophrenia and schizoaffective disorder are among the most severe and disabling psychiatric illnesses and are characterized by hallucinations, delusions, disorganized behavior, and impaired social and occupational functioning (Awad & Voruganti, 2008; Sartorius et al., 2005). These conditions disrupt not only the lives of affected individuals but also profoundly affect their families, particularly in societies where long term care is largely provided at home. Over recent decades global mental health care has shifted from institutional treatment to community based models, transferring the primary responsibility for daily care, supervision, and emotional support to family members (Pearlin et al., 1990; Schulz & Sherwood, 2008; World Health Organization, 2019). While this transition promotes patient autonomy and social inclusion, it has simultaneously increased the physical, emotional, and social demands placed on family caregivers.

Caregiver burden is a central concept in caregiving research and refers to the multidimensional strain experienced by individuals who provide long term care to a relative with chronic illness (Zarit, Todd, & Zarit, 1986). It includes both objective components such as financial costs, time demands, employment disruption, and household responsibilities, and subjective components such as worry, guilt, frustration, helplessness, and emotional exhaustion (Pearlin et al., 1990; Vitaliano et al., 2003). In psychosis, caregiver burden is often intensified by symptom unpredictability, relapse risk, stigma, and the need for continuous monitoring and crisis management (Awad & Voruganti, 2008; Magliano et al., 2005). Studies across cultures show that caregivers of individuals with psychosis experience higher levels of burden than caregivers of people with many other chronic medical conditions (Flyckt et al., 2013; Kate et al., 2013).

One of the most serious consequences of prolonged caregiver burden is psychological distress. Psychological distress refers to a broad range of emotional and cognitive symptoms including depression, anxiety, irritability, emotional exhaustion, somatic complaints, and sleep disturbance (Ridner, 2004; Donovan et al., 2014). Caregivers of people with severe mental illness are at particularly high risk, with prevalence estimates of clinically significant distress ranging from approximately 30 to 50 percent across studies (Chen et al., 2016; Hegde et al., 2019; Lerner et al., 2018). A strong body of evidence shows that higher caregiver burden is associated with greater psychological distress, including anxiety and depressive symptoms, as caregivers emotional and physical coping resources become depleted over time (Pinquart & Sorensen, 2003; Vitaliano et al., 2003; Unsar et al., 2011). This burden distress relationship has important implications not only for caregiver wellbeing but also for patient outcomes, since distressed caregivers may struggle to provide stable and effective care (Schulz & Sherwood, 2008; Ran et al., 2016).

Caregiving does not occur in isolation but within the family system where interpersonal relationships, communication patterns, and shared responsibilities shape how stress is experienced and managed. Family conflict including disagreements over caregiving roles, finances, treatment decisions, and emotional responses to illness is a common and powerful intrafamilial stressor in families caring for individuals with psychosis (Hooley, 2007; Cummings & Davies, 2010). High levels of criticism, hostility, and unresolved conflict, often described as expressed emotion, have been shown to predict both caregiver distress and patient relapse in psychosis (Butzlaff & Hooley, 1998; Hooley, 2007). When family relationships are conflictual caregivers may feel unsupported, blamed, or isolated, which intensifies emotional exhaustion and strengthens the impact of burden on psychological distress (Zhang & Wiebe, 2022).

The Stress Process Model (Pearlin et al., 1990) provides a theoretical framework for understanding these dynamics by proposing that caregiving stressors lead to psychological outcomes through intervening processes such as family strain and interpersonal conflict. Similarly Coping Theory (Lazarus & Folkman, 1984) suggests that emotional outcomes depend not only on the presence of stressors but also on how they are appraised and managed within the social environment. In this framework family conflict can be conceptualized as a mediating mechanism through which caregiver burden translates into psychological distress.

Not all family conflict has the same psychological impact. According to Conflict Management Theory and the Thomas Kilmann model individuals differ in how they manage disagreements through styles such as avoiding, accommodating, competing, compromising, and collaborating (Thomas & Kilmann, 1974). These styles reflect different balances between assertiveness and cooperativeness and can either increase or reduce emotional strain. Destructive styles such as avoiding and competing tend to increase resentment, reduce perceived support, and escalate interpersonal tension, whereas constructive styles such as collaborating and compromising promote communication, shared problem solving, and emotional validation (Rahim, 2002; Sillars et al., 2010). In families coping with psychosis constructive conflict management may buffer the negative psychological effects of caregiver burden, while destructive approaches may amplify distress (Hooley, 2007; Rhodes & Lansky, 2013).

These processes are particularly important in Pakistan where mental health services are limited, stigma remains high, and families serve as the primary providers of care. The mental health treatment gap is substantial, and community based support for individuals with psychosis and their caregivers is scarce (Mirza & Jenkins, 2004; Aamir et al., 2023). As a result caregiving often becomes a long term and intensive responsibility embedded within strong cultural expectations of family duty, frequently carried by women (Knight & Sayegh, 2010). Despite the growing international literature on caregiver burden and psychological distress, relatively little research in Pakistan and similar collectivist societies has examined how family conflict processes mediate this relationship, particularly through specific conflict management styles.

The present study therefore aims to examine the relationship between caregiver burden and psychological distress among caregivers of individuals with psychosis in Pakistan and to investigate the mediating role of family conflict and conflict management styles. By clarifying how family dynamics shape the translation of caregiving burden into psychological distress, this research seeks to inform culturally appropriate family centered interventions that support caregiver wellbeing and improve the psychosocial environment of individuals living with psychosis.

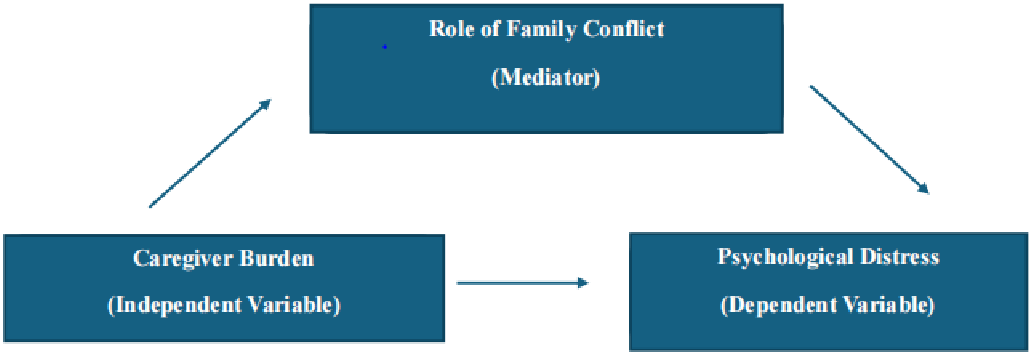
Objectives of the Study

1. To assess the level of psychological distress among caregivers of individuals with psychosis.
2. To examine the relationship between caregiver burden and psychological distress among individuals with psychosis.
3. To investigate the mediating role of family conflict in the relationship between caregiver burden and psychological distress.
4. To explore the influence of demographic variables (e.g., age, gender, socioeconomic status, education, and relationship with the patient) on caregiver burden, psychological distress, and family conflict.

Hypotheses of the Study

1. There will be a significant relationship between caregiver burden, family conflict and psychological distress among individuals with psychosis.
2. Caregiver burden will be a significant predictor of psychological distress among individuals with psychosis.
3. Caregiver burden will be a significant predictor of family conflicts among individuals with psychosis.
4. Family conflicts will be a significant predictor of psychological distress among individuals with psychosis.
5. Family conflict will significantly mediates the relationship between caregiver burden and psychological distress.
6. There will be significant demographics (such as gender etc.) based difference in caregiver burden, family conflict and psychological distress among individuals with psychosis.

Conceptual Framework



METHOD

Participants

The population consisted of 120 family caregivers of people that had been clinically diagnosed with psychosis. The sample was chosen through purposive sampling of psychiatric wards and outpatient departments of the Allied Hospital II, Faisalabad. All the caregivers were between the ages of 18 and 35 years and had at least four week of care. Primary caregivers who had a direct role in the daily management of the patient were involved only.

Inclusion Criteria

- Primary caregivers of individuals diagnosed with psychosis according to DSM-5-TR.
- Caregivers aged 18–35 years.
- Caregivers providing care for at least four week.

Exclusion Criteria

- Professional or paid caregivers.
- Caregivers younger than 18 years.
- Caregivers of individuals diagnosed with neurocognitive, personality, or neurotic disorders.

Instruments

Demographic Information Form

To gather information about caregivers, a demographic sheet has been used to gather data on age, gender, education level, relationship to the patient, length of care giving, and the pertinent medical and psychiatric history of the care recipient.

Zarit Burden Interview (ZBI)

The Zarit Interview was used to measure caregiver burden through Zarit Burden Interview (ZBI) which was initially developed by Zarit, Reever and Bach-Peterson [18]. The ZBI has 22 items that are measured using a five-point Likert scale, with 0 (Never) to 4 (Nearly Always). An increase in the scores means that the caregiver is more burdened. A version of this test that had proved reliability (= 0.89) was used.

Kessler Psychological Distress Scale (K10)

Kessler Psychological Distress Scale-K10 was used to measure psychological distress, which was initially created by Kessler et al. [19]. The tool will include ten questions that will be rated on a five-point Likert scale 1 (None of the time) to 5 (All of the time) with the aggregate score of higher items indicating more distress. An adapted version was used to be culturally relevant.

Conflict Management Style Assessment (CMSA)

The Conflict Management Style Assessment (CMSA) by Putnam and Wilson was used to evaluate family conflict [20]. The CMSA has fifteen items that are grouped into five styles of conflict-resolution, namely: Collaborating, Competing, Avoiding, Accommodating, and Compromising that consist of three items rated on a four-point Likert scale. Subscale internal consistency coefficients have been reported to be between $\alpha = 0.65$ to 0.82.

Procedure

After obtaining formal ethical approval of Ethical Review Committee (ERC), the identification of eligible caregivers was conducted by clinicians at Allied Hospital II. The aim of the research, the confidentiality protection, and voluntary nature of participation were explained, and informed written consent was later obtained. The participants had to complete a demographic questionnaire, Zarit Burden Interview (ZBI), K10 psychological distress scale and CMSA questionnaires, the researcher had to clarify the participants where needed and insured their privacy. The collected data was done within a period of six weeks and all the filled forms were safely stored. The statistical analysis was done with the SPSS-27, using descriptive statistics, Pearson correlation coefficients, multiple regression models, and a mediation analysis using the PROCESS macro, where $p < 0.05$ was taken as the significance level.

RESULTS

The empirical results are logically organized following the hypotheses formulated beforehand and supported by the set of statistical methods, including correlation, regression, and mediation analyses. All hypotheses are discussed in the context of available literature and applicable theoretical frameworks thus, making the discovered results part of the overall body of caregiver studies. The chapter ends with a focus on the salient insights that were derived based on the data and how they agree with the principal goals of the study.

Table 1: Descriptive Statistics of the Participants (N= 120)

Variables	Categories		M	SD
Age	Minimum	16	38.33	13.83
	Maximum	70		
			F	%
Gender	Male		40	33.3
	Female		80	66.7
No of siblings	Only child		0	0
	2 to 4		40	33.3
	5 and above		80	66.7
Birth order	Only child/first born		24	20.0
	2 to 4		64	53.3
	5 and above		32	26.7
Marital status	Single		31	25.8
	Married		66	55.0
	Divorced		8	6.7
	Widowed		14	11.7
	Separated		1	0.8
Family status	Nuclear		75	62.5
	Joint		45	37.5
	Cubical		0	0

Educational level	Uneducated	43	35.8
	Below matric	32	26.7
	Matric to inter	25	20.8
	14 years to 16 years	19	15.8
	Above to 16 years	1	0.8
Occupation	Unemployed	25	20.8
	Labour	23	19.2
	Employed	26	21.7
	Business	4	3.3
	Never tried	42	35.0
Residential area	Urban	62	51.7
	Rural	58	48.3
Relation with patient	Primary caregivers	120	100
	Secondary caregivers	0	0
Duration of caregiving	0 to 6 months	26	21.7
	Above 6 months to 2 years	46	38.3
	Above 2 years to 5 years	26	21.7
	Above than 5 years	22	18.3
Any medical and psychological history	Yes	27	22.5
	No	93	77.5
Socio-economic status	Higher	0	0
	Middle	33	27.5
	Lower	87	72.5
Hospital/clinic name	Public	117	97.5
	Private	3	2.5

Note: M= Mean, SD= standard deviation, F= frequency, %= percentage

Table 1 showed the demographic characteristics of the participants (N = 120). The participants ranged in age from 16 to 70 years (M = 38.33, SD = 13.83), reflecting a wide distribution across early to late adulthood. The majority were female (66.7%), while males were 33.3%. Most participants had 5 or more siblings (66.7%), and more than half were second to fourth born (53.3%). Regarding marital status, most were married (55.0%), followed by single (25.8%), and the percentage of divorced, widowed and separated are (6.7%), (11.7%) and (0.8%) respectively. A majority lived in nuclear families (62.5%) as compared to joint family (37.5%). In terms of education, a considerable proportion was uneducated (35.8%), whereas smaller groups had matric to intermediate (20.8%) or higher education (16.6%). Occupationally, 21.7% were employed, while 35% reported never having tried any occupation. Slightly more than half lived in urban areas (51.7%). All participants were primary caregivers (100%), with most involved in caregiving for more than one year (59.2%). The majority reported no medical or psychological history (77.5%). Socioeconomic status was largely lower class (72.5%), and almost all participants were attending public hospitals or clinics (97.5%).

Table 2: Descriptive analysis and Alpha Reliabilities for Study Variables

Scales	*K*	*M*	*SD*	Min	Max	*A*	Range		
							Potential	Actual	Skewness
Zarit Caregiver Burden Assessment Scale	120	58.41	14.39	15	88	0.88		73	-0.23
Kessler Psychological Distress Scale	120	36.41	8.66	12	50	0.91		38	-0.75
Kessler Depression	120	21.54	5.32	7	30	0.85		23	-0.63
Kessler psychological Anxiety	120	14.87	3.82	4	20	0.84		16	-0.81
Factor Nervous	120	7.48	2.11	2	10	0.77		8	-0.73
Factor Agitation	120	7.39	2.16	2	10	0.88		8	-0.74
Factor Fatigue	120	7.40	1.75	2	10	0.37		8	-0.52
Factor Negative Affect	120	14.13	3.98	4	20	0.85		16	-0.57
Conflict Management Style Assessment Scale	120	39.54	8.18	23	60	0.84		37	-0.11
Collaborating Style	120	7.45	2.18	3	12	0.61		9	0.36
Competing Style	120	6.61	1.89	3	12	0.43		9	0.77
Avoiding Style	120	8.58	2.20	4	12	0.55		8	-0.15
Accomodating Style	120	9.05	2.49	4	12	0.72		8	-0.50
Compromising Style	120	7.84	1.86	3	12	0.36		9	0.05

Note: k= numbers, M= mean, SD= standard deviation, Min= minimum, Max= maximum, α= alpha

Table 2 showed the descriptive statistics and reliability analyses for the study variables. The Zarit Caregiver Burden Scale showed moderate to high burden (M = 58.41, SD = 14.39) with strong internal consistency (α = .88). Psychological distress, measured with the Kessler scale, also indicated elevated stress (M = 36.41, SD = 8.66, α = .91). Depression (M =

21.54, SD = 5.32, $\alpha = .85$) and anxiety (M = 14.87, SD = 3.82, $\alpha = .84$) levels were moderately high. Among negative emotional states, nervousness (M = 7.48, SD = 2.11), agitation (M = 7.39, SD= 2.16), fatigue (M = 7.40, SD = 1.75), and negative affect (M = 14.13, SD = 3.98) showed consistent presence.

Most reliability values were acceptable. Conflict management styles overall showed high reliability ($\alpha = .84$), with accommodating (M = 9.05, SD = 2.49) and avoiding (M = 8.58, SD = 2.20) styles being the most frequently used, while competing style was least used (M = 6.61, SD = 1.89).

Table 3: Correlations Between Zarit Caregiver Burden, Psychological Distress Scale and family conflict (N = 120)

Variable	1	2	3	4	5	6	7	8	9
Zarit Total									
Kessler Total	0.62**								
Kessler Depression	0.58**	0.96**							
Kessler Anxiety	0.61**	0.92**	0.78**						
Collaborating Style	-0.19*	-0.29**	-0.35**	-0.18*					
Competing Style	-0.09	-0.28**	-0.30**	-0.21*	0.59**				
Avoiding Style	0.03	-0.08	-0.17	0.04	0.40**	0.25**			
Accommodating Style	-0.15	-0.20*	-0.24**	-0.12	0.51**	0.44**	0.53**		
Compromising Style	-0.17	-0.32**	-0.34**	-0.24**	0.60**	0.38**	0.51**	0.57**	

Table 3 showed strong positive associations between caregiver burden and psychological distress ($r = .62$, $p < .01$), as well as with depression ($r = .58$, $p < .01$) and anxiety ($r = .61$, $p < .01$). This indicates that higher caregiver burden was linked with greater psychological distress, depressive symptoms, and anxiety.

Conflict management styles showed significant associations with psychological outcomes.

Collaborating style correlated negatively with burden and distress ($r = -.19$ to $-.35$, $p < .05$), suggesting its protective role. Competing style also showed negative but weaker correlations. While accommodating and compromising styles demonstrated mixed results, with some negative associations with burden/distress but positive correlations with depression and anxiety dimensions.

Table 4: Regression of Caregiver burden (N = 120)

Predictor	B	SE	β	t	P	95.0% confidence interval for B	
						Lower Bound	Upper Bound
Constant	14.35	2.59		5.53	<0.001	9.21	19.48
Zarit Total	0.37	0.04	0.62	8.76	<0.001	0.29	0.46

Note: SE= standard error, β= Beta, p= significance level, Dependent variable= KTotal, r^2= 0.39

Table 4 showed that caregiver burden turned out to be a strong predictor of psychological distress in individuals with psychosis (β = .62, t = 8.76, p < .001). The positive coefficient (B = 0.37) means that when caregiver burden increased, psychological distress also increase. In other words, every one-point rise in burden was linked with about a 0.37 point rise in distress. The model explained 39% of the variance (R^2 = 0.39), which is quite a large effect in psychology research. These results make it clear that the more strain caregivers experienced, the more psychological difficulties they faced.

Table 5: Regression of Caregiver burden (N = 120)

Predictor	B	SE	β	T	P	95.0% confidence interval for B	
						LB	UB
1. Constant	9.16	0.82		11.10	<0.001	7.53	10.80
Collaborating style	-0.02	0.01	-0.19	-2.13	0.034	-0.05	-0.002
2. Constant	7.37	0.72		10.15	<0.001	5.93	8.80
Competing style	-0.01	0.01	-0.09	-1.07	0.28	-0.03	0.01
3. Constant	8.28	0.84		9.77	<0.001	6.60	9.96
Avoiding style	0.005	0.01	0.03	0.36	0.71	-0.02	0.03
4. Constant	10.60	0.94		11.17	<0.001	8.72	12.48
Accommodating style	-0.02	0.01	-0.15	-1.68	0.095	-0.05	0.005
5. Constant	9.13	0.70		12.92	<0.001	7.73	10.53
Compromising style	-0.02	0.01	-0.17	-1.88	0.06	-0.04	0.001

Note: SE= standard error, β= Beta, p= significance level, Independent variable= Zarit total, $r^2$1= 0.03, $r^2$2= 0.01, $r^2$3= 0.001, $r^2$4= 0.02, $r^2$5= 0.02

Table 5 represented the results of regression analysis to see how caregiver burden predicted different conflict management styles. The findings showed that caregiver burden significantly predicted the collaborating style (β = -0.19, t = -2.13, p = .034). The negative value (B = -0.02) suggests that as caregiver burden increased, the use of collaborating strategies decrease. The model explained about 3% of the variance (R^2 = 0.03), which is small but still meaningful.

For the competing style, caregiver burden did not play a significant role (β = -0.09, t = -1.07, p = .28). The same was true for the avoiding style (β = 0.03, t = 0.36, p = .71), which showed no relationship.

The accommodating style showed a negative trend (β = -0.15, t = -1.68, p = .095), suggesting that higher burden might reduce accommodating behavior, but the result was not statistically significant. Similarly, the compromising style also showed a marginal effect (β = -0.17, t = - 1.88, p = .06), which came close to significance but didn't quite meet the cutoff.

Overall, the results suggest that caregiver burden mainly reduced the use of collaborative strategies, while the effects on other conflict styles were weaker or non-significant. This points to the idea that when caregivers are under greater strain, they may find it harder to use constructive conflict resolution approaches.

Table 6: Regression of Conflict Management Style Assessment (N = 120)

Predictor	**B**	**SE**	**β**	**t**	**P**	**95.0% confidence interval for B**	
						LB	**UB**
Constant	49.12	3.75		13.09	<0.001	41.69	56.54
CMSA	-0.32	0.09	-0.30	-3.45	<0.001	-0.50	-0.13

Note: SE= standard error, β= Beta, p= significance level, Dependent Variable= KTotal, r^2= 0.09

Table 6 showed that conflict management styles significantly predicted caregiver burden (β = -.30, t = -3.45, p < .001). The negative coefficient (B = -0.32) indicates that higher use of constructive conflict management skills was linked to lower burden. Caregiver burden decreased by approximately 0.32 points. The model explained 9% of the variance (R^2 = 0.09) in caregiver burden, which is considered meaningful in psychological contexts. This suggests that caregivers who engaged in more effective conflict resolution strategies experienced reduced psychological strain. These findings highlight the protective role of conflict management in alleviating stress related to caregiving responsibilities.

Table 7: Mediation of Family Conflict in the Relationship between Caregiver Burden and Psychological Distress (N = 120)

Effect	**Estimate**	**SE**	**95% CI**		**t**	**p**	**% Mediation**
			Lower	Upper			
Indirect (Total)	0.02	0.02	–0.02	0.06	–	–	3.9%
Direct	0.35	0.04	0.26	0.43	8.24	<.001	96.1%
Total	0.38	0.04	0.29	0.46	8.76	<.001	100%

The mediation analysis revealed that caregiver burden significantly predicted psychological distress (*B* = 0.38, *t* = 8.76, *p* < .001). After accounting for the mediators, the direct effect remained significant (*B* = 0.35, *t* = 8.24, *p* < .001). The total indirect effect via family conflict styles was small (*B* = 0.02, SE = 0.02, 95% CI [−0.02, 0.07]) and contributing only 3.9% of the overall effect. Because the confidence interval included zero. In conclusion, caregiver burden has a strong direct effect on psychological distress, while family conflict styles do not significantly mediate this relationship.

Table 8: Path Estimates for the Mediation Model of Family Conflict between Caregiver Burden and Psychological Distress (N = 120)

Path	Estimate	SE	95% CI (LL, UL)	t	p
Caregiver burden → Collaborating	−0.029	0.014	(−0.057, −0.002)	−2.14	.035
Caregiver burden → Competing	−0.013	0.012	(−0.037, 0.011)	−1.07	.287
Caregiver burden → Avoiding	0.005	0.014	(−0.023, 0.033)	0.36	.718
Caregiver burden → Accommodating	−0.027	0.016	(−0.058, 0.005)	−1.68	.095
Caregiver burden → Compromising	−0.022	0.012	(−0.045, 0.001)	−1.89	.062
Collaborating → Distress	0.016	0.398	(−0.772, 0.805)	0.04	.967
Competing → Distress	−0.852	0.398	(−1.640, −0.064)	−2.14	.034
Avoiding → Distress	−0.000	0.340	(−0.674, 0.674)	−0.00	.999
Accommodating → Distress	0.279	0.327	(−0.369, 0.926)	0.85	.396
Compromising → Distress	−0.913	0.451	(−1.805, −0.020)	−2.03	.045
Caregiver burden → Distress (direct)	0.354	0.043	(0.269, 0.440)	8.24	<.001

A parallel mediation model was estimated to test whether conflict management styles mediated the relationship between caregiver burden and psychological distress. The total effect of caregiver burden on distress was significant, *B* = 0.38, 95% CI [0.29, 0.46], *p* < .001, showing that higher caregiver burden predicted greater distress. After including all mediators, the direct effect remained significant, *B* = 0.35, 95% CI [0.27, 0.44], *p* < .001. The total indirect effect via the five conflict styles was small and nonsignificant, *B* = 0.02, 95% CI [−0.02, 0.07], accounting for only 3.9% of the total effect. None of the specific indirect paths were significant. Although competing (*B* = −0.85, *p* = .034) and compromising (*B* = −0.91, *p* = .045) styles significantly predicted distress, caregiver burden did not strongly predict these styles, and thus no significant mediation emerged. In summary, the results indicate that caregiver burden exerts a direct effect on psychological distress, with little evidence that conflict management styles mediate this relationship.

Table 9: T-test Table (N = 120)

Variables	Male (N=40)		Female (N=80)			95% of CI		
	M	SD	M	SD	T	LL	UL	Cohen's d
Kessler Total	34.62	9.00	37.31	8.39	-1.61	-5.98	0.61	-0.31
Kessler Depression	20.10	5.56	22.26	5.08	-2.12	-4.17	-0.14	-0.41
Kessler anxiety	14.52	3.99	15.05	3.74	-0.70	-1.99	0.94	-0.13
Zarit Total	58.17	13.72	58.53	14.81	-0.12	-5.90	5.18	-0.02
Collaborating Style	8.22	2.33	7.06	2.01	2.82	0.34	1.97	0.54
Competing style	7.30	1.98	6.27	1.76	2.87	0.31	1.73	0.55
Avoiding style	8.55	1.73	8.60	2.41	-0.11	-0.89	0.79	-0.02
Accommodating Style	8.97	2.30	9.08	2.60	-0.23	-1.07	0.84	-0.04
Compromising Style	8.00	2.01	7.76	1.79	0.65	-0.47	0.95	0.12

Note: M= mean, SD= standard deviation, LL= lower level, UL= upper level

Table 9 indicates the independent samples t-test compared male (n = 40) and female (n = 80) caregivers on study variables. No significant gender differences were observed for overall burden (Zarit scores) or total psychological distress. However, females scored higher on depression (M = 22.26, SD = 5.08) compared to males (M = 20.10, SD = 5.56; t = -2.12, p < .05). In conflict management, males were more likely to use collaborating (M = 8.22, SD = 2.33) and competing styles (M = 7.30, SD = 1.98) than females, with both differences reaching significance (p < .01). No significant gender differences emerged for avoiding, accommodating, or compromising styles.

DISCUSSION

The present study examined the relationship between caregiver burden, family conflict, and psychological distress among caregivers of individuals with psychosis in Pakistan. The findings provide important insight into how caregiving strain translates into emotional suffering within a low resource and collectivist sociocultural context.

The first hypothesis proposed that caregiver burden, family conflict, and psychological distress would be significantly related. This hypothesis was supported, as a strong positive correlation was found between caregiver burden and psychological distress (r = .62, p < .01), indicating that higher caregiving demands were associated with greater emotional strain, anxiety, and depressive symptoms. This result is consistent with previous literature describing caregiving as an emotionally exhausting and psychologically demanding role that exposes individuals to chronic stress, anxiety, and depressive mood (Pinquart & Sorensen, 2003; Vitaliano et al., 2003). Similar findings were reported by Awad and Voruganti (2008), who observed that caregivers of individuals with schizophrenia experience high emotional burden due to symptom unpredictability, social stigma, and financial pressures. These findings are also consistent with the Stress Process

Model, which proposes that sustained caregiving duties act as chronic stressors that gradually erode psychological wellbeing (Pearlin et al., 1990).

The strength of this association in the present Pakistani sample appears stronger than what is often reported in Western contexts. In high income countries, structured support systems, respite care, and professional mental health services buffer caregivers from severe distress (Knight & Sayegh, 2010; Flyckt et al., 2013). In contrast, caregiving in Pakistan is embedded in collectivist family values where caregiving is seen as a moral obligation rather than a shared or professionally supported responsibility. Limited psychiatric services, stigma, and lack of guidance place caregivers under intense emotional strain, which explains the high levels of distress observed in this study.

The second hypothesis stated that caregiver burden would significantly predict psychological distress. This was strongly supported. Regression analysis showed that caregiver burden explained 39 percent of the variance in psychological distress ($\beta = .62$, $p = .001$), indicating that increases in caregiving responsibilities significantly raise anxiety, depression, and emotional exhaustion. These results are consistent with Schulz and Sherwood (2008) and Awad and Voruganti (2008), who reported that caregiver burden is one of the strongest predictors of mental health problems in psychiatric caregivers. This supports the Stress Process Model, which suggests that prolonged exposure to caregiving demands leads to emotional depletion, role overload, and psychological strain.

Although some studies from high income countries have reported that caregivers with higher involvement may show lower distress due to better institutional support and psychoeducation (Schulz & Sherwood, 2008), such protective mechanisms are largely absent in Pakistan. Therefore, caregiver burden in this context translates more directly into psychological suffering.

The third hypothesis proposed that caregiver burden would predict family conflict. The findings showed that caregiver burden was significantly negatively associated with the use of the collaborating conflict style ($\beta = -.19$, $p = .034$), meaning that caregivers with higher burden were less likely to engage in cooperative communication. Emotional exhaustion appears to impair caregivers ability to resolve disagreements constructively, leading to communication breakdown and emotional distance. This finding supports Family Systems Theory, which states that stress in one family member disrupts the emotional balance of the entire family (Bowen, 1978). Similar results have been reported by Zhang and Wiebe (2022), who found that caregiver stress reduces constructive communication and increases avoidance and blame.

In Western families, conflict is often managed more openly with the help of counseling and support services, which may reduce tension even under stress (Sillars et al., 2010). In Pakistani families, however, emotional expression is often suppressed due to stigma and cultural expectations, allowing resentment to build up and leading even moderate caregiving stress to trigger conflict.

The fourth hypothesis proposed that family conflict would predict psychological distress. This hypothesis was supported. Conflict management styles significantly predicted distress ($\beta = -.30$, $p < .001$), with collaborative and compromising styles reducing distress and avoidant and competitive styles increasing distress. These findings are consistent with Emotional Security Theory, which suggests that chronic family tension undermines emotional stability and increases anxiety and depression (Cummings & Davies, 2010). In Pakistan, unresolved family conflict may place a disproportionate burden on women, who are expected to manage both emotional care and household responsibilities (Knight & Sayegh, 2010).

The fifth hypothesis tested whether family conflict mediated the relationship between caregiver burden and psychological distress. This hypothesis was not supported. Mediation analysis showed no significant indirect effect ($B = 0.02$, 95 percent confidence interval -0.02 to 0.07), indicating that family conflict did not explain how caregiver burden translated into distress. Although individual conflict styles were related to distress, they did not account for the burden distress relationship. This suggests that caregiver burden directly produces emotional burnout rather than operating through family conflict. This pattern is consistent with Papastavrou et al., (2012), who found that caregiving strain primarily affects mental health through emotional overload rather than interpersonal pathways. In Pakistan, caregivers often suppress conflict to preserve family harmony, which leads distress to be internalized rather than expressed through overt disagreement.

The final hypothesis examined demographic differences. Although overall caregiver burden and psychological distress did not differ significantly by gender, female caregivers reported higher depressive symptoms, while male caregivers were more likely to use collaborating and competing conflict styles. These results align with Schulz and Sherwood (2008) and Knight and Sayegh (2010), who found that women experience greater emotional strain due to cultural caregiving expectations, while men tend to use more assertive problem solving approaches. In Western contexts gender differences are often smaller because caregiving roles are more equally shared and supported (Flyckt et al., 2013), whereas in Pakistan traditional gender roles increase emotional strain for women.

In summary, the findings show that caregiver burden is a strong and direct predictor of psychological distress among caregivers of individuals with psychosis in Pakistan. While family conflict and conflict management styles influence emotional wellbeing, they do not mediate the burden distress relationship. These results highlight the need for interventions that directly reduce caregiver burden through psychoeducation, practical assistance, and accessible mental health services, alongside efforts to promote healthier family communication and support.

Conclusion

This study demonstrates that caregiver burden is a strong and direct predictor of psychological distress among caregivers of individuals with psychosis in Pakistan. Higher caregiving demands were associated with increased anxiety, depressive symptoms, and emotional exhaustion. Although family conflict and conflict-management styles were significantly related to psychological distress, they did not mediate the relationship between caregiver burden and distress. This indicates that caregiver burden primarily affects mental health through direct emotional overload rather than through interpersonal conflict pathways.

Nevertheless, constructive conflict-management styles, particularly collaboration and compromise, were associated with lower distress, whereas avoidant and competitive styles were linked to higher distress. This suggests that although family conflict does not explain how burden becomes distress, family communication still plays a meaningful role in shaping caregivers' emotional wellbeing. In the collectivist and resource-limited context of Pakistan, caregiving stress appears to be internalized rather than expressed through overt conflict, which explains the absence of a mediation effect.

Limitations

This study has several limitations. First, its cross-sectional design does not allow causal conclusions. Second, reliance on self-report measures may have introduced social desirability bias, especially in a culture where family conflict and emotional distress are stigmatized. Third, participants were recruited from urban psychiatric centers, limiting generalizability to rural or non-clinical populations. Finally, cultural factors such as collectivism and religious coping were not directly measured.

Implications

The findings support stress-based models of caregiving by confirming that caregiver burden directly predicts psychological distress. Clinically, the results highlight the need for interventions that reduce caregiving burden through psychoeducation, emotional support, and practical assistance. Although family conflict did not mediate the burden–distress relationship, constructive communication and conflict management remain important for improving caregiver wellbeing.

In Pakistan, where caregiving occurs within close family networks and limited formal services, family-based psychosocial interventions that promote communication, shared responsibility, and emotional expression are particularly relevant.

Recommendations

Mental health services should include caregiver support programs focusing on stress management, psychoeducation, and collaborative problem solving. Family counseling should be integrated into psychosis care to address communication difficulties and role conflicts. Multidisciplinary collaboration among psychologists, psychiatrists, and social workers is needed to provide comprehensive caregiver support.

Future research should use longitudinal designs to clarify causal relationships and incorporate qualitative approaches to explore cultural meanings of caregiving and conflict. Including religious and community-based coping variables may further explain protective factors among Pakistani caregivers.

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