

Mothers' Parenting Stress and Internalizing and Externalizing Behavioural Problems of Children

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The detrimental influence of mother's parenting stress was investigated as a risk factor for a range of child behavior issues including emotional and behavioral problems. A sample of 200 Pakistani mothers with at least one child between the ages of 6-12 years participated in the study. A cross-sectional survey was conducted, where mothers self-reported on both their parenting stress and their children's internalizing and externalizing problems. Parenting stress was assessed using Urdu version of the Parenting Stress Scale (Khalid & Fatima, 2010) and the Child Problem Checklist (Tariq & Hanif, 2007) was used to assess children's internalizing and externalizing behavioral problems. Results showed that maternal parenting stress significantly predicted both internalizing and externalizing behavior problems in children. Mothers' reported level of parental stress, as reflected in lower satisfaction with their role, was positively associated with both internalizing and externalizing behavior problems in their children. Additionally, it has been found that the type of school attendance (public or private) played a significant role in explaining parenting stress and its relation to behavior problems. Taken together, these findings highlight the importance of considering mothers' experiences in their parenting role when addressing child behavior problems.

Keywords: Mothers' parenting stress, behavior problems, children

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In Pakistan, children make up 50% of the population (Imran et al., 2021), and there are reported behavioral problems among school children aged 5 to 11 years (Syed et al., 2009). Child behavioral problems are generally categorized into two categories (Achenbach et al., 2016). *Internalizing* behavior refers to self-harming behaviors that affect a person's internal psychological state, including anxiety, depression, withdrawal, and somatic complaints (Kochanova et al., 2022; Rubin et al., 2009). *Externalizing* behavioral problems involve overt patterns of behavior directed at harming others. Internalizing problems are commonly seen as depression, anxiety, and social withdrawal (Matin et al., 2019). Externalizing problems have been linked to adverse outcomes such as education difficulties, delinquency, antisocial behaviors in adolescence, and challenges in forming social relationships (Kozlova et al., 2020). Both internalizing and externalizing behavioral patterns impact children's mental health (Arslan et al., 2021), as well as their academic performance, engagement, and health-related outcomes (Olivier et al., 2020).

Parental stress is a significant predictor of problematic behavioral patterns in Children. This stress is primarily caused by the challenges and responsibilities of parenting, particularly in response to daily hassles (Deater-Deckard et al., 2005). It is characterized by a lack of control over parenting practices (Chen et al., 2022), dissatisfaction with the parenting role, and strained relationship between parents and children (Kyriazos et al., 2021). Parental stressors can lead to psychological distress and feelings of guilt associated with parental dissatisfaction (Abidin, 1992). On the other hand, parenting also provides rewards, fulfilling emotional and psychological needs for parents (Schwartz & Gidron, 2002).

According to Bowlby's attachment theory (1978), the parent-child relationship has a significant impact on child's psychological development. Previous research in Western cultures (Kochanova et al., 2022) and Asian-Chinese culture (Mak et al., 2020) has shown that parental stress predicts child behavior problems. Cross-cultural studies have also supported the relationship between maternal parenting stress and child behavioral problems in Japanese (Katsurada et al., 2017), Italian (Spinelli et al., 2020), and Canadian samples (Tupper et al., 2020). Parental stress has been found to predict both internalizing and externalizing behavioral problems across different domains of parenting stress. Parental role satisfaction has been linked to child development outcomes such as social competence (Cho et al., 2023). Parental distress as a stressor has been associated with the prediction of child externalizing behavioral problems (Varshal & Slobodskaya, 2022). Mothers who report higher satisfaction and find parenting

rewarding tend to have children with fewer externalizing behavior problems (Bornstein et al., 2018). Parenting demands, particularly the sense of loss of control and feeling overwhelmed with parental responsibilities, have been found to predict child behavioral problems (Villarreal et al., 2022).

The childhood period of human development is crucial for growth and development and is influenced by various social, biological, physical, and emotional changes (Duprey et al., 2019; Orben et al., 2020). Children may face parental practices and social pressures that increase their risk of developing behavioral or emotional problems (Rothenberg et al., 2020). Studying child behavioral problems is important as they can significantly impact a child's social functioning in school and with peers, while also negatively affecting their cognitive, emotional, and social skills. Additionally, these problems can have negative consequences for society (Olivier et al., 2020). If behavior problems persist in childhood, they can have serious consequences in adolescence and adulthood, such as conduct problems, crime, and antisocial behaviors (Jung et al., 2017). Therefore, the present study focuses on examining behavioral problems of children specifically in Pakistan.

Recent literature has found that mother's parental stress has a stronger influence on child behavioral problems compared to father's parental stress (Ward & Lee, 2020). It is important to note that in Pakistani culture, mothers typically have the primary responsibility for raising and nurturing children as they often stay at home, while fathers are considered responsible for the family's financial needs and are mostly away from home during the day. As per cultural norms in Pakistan, mother serve as the primary caregivers, which can lead to higher levels of parental stress experienced by them (Mumtaz et al., 2022). In Pakistan, there have been limited studies examining the association between parental stress and child behavioral issues, indicting a research gap that the present study aims to address. A recent survey found that 25% of parents in Pakistan experience parental stress, which can influence their parenting practices, including displaying rude behavior towards their children, and subsequently have a negative impact on the child's mental health (Imran et al., 2021). Another study revealed that 15% of children are referred to psychiatrist in hospital due to behavioral problems (Mian, 2013). One study identified parental stress, specifically anxiety and depression, as a predictive factor for child behavioral problems (Malik & Irshad, 2012). However, this study did not specifically examine stress arising from the parental role itself. Another study found a significant positive relationship between parental stress and behavioral

problems in Pakistani children with ADHD (Anjum & Malik, 2010). In Pakistan, there have been studies investigating parenting stress in children with intellectual and physical disabilities (Nadeem et al., 2016; Sheikh et al., 2018).

This backdrop highlights the need to investigate whether stress associated with the parenting role predicts behavioral problems in typically developing children in Pakistan. The stress resulting from inevitable and demanding tasks of parenting leads to challenges in child-rearing and ultimately contributes to problematic behavior among children. Thus, the current study aims to explore how parenting stress affects the internalizing and externalizing behavior problems in parents of typically developing children during middle childhood.

Objectives

1. To study the predicting role of parental stress among mothers on internalizing behavior problems in children.
2. To investigate the predicting role of parental stress among mothers on externalizing behavior problems in children.
3. To examine the difference of internalizing and externalizing behavior problems between children of government and private school.

Hypotheses

In line of literature, following hypotheses were formulated:

1. Parental stress among mothers will positively predict internalizing behavioral problems in children.
2. Parental stress among mothers will positively predict externalizing behavioral problems in children.

Method

Sample

A non-random community sampling technique was employed to recruit a sample of 200 mothers from the Rawalpindi region. The mothers had at least one child aged between 6 to 12 years who met the study's inclusion criteria.

Table 1
Sociodemographic Profile of Participants (N = 200)

	Mothers		Children	
	<i>n</i>	%	<i>n</i>	%
Education			Gender	
High School Certificate	96	48	Boys	106 53
Higher Secondary School Certificate	51	25.5	Girls	94 47
Graduation	37	18.5	Parenting Status	
Post-Graduation	16	8.0	Both parent	179 89.5
Socioeconomic Status			Single parent	21 10.5
Lower	23	11.5	Type of School	
Lower Middle	30	15.0	Govt.	97 48.5
Middle	71	35.5	Private	103 51.5
Upper	76	38.0		
Family Size (No. of Children)				
1 to 2 children	55	27.5		
3 to 4 children	117	58.5		
5 or more	28	14.0		

Note. *N* = 200 (*n* = 200 for mother and *n* = 200 for children).

Table 1 presents data of 200 participants with ages ranging from 24-50 years for mothers with a mean age of 33 years (*SD* = 4.90) having children with average age of 8.39 years (*SD* = 2.03). Most mothers' level of education is high school certificate (matriculation); belonging to middle and upper class of socioeconomic status; and are having 3 to 4 number of children. Almost equal numbers of mothers for children of both genders are part of the sample.

Measures

The following measures were employed to assess the study variables.

Parental Stress Scale

Urdu version of Parental Stress Scale (PSS; Khalid & Fatima, 2010), a self-reported measure comprising of 18 items to be rated on a 5-point Likert scale ranging from *Strongly Disagree* = 1 to *Strongly Agree* = 5, originally developed by Berry and Jones (1995), was used. The PSS score ranges from 18 to 95, with a higher score indicating higher levels of stress, lower sensitivity, and poorer quality of the parent-child relationship. Cronbach's Alpha reliability for the Urdu version of the PSS is .73 for the present study.

Child Problem Checklist

Child Problem Checklist (CPCL; Tariq & Hanif, 2007), an indigenous measure of child's internalizing and externalizing behaviors was used. The checklist comprised of 80 items to be rated on 5-point Likert scale responded from 1= *Strongly Disagree* to 5 = *Strongly Agree* categorized under three subscales including Internalizing Behavior, Externalizing Behavior, and Somatic Problems. The Cronbach's alpha reliability coefficient of the Urdu version ranges from .79-.85 (Tariq & Hanif, 2007). High scores on CPCL indicate higher externalizing and internalizing behavior problems.

Procedure

Institutional Review Board approval was obtained, and sample consent was secured from all participants. Confidentiality was ensured for all participants. Participants were approached in the Railway Scheme 1/A Chaklala area of Rawalpindi (Punjab province of Pakistan) and data were collected through door-to-door distribution of questionnaires. The participants were briefed about the objectives of the study, and their informed consent was obtained while ensuring the confidentiality of their responses. The questionnaires were collected back within a two-day window, allowing participants ample time to complete them.

Results

Table 2 presents the results of Pearson Product Moment Correlation analysis computed between the parenting stress and behavior problems of children.

Table 2
Inter-Correlations Between Study Variables (N = 200)

Variable	M	SD	1	2	3	4	5	6	7	8
1. PSS	45.74	10.24	-	.59**	.76**	.75**	.77**	.30**	.21**	.34**
2. PR	23.63	2.73		-	.03	.31**	.42**	.04	-.02	.11
3. PS	20.95	5.30			-	.67**	.53**	.24**	.19**	.24**
4. LC	6.64	2.77				-	.51**	.24**	.17*	.24**
5. PSt	3.95	1.90					-	.37**	.31**	.37**
6. CPCL	136.94	38.72						-	.81**	.86**
7. EBP	73.15	24.15							-	.58**
8. IBP	63.79	19.40								-

Note. PSS = Parental Stress Scale; PR = Parental Rewards; PS = Parental Stressors; LC = Lack of Control; PSt = Parental Satisfaction; CPCL = Child Problem Checklist; EBP = Externalizing Behavior Problems; IBP = Internalizing Behavior Problems.

* $p < .01$. ** $p < .001$.

Results in Table 2 indicate a significant positive association between parenting stress and the externalizing type of behavior problems, as well as with the internalizing behavior problems. Furthermore, parental stress demonstrates a significant positive association with overall behavioral problems of children.

Table 3 displays the results of a simple linear regression analysis.

Table 3
Simple Linear Regression Predicting Child Behavior Problems from Mothers' Parental Stress (N = 200)

Variables	B	β	SEB	R ²
Internalizing Behavioral Problems				
Constant	34.72**		5.94	
Parenting Stress Total	.64**	.34**	.13	.11
Externalizing Behavioral Problems				
Constant	50.59*		7.68	.04
Parenting Stress Total	.49*	.21*	1.64	

* $p < .01$; ** $p < .001$.

Table 3 indicates that maternal parental stress accounts for 11% of the variance in children's internalizing behavior problems revealing significant associations between maternal stress and the child's internalizing problems ($F = 25.13$, $p < .00$). Additionally, mothers' parental stress is also a predictor of children's externalizing ($F = 9.07$, $p < .01$, $R^2 = .04$), explaining 4% of the variance in child externalizing behavior.

Table 4 presents the results of a multiple regression analysis conducted to examine the relationship between the subscales of parental stress and internalizing and externalizing behavior problems in children. Table 4 shows that parental satisfaction domain of maternal stress has a significant impact on both child internalizing and externalizing behavior problems. However, the subscales of parental rewards, parental stressors, and lack of control revealed nonsignificant effects on child internalizing and externalizing behavior problems. These findings suggest that as scores on the parental satisfaction or lack of parental satisfaction domain of parental stress increase, scores on child internalizing and externalizing behavior problems also increase. This implies that lower levels of maternal satisfaction in the role of mother (higher parental stress) are associated with an increase in child internalizing and externalizing behavior problems.

Table 4

Regression Analysis on Domains of Mothers' Parental Stress Predicting Internalizing and Externalizing Behavioral Problems (N = 200)

Variables	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
Internalizing Behavior Problems					
Parental Rewards	.21	.45	.47	.63	[-.68, 1.12]
Parental Stressors	-.11	.44	-.24	.80	[-.98, .76]
Lack of Control	1.20	.63	1.90	.08	[-.04, 2.46]
Parental Satisfaction	3.53	1.17	3.02	.00	[1.22, 5.84]
Externalizing Behavior Problems					
Parental Rewards	-.26	.59	-.44	.66	[-.61, 61.68]
Parental Stressors	.21	.57	.37	.71	[-1.41, .90]
Lack of Control	.34	.81	.42	.68	[-1.27, 1.95]
Parental Satisfaction	4.88	1.50	3.25	.00	[1.92, 7.84]

Additionally, [Table 4](#) shows possible role of school system on child behavioral patterns are also examined. Children studying at government schools ($n = 97$) and children studying at private schools ($n = 103$) would be on possible differences that was assessed using independent t -analysis. The result shows that on average, externalizing behavior problems were higher in children attending private schools ($M = 72.00$, $SD = 25.41$) as compared to children attending Government schools ($M = 69.67$, $SD = 22.32$). This difference is significant ($t = 1.99$, $p = .05$; Cohen's $d = .32$). Moreover, the result shows nonsignificant difference ($t = 1.85$, $p = .07$) on internalizing behavior problems of children attending government schools ($M = 72.77$, $SD = 23.86$) and children enrolled in private schools ($M = 73.67$, $SD = 1.72$).

Discussion

The present study examined the impact of maternal parenting stress on internalizing and externalizing behavior of children in Pakistan. Mother's parental stress significantly predicts internalizing and externalizing behavior problems in children. This is consistent with previous research ([Lionetti et al., 2022](#); [Yoo, 2020](#)). Parental stress as reported by the mother, directly influences child behavior problems ([Ward & Lee, 2020](#)). Therefore, an increase in maternal stress is associated with an increase in children's internalizing and externalizing behavioral problems. Among domains of parental stress, parental lack of satisfaction had a statistically significant influence on

child internalizing and externalizing behavioral problems. Specifically, the lack of parental satisfaction with the parenting role was found to have a significant impact on child behavior problems. In Pakistan, when mothers are dissatisfied with their role and find parenting less enjoyable, children are more likely to exhibit internalizing and externalizing behavior problems. Cross-cultural research supports the findings of the study that indicate a strong association between maternal role satisfaction and child behavioral outcomes in Korean culture (Hwang & Hwang, 2015). Similarly, research conducted in China also demonstrates a link between maternal dissatisfaction and internalizing and externalizing behavioral problems (Chen et al., 2022). The similarity in these findings across Korean, Chinese, and Pakistan cultures can be attributed to their collectivist nature.

Additionally, the study found nonsignificant impact of the three other components of parental stress that is, parental stressors, parental rewards, and lack of control on child internalizing and externalizing behavioral problems. These findings can be attributed to the fact that multiple other factors play a role in the development of such problems in children, including media use, family adjustment, environmental sensitivity, and parental functioning (Giannotti et al., 2022; Kochanova et al., 2022; Lionetti et al., 2022; McDaniel & Radesky, 2018). Moreover, in Pakistan, parents often perceive the upbringing of their children as a religious and ethical duty. As a result, factors such as parental rewards, parental stressors, and lack of control may hold less significance for them and, consequently, have minimal influence on child behavior problems. Therefore, it can be concluded that parental stressors, parental rewards, and lack of control do not contribute significantly to the occurrence of child behavioral problems in this culture.

Examining the potential impact of school type, the findings indicated that children attending private schools demonstrated significantly higher levels of externalizing behavior problems, while those in government schools exhibited elevated scores on internalizing behavior problems. Previous study conducted in Pakistan reported a higher incidence of behavior problems among children attending government schools compared to private schools in the city of Karachi (Hussein, 2008). These findings suggest the potential role of cultural variations between the cities of Karachi and Islamabad. Exploring the school system, factors such as infrastructure, teaching pedagogy, and opportunities for personal growth and development may offer plausible explanations for these observed differences.

Limitations and Suggestions

This study's findings should be interpreted with caution due to its focus on a specific region of Pakistan particularly when we consider the cultural variations across different provinces of the country. Furthermore, the possible impact of social support and religious beliefs that may influence parenting practices are not looked into and are beyond the scope of the present study. Additionally, collecting data from both parents would have provided a more comprehensive understanding of child behavioral problems.

Implications

This study highlights mothers' parental stress as a contributing factor to child behavioral problems. Its findings can assist clinical psychologists and counselors in comprehending the impact of maternal stress on children's behavior. Furthermore, it sets the ground for further research on behavioral patterns among preschoolers and adolescents. The study proposes to focus on targeted interventions aimed at reducing maternal stress as a preventive measure against child behavior problems.

Conclusion

Research in Pakistan demonstrates that maternal stress significantly influences child behavior problems. Parental stress should be considered when addressing these issues. High levels of maternal stress are associated with both internalizing and externalizing behavior problems in children. Of particular significance is parental satisfaction, which appears to be the most influential aspect of maternal stress on child behavior problems. Insufficient satisfaction with the maternal role contributes to increased behavioral problems in children.

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