

# PARENTAL STRESS AND MARITAL SATISFACTION AMONG PARENTS OF CHILDREN WITH SPECIAL NEEDS: THE MEDIATING ROLE OF MORAL INJURY

Laraib Niazi<sup>a\*</sup>, & Muhammad Tahir Nawaz<sup>b</sup>

<sup>a</sup>Department of Psychology, National University of Medical Sciences, Islamabad, Pakistan

\*Correspondence to: Muhammad Tahir Nawaz, Department of Psychology, National University of Medical Sciences, Islamabad, Pakistan.  
Email: nawaz.num@gmail.com

## KEYWORDS:

Parental Stress, Marital Satisfaction, Moral Injury, Children with Special Needs, Pakistan

## CITE THIS ARTICLE:

Niazi, L., & Nawaz, M. T. (2026). Parental Stress and marital satisfaction among parents of children with special needs: the mediating role of moral injury. Pakistan Journal of Positive Psychology, 3(1), 54-64.

## ABSTRACT

Parents of children with special needs often have to deal with ongoing concerns of care, finances, social and emotional support, which can impact personal health and relationships. Marital satisfaction may be related to moral injury, which is defined as a violation of one's deeply-held values, resulting in guilt, shame, betrayal, self-condemnation, and spiritual distress. This was a cross-sectional study that focused on the relationships between parental stress, moral injury, marital satisfaction, and the indirect effect of moral injury. A convenience sample of 60 currently married parents of children with special needs (30 mothers and 30 fathers) was selected from special education schools, autism centres and rehabilitation centres from Rawalpindi and Islamabad, Pakistan. The participants were asked to fill out the Parental Stress Scale, Locke-Wallace Marital Adjustment Test, and Moral Injury Symptom Scale-Civilian Version-Short Form. Descriptive statistics, reliability analysis, Pearson correlations, multiple regression, group comparisons and mediation analysis were performed. Marital satisfaction ( $r = .55, p < .01$ ) and moral injury ( $r = .51, p < .01$ ) were positively related to parental stress, and moral injury was also positively related to marital satisfaction ( $r = .45, p < .01$ ). The adjusted regression model revealed that parental stress accounted for a significant prediction of marital satisfaction, but moral injury did not. The indirect effect using the pathway of moral injury was small and not quite statistically significant, suggesting preliminary evidence of mediation. There were no significant differences based upon parental status, family system, number of children with disabilities or the diagnostic category. Interestingly positive associations may be due to shared coping, interdependence of partners, religious meaning-making or social desirability in a collectivistic cultural context. Results further expand the concept of moral injury to family care-giving and should be interpreted with some caution and replicated with larger, dyadic, and longitudinal samples.

## I. INTRODUCTION

Parenting is an emotional, practical and financial obligation, and when a child has development, intellectual, behavioural and/or physical support needs, these demands can be greater. Parents might need to be with the child all the time, arrange educational and rehabilitation services, control difficult behaviors, keep up with clinical appointments and prepare for an uncertain future. These responsibilities can limit work, leisure, social interaction and time in marriage. Many studies have found that parents of disabled children report a higher level of caregiving strain, psychological distress, stress burnout, and lower quality of life than parents of typically developing children

(Aktan et al., 2020; Cheng & Lai, 2023; Kelada et al., 2021; Rusu et al., 2025). Parental stress is the emotional and cognitive burden experienced when the demands of parenting are greater than the personal, relational and social resources. This stress is not only related to the children's functional issues but also to the cost of care, limited access to services, lack of knowledge, time limitation, social stigma and uncertainty about the long-term care of children with special needs (Marsack-Topolewski et al., 2021; Shahali et al., 2024). These challenges can become more pronounced in Pakistan because of limited access to specialised services, inequity in access to rehabilitation, financial strain, misconceptions of developmental conditions in society, and the heavy cultural expectations on parents regarding responsibility (Aftab et al., 2023; Lakhani et al., 2024; Ramzan et al., 2022).

Parents can then feel stressed on both a personal level and in their everyday parenting role. It is also possible that the burden can be unevenly spread across the family. Mothers are expected to take care of the house and look after the child's emotional, educational and physical needs, while fathers may be expected to be responsible for the financial stability of the family, discipline and protection. The absence of fathers in the parenting process can raise maternal parenting stress and decrease spousal support (Karimi et al., 2023). Meanwhile, fathers can feel shame or feel like they are doing something wrong if they are not in control of their child's behavior, cannot provide the care their child needs, or cannot shield the child from social condemnation. Such gendered expectations may affect how stress is felt, expressed and communicated in marriage. Marital Satisfaction is an individual's global assessment of the quality, support, communication, love, understanding and feeling secure in marriage. It is generally accepted that parenting stress is negatively related to marital satisfaction. Low-Quality couple time is associated with irritability, a decrease in couple time, disagreements about finances and parenting, and emotional withdrawal or conflict resolution, among other factors (Brisini & Solomon, 2021; Dong et al., 2022). The parents of children with autism and other developmental conditions have reported lower marital quality, marital conflict, burnout, and higher risk of marital disruption (Alsamiri et al., 2024; Hoseinnejad et al., 2020; Okafor et al., 2022). Qualitative evidence in Pakistan also indicates that stress factors associated with late diagnosis, treatment costs, stigma, lack of professional guidance, poor communication and marital conflicts exist with parents of children with autism spectrum disorder (Rizvi & Batool, 2024).

But not all parenting stress has the same impact on all marital relationships. Cooperation and emotional dependency can sometimes be enhanced by shared misfortune between spouses. Parents of children with autism have been shown to have greater marital satisfaction with positive dyadic coping styles such as helping behaviors (joint problem-solving, emotional support, constructive reframing) (Brown et al., 2020). Some parents have reported that the child's condition has inspired more compassion, commitment, gratitude and mutual assistance amongst them and their spouse (Shattnawi et al., 2021). Family cohesion, family resilience and adaptive coping behaviours can also buffer wellbeing during ongoing caregiving stress (Easler et al., 2022; Gagat-Matula, 2022; Ma et al., 2023). The marital relationship can be an especially significant source of both material and emotional assistance in collectivistic societies where parents feel misunderstood or rejected by extended family, professionals or the community. Thus, the relationship between parental stress and marital satisfaction may vary based on the interpretation of the stress experienced and its effect on marital conflict, mutual coping or both. The concept of moral injury may help explain this variation. Moral injury is the psychological, interpersonal and spiritual suffering that can result from events that go against what is considered right and what is expected. It can be linked to one's own behavior as well as inaction, or when one sees others act badly, or when one is let down by trusted people or institutions (Litz et al., 2009; ter Heide & Olf, 2023). These are some of the common experiences that can occur, such as feeling guilty, feeling shameful, anger, self-condemnation, lack of trust, resentment, struggles with forgiveness, and spiritual struggle.

The term moral injury has been studied primarily in the military and health care settings, but it is now the subject of study in civilian and family settings. Parents find themselves in morally distressing situations when they feel they are not doing enough for a child, they have lost their patience, they feel that they are not doing what is expected of them as a good parent or when they think that they have made a decision that is going against their values. While guilt typically refers to a negative action, shame often refers to a negative self-appraisal, and can be manifested in patterns of concealment and withdrawal (Miceli & Castelfranchi, 2018; Tangney et al., 2007). Parental frustration can also stem from a lack of empathy, justice, or support from family, professionals, schools, or medical care providers. Moral injury has been documented in studies with parents involved in child protection

services and parents whose children are placed in out-of-home care, including self-blame, negative experiences with professionals, being excluded from services, systemic bias and loss of trust (Haight et al., 2017; Wisso et al., 2024). These processes are applicable to parents of children with special needs. Social rejection/exclusion can shrink a parent's support network and exacerbate feelings of rejection/exclusion (Currie & Szabo, 2020). Parents might feel guilt for the informal support, shame for the child's conduct in public, and self-blame for the diagnosis and development of their child (Marcinechova et al., 2024; Rizzo et al., 2024). If professionals who seek to help the parents are not listened to or diagnosis delayed, parents might feel that individuals in power have failed them (Shattnawi et al., 2021).

When experienced multiple times, such experiences can place a more significant moral and emotional burden on the experience of caring. These experiences can become a heavier moral-emotional burden when experienced repeatedly. Moral injury may impact on marital satisfaction in both negative and positive ways. Guilt, shame, resentment and betrayal can make people feel irritated, distant, mistrustful and unable to get close to others (Fernandez & Currier, 2024). However, guilt can also sometimes be a motivator to empathy, responsibility and a desire to mend relationships (Scaffidi Abbate et al., 2022). If they feel that external support is rejected or insufficient, spouses may need each other more than ever to give them understanding and meaning. So, in part, moral injury may account for the ways in which parental stress is linked to marital strain and/or increased closeness in the relationship. Previous studies have focused on coping style, dyadic coping, social support, resilience, hope, and sexual satisfaction as mediators between parenting stress and marital or family outcomes (Arshad et al., 2024; Emam et al., 2023; Nana & Mamat, 2023). However, the concept of moral injury has not been studied extensively in the context of a parent of a child with special needs, especially in Pakistan. An analysis of this construct can provide a more profound understanding of caring than focusing on workload and psychological distress, by taking into account parents' moral expectations of the parent, the spouse, society, and service systems. Accordingly, the current study explored the relationship between parental stress, moral injuries and marital satisfaction of the parents of children with special needs in Rawalpindi and Islamabad. It also assessed the role of moral injury in the pathways between parental stress and marital satisfaction indirectly. Parental stress and moral injury were hypothesized to be negatively associated with marital satisfaction, parental stress to be positively related to moral injury, and moral injury to mediate the relationship between parental stress and marital satisfaction, all based on the prevailing literature.

## II. METHOD

### Participants

A cross sectional correlational design was employed. Some of the special education schools, autism centers and rehabilitation centers in Rawalpindi and Islamabad, Pakistan were selected for the purpose of data collection. They offer educational, assessment, therapeutic and rehabilitation services for children and youth with developmental and intellectual, behavioral and physical disabilities. Parents were approached to their children's services at the centers, as and when they were available and willing to participate. A complete sampling frame was not available and the availability of parents for the study sites prevented a complete sampling frame, so convenience sampling was used. There were 60 currently married parents of children with special needs with 30 parents being mothers and 30 being fathers. Five participants (8.3%) were aged 20-29 years, 27 (45.0%) were aged 30-39 years, and 28 (46.7%) were aged 40-49 years. In nuclear families, the age of the participants was 35(58.3%) and in joint families, age of the participants was 25(41.7%). Forty-seven parents (78.3%) indicated that they had a child with a disability and 13 (21.7%) indicated they had two children with a disability. The children's diagnoses included intellectual disability ( $n = 11$ , 18.3%), Down syndrome ( $n = 14$ , 23.3%), cerebral palsy ( $n = 10$ , 16.7%), autism spectrum disorder ( $n = 12$ , 20.0%), and attention-deficit/hyperactivity disorder ( $n = 13$ , 21.7%). The data were analyzed at the level of the individual parent, not the level of the couples, with both parents eligible. Parents were included who were currently married and had a child with a diagnosed special need receiving educational or rehabilitation services, could understand the questionnaires, and provided informed consent. Excluded were those parents who were separated or divorced and widowed, as well as those who could not fully complete the questionnaires.

### Measures

The 18-item Parental Stress Scale (Berry & Jones, 1995) was used to measure parental stress. Scale has both positive and challenging dimensions of parenthood. An item is rated on a 5-point response scale from strongly disagree to strongly agree. Items 1, 2, 5, 6, 7, 8, 17, and 18 will be reversed coded prior to totalling of all items (higher scores will represent higher parental stress). The results of the current sample showed an internal consistency of .98 (Cronbach's alpha). The 15-item Locke-Wallace Marital Adjustment Test (Locke & Wallace, 1959) was used to measure marital satisfaction. This instrument measures overall marital satisfaction, consensus on key topics of marriage, conflict resolving, shared interests, attitudes towards the marriage, and self-confidence in spouse. The weighted scores of each item are added together with higher total scores reflecting more positive marital adjustment or marital satisfaction. Modest internal consistency of the present sample ( $\alpha = .61$ ) was taken into consideration when interpreting findings as some items on the marital adjustment scale are likely to be interpreted differently across cultural/religious contexts (Haque & Davenport, 2009). The Moral injury symptoms were assessed with 10 items Moral Injury Symptom Scale-Civilian Version-Short Form was created by Koenig et al. (2019). Current feelings in relation to a severe stressful or traumatic period are rated on a 10-point response continuum by respondents. The items evaluate betrayal, guilt, shame, perceived moral transgression, trust, meaning, self-forgiveness, self-condemnation, perceived divine punishment and change in religious belief. Items 5, 6, 7, 9, and 10 are reverse-scored, with items totaling for a final score range from 10 to 100, with higher scores representing more severe symptoms of moral injury. In this study, internal consistency was good ( $\alpha = .96$ ).

### Procedure

Once institutional and ethical approval had been granted from the National University of Medical Sciences, special education and rehabilitation centers were approached for permission. Information was provided to potential participants about the purpose of the study, its voluntary nature, the confidentiality measures, and that these participants could withdraw from the study without penalty. Prior written informed consent was obtained. A printed questionnaire and an online questionnaire was used. Responses were only used for academic purposes, personal information was kept confidential and participants were debriefed after. The data were analyzed in SPSS. Demographic characteristics were summarized as frequencies and percentages. The study measures were computed for means, standard deviations, observed range, skewness, kurtosis and Cronbach's alpha coefficients. The bivariate relationships between parental stress, moral injury, and marital satisfaction were evaluated using Pearson product-moment correlations. The simultaneous effects of parental stress and moral injury on marital satisfaction were assessed using multiple linear regression. Independent-samples t tests compared differences between levels of parental status, family system and family size (number of disabled children). One-way analysis of variance compared differences between diagnostic groups. Mediation analysis was performed using the PROCESS macro (with the predictor being parental stress, mediator being moral injury, and outcome being marital satisfaction). Indirect effect was estimated based on the estimated coefficient, its standard error, and 95% bootstrap confidence interval. As this was a small sample and the path from the mediator to the outcome was not statistically significant at the .05 level, the mediation results were considered exploratory and interpreted with caution.

## III. RESULTS

**Table I: Participant Characteristics (N = 60)**

| Characteristic  | Category | n (%)     |
|-----------------|----------|-----------|
| Age (years)     | 20-29    | 5 (8.3)   |
|                 | 30-39    | 27 (45.0) |
|                 | 40-49    | 28 (46.7) |
| Parental status | Mother   | 30 (50.0) |
|                 | Father   | 30 (50.0) |
| Family system   | Nuclear  | 35 (58.3) |

| Characteristic           | Category                 | n (%)     |
|--------------------------|--------------------------|-----------|
| Children with disability | Joint                    | 25 (41.7) |
|                          | One                      | 47 (78.3) |
|                          | Two                      | 13 (21.7) |
| Child diagnosis          | Intellectual disability  | 11 (18.3) |
|                          | Down syndrome            | 14 (23.3) |
|                          | Cerebral palsy           | 10 (16.7) |
|                          | Autism spectrum disorder | 12 (20.0) |
|                          | ADHD                     | 13 (21.7) |

All three constructs showed significant variability, as revealed by descriptive statistics. The mean score of the parental stress was 50.38 (SD = 19.43) and ranged from 19-89. The overall mean marital satisfaction score was 73.80 (SD = 21.38) and the range was between 17 and 131. The mean moral injury score was 57.05 (SD = 17.91), with an observed range of 15 to 93. The skewness and kurtosis values were within the normal range for approximate normality. The reliabilities for parental stress and moral injury were excellent, and the marital satisfaction reliability was modestly so.

**Table II: Descriptive and Psychometric Properties of the Study Measures (N = 60)**

| Measure              | k  | alpha | M     | SD    | Observed range | Skewness | Kurtosis |
|----------------------|----|-------|-------|-------|----------------|----------|----------|
| Parental stress      | 18 | .98   | 50.38 | 19.43 | 19-89          | .36      | -.72     |
| Marital satisfaction | 15 | .61   | 73.80 | 21.38 | 17-131         | .42      | .57      |
| Moral injury         | 10 | .96   | 57.05 | 17.91 | 15-93          | -.33     | -.47     |

*Note.* k = number of items; alpha = Cronbach's alpha.

Parental stress was significantly and positively related to marital satisfaction ( $r = .55$ ,  $p < .01$ ). This correlation was in the opposite direction to that which was expected. Parental stress also correlated positively with moral injury ( $r = .51$ ,  $p < .01$ ), such that higher levels of parenting related stress were associated with higher levels of moral injury indicated by feelings of guilt, shame, betrayal, self-condemnation, or related moral-spiritual symptoms. Marital satisfaction was positively associated with moral injury,  $r = .45$ ,  $p < .01$ , but in the opposite direction from the hypothesized.

**Table III: Correlations among Parental Stress, Marital Satisfaction, and Moral Injury (N = 60)**

| Variables               | 1     | 2     | 3 |
|-------------------------|-------|-------|---|
| 1. Parental stress      | -     |       |   |
| 2. Marital satisfaction | .55** | -     |   |
| 3. Moral injury         | .51** | .45** | - |

\*\*  $p < .01$ .

The multiple regression model consisting of parental stress and moral injury accounted for significant variance in marital satisfaction  $F(2, 57) = 14.94$ ,  $p < .001$ ,  $R^2 = .34$ . The total variance of marital satisfaction was explained by 34% of the predictors. Parental stress remained a significant positive predictor,  $B = .47$ ,  $SE = .14$ ,  $\beta = .43$ ,  $t = 3.48$ ,  $p < .001$ . There was a smaller positive coefficient for moral injury, but this did not fall into the conventional level of statistical significance after controlling for parental stress,  $B = .27$ ,  $SE = .15$ ,  $\beta = .23$ ,  $t = 1.86$ ,  $p = .06$ .

**Table IV: Multiple Regression Predicting Marital Satisfaction (N = 60)**

| Predictor       | B     | SE   | beta | t    | p      |
|-----------------|-------|------|------|------|--------|
| Constant        | 33.98 | 8.07 | -    | 4.21 | < .001 |
| Parental stress | .47   | .14  | .43  | 3.48 | < .001 |
| Moral injury    | .27   | .15  | .23  | 1.86 | .06    |

*Note.*  $R^2 = .34$ ;  $F(2, 57) = 14.94$ ,  $p < .001$ . B = unstandardized coefficient; beta = standardized coefficient.

Parental stress was a significant predictor of moral injury (path a) in the mediation analysis:  $B = .47$ ,  $SE = .10$ ,  $p < .001$ , 95% CI [.25, .67]. The direct effect of parental stress was significant and positive (path c') even when moral injury was also included as a predictor of marital satisfaction,  $B = .48$ ,  $SE = .14$ ,  $p < .001$ , 95% CI [.20, .75]. Path b did not attain the conventional threshold for significance (path b = .27,  $SE = .14$ ,  $p = .067$ , 95% CI for path b = [-.02, .57]). The estimated indirect effect was .13 (bootstrapped  $SE = .08$ ), and a reported 95% bootstrap CI were between .00 and .31. The results suggest that a portion of the relationship between parental stress and marital satisfaction is carried by moral injury, though this is tentative due to the lower bound being zero following rounding and b not being significant. They cannot be used to make any statistically valid claims of mediation.

**Table V: Mediation Model with Moral Injury as the Proposed Mediator (N = 60)**

| Path/effect                              | B   | SE  | p      | 95% CI lower | 95% CI upper |
|------------------------------------------|-----|-----|--------|--------------|--------------|
| Parental stress -> moral injury (a)      | .47 | .10 | < .001 | .25          | .67          |
| Moral injury -> marital satisfaction (b) | .27 | .14 | .067   | -.02         | .57          |
| Direct effect of parental stress (c')    | .48 | .14 | < .001 | .20          | .75          |
| Indirect effect (a x b)                  | .13 | .08 | -      | .00          | .31          |

*Note.* The indirect effect was estimated using bootstrap resampling. Because the reported lower confidence limit rounded to .00 and path b was nonsignificant, mediation was interpreted as tentative.

The secondary analysis results indicated that there were no significant differences between mothers and fathers or between nuclear families and joint families, or between one and two children with disabilities in terms of parental stress, marital satisfaction, and moral injury. There were also no significant differences between the five child diagnostic categories with regard to parental stress, marital satisfaction, and moral injury. The overall sample and the diagnostic subgroups were small and these null comparisons need to be interpreted with caution.

## IV. DISCUSSION

The study examined the relationships between parental stress, Moral injury, marital satisfaction in parents of children with special needs and whether or not the effect of parental stress on marital satisfaction was mediated by moral injury. There were three major outcomes. First of all, parental stress had a positive association with moral injury, which suggests that parental caregiving stressors may have a more profound moral-emotional dimension. Second, marital satisfaction was not negatively related with parental stress, and not negatively related with moral injury, as might be expected. Lastly, the association between moral injury and StGB was small and was not clearly established as an intervening variable, and thus should be viewed as a plausible pathway of association, but not as a confirmed mediator. Parental stress and moral injury were positively related and were theoretically coherent. Parents of children with special needs are subjected to demands that go beyond physical demands. They might compare their own parenting practices with high standards of personal, cultural and religious beliefs for responsible parenthood. They may feel guilt, shame, or self-condemnation when they think they haven't done enough, are impatient, don't think they can afford it, or aren't sure if the child will suffer the stigma. These feelings are not just a stress but also include judgments about the moral self. Parents can also feel let down when their relatives, professionals, schools or health systems do not provide the supportt they were hoping for. Moral injury (Litz et al., 2009; ter Heide & Olff, 2023) is characterized by the loss of trust, resentment and spiritual questioning.

This is in line with the results of other studies, which found that parents can suffer from moral injury when engaging with the child protection and out-of-home care systems. In that context, parents reported feelings of guilt for their own conduct, feelings of shame from the stigmatizing treatment received, the lack of inclusion in the key decisions, and betrayal from professionals and institutions (Haight et al., 2017; Wisco et al., 2024).

While the context of caregiving is different in the present study, this process of appraisal might function when parents of children with special needs feel blamed, unheard, unsupported or unable to perform an ideal parental role. Parents in Pakistan might be particularly at risk at the intersection of service limitations, financial pressures, stigma, and family expectations (Aftab et al., 2023; Lakhani et al., 2024; Rizvi & Batool, 2024). The positive correlation between parental stress and marital satisfaction was surprising as most studies report that parental stress will spill over into marital conflict, emotional withdrawal, and decreased marital satisfaction. Parenting stress can take up time and energy that could be put toward the couple relationship, and conflict regarding money, discipline, appointments, and parenting duties may lead to additional conflict (Brisini & Solomon, 2021; Dong et al., 2022). Parents of children with disabilities, including autism, have been found to have poorer marital quality than parents of children without disabilities, and marital relationship can also be a source of psychological distress, which can further affect emotional balance in marriage (Hoseinnejad et al., 2020; Wahab & Ramli, 2022). However, the discovery doesn't automatically mean that parenting stress is a good thing. A reasonable hypothesis is that a response to some shared adverse events in parenting is for parents to become more interdependent. If long term challenges are shared, there can be increased communication, coordination of tasks, mutual support and comfort, and a sense of the marriage as the most reliable avenue of support. It has been found that emotional support, coping together by problem solving, and reframing negatively can buffer marriage satisfaction during stress (Brown et al., 2020). After the diagnosis, some parents of children with autism have reported increased levels of compassion, cooperation within the home, commitment and intimacy with their family (Shattnawi et al., 2021). Additionally, wellbeing of families of children with disabilities can be facilitated by family cohesion and adaptive coping (Easler et al., 2022; Ma et al., 2023).

The interpretation may be especially helpful in environments such as collectivistic and familial cultures. Marriage and family continuity may have significant social, moral and religious significance. Parents might view the child's situation as something that both they and the child are required to endure, as a kind of spiritual trial and as a call to sacrifice and mutual support. When friends, family and institutions are not supportive, the spouse may become the only person to whom the parent can turn. In this context, greater caregiving stress can occur alongside greater perceived marital dependence. The positive correlation, therefore, could be a result of relational adaptation rather than an effect of a positive stress. There needs to be consideration of measurement and response processes as well. Marital adjustment measure was only marginally consistent in the present sample, meaning that items in the measure were not necessarily measuring marital satisfaction in the same way. It is important to keep in mind that the Locke-Wallace measure was created during a different cultural period and context and marital adjustment indicators can differ between Muslim families and populations (Haque & Davenport, 2009). Some respondents might also have been hesitant to report marital dissatisfaction due to privacy concerns, the stigma of marital troubles, or fear of disrupting the marriage. A high degree of stress may thus lead to higher mean marital satisfaction scores for subjects with higher levels of social desirability. The cross-sectional design does not allow for clarity about whether the closeness is due to stress or reporting or is a preexisting marital strength. The hypothesis was also rejected by the positive bivariate relationship between moral injury and marital satisfaction. Typical signs of moral injury include mistrust, irritability, withdrawal, feelings of spiritual distress, and lack of intimacy (Fernandez & Currier, 2024). Yet, the emotional reaction to moral feelings is not necessarily the same. While shame tends to be associated with act avoidance and global self-censure, guilt has been shown to lead to confession, empathy, restitution, and reparation (Miceli & Castelfranchi, 2018; Scaffidi Abbate et al., 2022).

Out of guilt, anger or feel they have failed, parents may try to make up for those feelings by being more attentive to the spouse or family. Similarly, when a support system betrays someone they may become more dependent on the marital bond. Therefore, for some participants, higher moral injury symptoms could occur in conjunction with higher marital engagement. An important qualification is given by the regression results. Moral injury was positively associated with marital satisfaction, but when considering the unique association, this was not the case when parental stress was added. This implies some common variance with parental stress in the bivariate

relationship. In both cases, the more intense the parent's caregiving strain, the more amount of moral injury would be reported, and parental stress would still be the more potent predictor of marital satisfaction. These data should not then be used to understand moral injury as an independent positive predictor of marital functioning. Similar care should be taken when interpreting the mediation analysis. The significant a path suggests that parental stress was related to moral injury. The indirect effect was not significant ( $p > .05$ ) on the b path, nor was the reported bootstrap confidence interval for the indirect effect non-zero after rounding. In the interest of this study, the study provides some evidence for an indirect process but not definitive evidence of mediation. While the title and conceptual focus are appropriate as the mechanism of moral injury was directly assessed, the results do call for replication. The observed pattern could also suggest that the relationship is more complex, and not just mediated by a simple linear pathway. The various aspects of moral injury may have opposite impacts. Marital satisfaction may be decreased by betrayal, shame and self condemnation, but it may be enhanced by guilt-driven repair, religious meaning-making and increased reliance on the spouse.

These dimensions may compound and/or mask each other when combined into one total score. Future research is thus suggested to explore sub-components of moral injury and differentiate self-directed transgression, betrayal by others, spiritual struggle and reparative guilt. Nonlinear models might be informative as well. Mild or moderate moral distress can enable the person to seek support, severe and persistent moral injury can result in withdrawal, depression or conflict. The lack of significant differences due to parental status, family system, number of children with disabilities and diagnosis indicates that perhaps the three psychological constructs were not clearly differentiated between these demographic groups in the present sample. While parents are likely to have distinct role expectations, each can find themselves with significant emotional and practical pressures. Likewise, there may be mixed effects of joint families: it can give extra support as well as add to the criticism, interference, or stigma. Although the challenges faced by the different diagnostic groups may be different, the number of participants in each group was small, which meant that there was not enough statistical power. The absence of findings should thus not be interpreted as suggesting that gender, family structure or diagnosis is irrelevant. The study has a number of contributions to the literature. It brings to the fore moral injury in a care-giving population with scant attention and situates this construct in the South Asian cultural context. It also suggests that the relationship of caregiving stress to marital satisfaction may not always be negative.

The results support a differentiated perspective in which stress is not necessarily synonymous with relational vulnerabilities, reliance, shared coping, and meaning. Most importantly, the results show the importance to distinguish between evidence and interpretation. The pattern is open to the possibility of moral injury being an indirect pathway but the evidence at present is exploratory. Evaluation of moral emotions in addition to general stress may be useful in clinical work with parents of children with special needs. Workload interventions may not address guilt, shame, betrayal, perceived failure, or struggle with the spirit. Clinicians can assist parents in recognizing their own false beliefs associated with the unrealistic expectations of a 'perfect parent', teach parents how to disassociate responsibility from self-criticism, process anger toward unsupportive systems and teach parents how to engage in self-forgiveness. Support from couples can foster open communication, shared caregiving, validation of emotions and mutual problem-solving. Where appropriate to the child's cultural or religious context, religious or spiritual resources may be included without reinforcing beliefs that the child's condition is unfair or a punishment or a reflection upon the child's actions. Service Systems also play a part to prevent Morally injurious experiences. Parents can be hurt if concerns are not taken seriously, information is not clear, services are not available, or professionals are blameful and stigmatizing. Timely referral, parent support groups, psychoeducation, coordinated care and respectful communication can help decrease practical strain and perceived betrayal.

A professional should see parents as partners in caring for their child, and give opportunities for parents to express their emotional and moral issues without criticism. Several conclusions are limited by the following: The sample was convenience sampled from two neighboring cities and was small, which restricted the generalizability and statistical power. This cross-sectional design does not imply temporality and causality, particularly in mediation. Alternatively, marital satisfaction may affect parents' perceptions of caregiving stress or supportive marriages may lead to greater disclosure of stress. All variables were self-reported, which posed a risk of common method variance and social desirability. Modest reliability was found with the marital adjustment measure. Participants

were individuals parents, and not verified marital dyads, so couple-level processes could not be tested. Several child diagnoses were included in the sample and the diagnostic subgroups were too small to make robust comparisons. Lastly, the moral injury measure is very general and refers to a particularly traumatic or stressful time, not necessarily one concerning the parenting of a child with special needs. Larger and more diversified samples from other areas and couples as identifiable dyads should be included in future studies. Longitudinal research is needed to assess whether parental stress comes first to moral injury, and whether the relationship between parental stress and moral injury is predictive of later changes in marital satisfaction. Future studies should rely on culturally sensitive measures, measure social desirability, and incorporate qualitative interviews to gain deeper understanding of the definition of guilt, shame, betrayal, divine meaning, and marital support for Pakistani parents. A more complex relationship might be captured by testing parallel models or moderated models that include the interaction between coping, social support, resilience and religious coping. It is also important for researchers to consider the various moral injury domains and investigate the differences between moral injury severity and marital functioning, as well as by diagnosis, parent gender, socioeconomic status, and service access.

## V. CONCLUSION

Among parents of children with special needs, parental stress, moral injury and marital satisfaction were significantly interrelated. More parental stress was linked to more moral injury, which reflects the salience of guilt, shame, betrayal, self-condemnation and spiritual distress in the context of family care provision. Contrary to the proposed hypotheses, parental stress and moral injury had positive relationships with marital satisfaction. These findings could be due to general coping skills, need for help from a spouse, religious coping, cultural norms, measurement constraints, or social desirability rather than to the positive effects of distress. The indirect effect (moral injury) was small and near the null boundary and should be considered as preliminary. The mediating role of moral injury deserves confirmation with larger, culturally sensitive, dyadic, and longitudinal studies of the emotional experience of parents, however, making moral injury a potentially fruitful construct for understanding it.

### Disclosure Statement

No potential conflict of interest was reported by the authors.

### Funding

The author received no funding from any organizations.

## VI. REFERENCES

- Aftab, R., Pirani, S., Mansoor, M., & Nadeem, T. (2023). Caregiver strain and its associated factors in autism spectrum disorder in Karachi, Pakistan. *Education*, 11, 100-0. <https://doi.org/10.29271/jcpsp.2023.07.784>
- Aktan, O., Orakci, S., & Durnali, M. (2020). Investigation of the relationship between burnout, life satisfaction and quality of life in parents of children with disabilities. *European Journal of Special Needs Education*, 35(5), 679-695. <https://doi.org/10.1080/08856257.2020.1748429>
- Alsamiri, Y. A., Alaghdaf, A. A., Alsawalem, I. M., Allouash, B. A., & Alfaidi, S. D. (2024). Mothers of children with disabilities: Exploring lived experiences, challenges, and divorce risk. *Frontiers in Psychology*, 15, 1399419. <https://doi.org/10.3389/fpsyg.2024.1399419>
- Arshad, F., Iqbal, H., Akram, W., & Mumraiz, A. (2024). Parental stress, sense of coherence, marital satisfaction, and hope in parents of children with spina bifida. *Journal of Asian Development Studies*, 13(3), 300-309. <https://doi.org/10.62345/jads.2024.13.3.25>
- Berry, J. O., & Jones, W. H. (1995). The Parental Stress Scale: Initial psychometric evidence. *Journal of Social and Personal Relationships*, 12(3), 463-472. <https://doi.org/10.1177/0265407595123009>
- Brisini, K. S. C., & Solomon, D. H. (2021). Distinguishing relational turbulence, marital satisfaction, and parenting stress as predictors of ineffective arguing among parents of children with autism. *Journal of Social and Personal Relationships*, 38(1), 65-83.

- Brown, M., Whiting, J., Kahumoku-Fessler, E., Witting, A. B., & Jensen, J. (2020). A dyadic model of stress, coping, and marital satisfaction among parents of children with autism. *Family Relations*, 69(1), 138-150. <https://doi.org/10.1111/fare.12375>
- Cheng, A. W., & Lai, C. Y. (2023). Parental stress in families of children with special educational needs: A systematic review. *Frontiers in Psychiatry*, 14, 1198302. <https://doi.org/10.3389/fpsy.2023.1198302>
- Currie, G., & Szabo, J. (2020). Social isolation and exclusion: The parents' experience of caring for children with rare neurodevelopmental disorders. *International Journal of Qualitative Studies on Health and Well-being*, 15(1), 1725362. <https://doi.org/10.1080/17482631.2020.1725362>
- Dong, S., Dong, Q., Chen, H., & Yang, S. (2022). Mother's parenting stress and marital satisfaction during the parenting period: Examining the role of depression, solitude, and time alone. *Frontiers in Psychology*, 13, 847419. <https://doi.org/10.3389/fpsyg.2022.847419>
- Easler, J. K., Taylor, T. M., Roper, S. O., Yorgason, J. B., & Harper, J. M. (2022). Uplifts, respite, stress, and marital quality for parents raising children with Down syndrome or autism. *Intellectual and Developmental Disabilities*, 60(2), 145-162. <https://doi.org/10.1352/1934-9556-60.2.145>
- Emam, M. M., Al-Hendawi, M., & Gaafar Ali, D. (2023). Parenting stress and life satisfaction in families of children with disabilities: The mediating effect of social support in three Arab-speaking countries. *Journal of Family Studies*, 29(1), 134-152. <https://doi.org/10.1080/13229400.2021.1893791>
- Fernandez, P. E., & Currier, J. M. (2024). Exploring the role of moral injury outcomes in intimate relationship functioning among U.S. combat veterans. *Psychological Trauma: Theory, Research, Practice, and Policy*, 16(7), 1229.
- Gagat-Matula, A. (2022). Resilience and coping with stress and marital satisfaction of the parents of children with ASD during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 19(19), 12372. <https://doi.org/10.3390/ijerph191912372>
- Haight, W., Sugrue, E., Calhoun, M., & Black, J. (2017). "Basically, I look at it like combat": Reflections on moral injury by parents involved with child protection services. *Children and Youth Services Review*, 82, 477-489. <https://doi.org/10.1016/j.chilyouth.2017.10.009>
- Haque, A., & Davenport, B. (2009). The assessment of marital adjustment with Muslim populations: A reliability study of the Locke-Wallace Marital Adjustment Test. *Contemporary Family Therapy*, 31(2), 160-168. <https://doi.org/10.1007/s10591-009-9087-5>
- Hoseinnejad, H., Chopaniyan, F., Sarvi Moghanlo, O., Rostami, M., & Dadkhah, A. (2020). Marital satisfaction and happiness in parents with autistic and normal children. *Iranian Rehabilitation Journal*, 18(1), 49-56.
- Karimi, M., Nasri, S., & Ghaemi, F. (2023). Structural relationships of fathers' involvement and parenting stress of mothers of autistic children with the mediation of family functioning, social support, and resilience. *Iranian Journal of Family Psychology*, 10(2), 46-66.
- Kelada, L., Wakefield, C. E., Muppavaram, N., Lingappa, L., & Chittem, M. (2021). Psychological outcomes, coping and illness perceptions among parents of children with neurological disorder. *Psychology & Health*, 36(12), 1480-1496.
- Koenig, H. G., Ames, D., & Pearce, M. J. (2019). *Religion and recovery from PTSD*. Jessica Kingsley Publishers.
- Lakhani, A., Ali, T. S., Kramer-Roy, D., & Ashraf, D. (2024). Informal social support for families with children with an intellectual disability in Karachi, Pakistan: A qualitative exploratory study design. *Heliyon*, 10(20), e39221. <https://doi.org/10.1016/j.heliyon.2024.e39221>
- Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*, 29(8), 695-706.
- Locke, H. J., & Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21(3), 251-255. <https://doi.org/10.2307/348022>
- Ma, M., Gao, R., Wang, Q., Qi, M., Pi, Y., & Wang, T. (2023). Family adaptability and cohesion and the subjective well-being of parents of children with disabilities: The mediating role of coping style and resilience. *Current Psychology*, 42(22), 19065-19075.
- Marcinechova, D., Zahorcova, L., & Lohazerova, K. (2024). Self-forgiveness, guilt, shame, and parental stress among parents of children with autism spectrum disorder. *Current Psychology*, 43(3), 2277-2292. <https://doi.org/10.1007/s12144-023-04476-6>

- Marsack-Topolewski, C. N., Samuel, P. S., & Tarraf, W. (2021). Empirical evaluation of the association between daily living skills of adults with autism and parental caregiver burden. *PLOS ONE*, 16(1), e0244844.
- Miceli, M., & Castelfranchi, C. (2018). Reconsidering the differences between shame and guilt. *Europe's Journal of Psychology*, 14(3), 710. <https://doi.org/10.5964/ejop.v14i3.1564>
- Nana, J., & Mamat, N. (2023). The effect of parental stress on marital quality in parents of children with special needs: The mediating role of coping styles. *International Journal of Academic Research in Progressive Education and Development*, 12(2).
- Okafor, T. B., Omeje, O., & Ejike, H. M. (2022). Stigmatization and marital conflicts predictors of depression among parents of autistic children in South-East Nigeria. *African Journal of Humanities and Contemporary Education Research*, 4(1), 31-44.
- Ramzan, L., Rashid, A., Aziz, S., Batool, S., Yaqoob, S., Khan, M. A., & Chughtai, A. S. (2022). Parental stress of Pakistani families with children who have developmental disabilities. *Pakistan Journal of Medical & Health Sciences*, 16(8), 514. <https://doi.org/10.53350/pjmhs22168514>
- Rizvi, A. Z., & Batool, S. S. (2024). A qualitative study on perspective of parental stress and lower marital quality among parents of children with autism spectrum disorder. *International Journal of Developmental Disabilities*, 1-20. <https://doi.org/10.1080/20473869.2024.2341196>
- Rizzo, A., Sorrenti, L., Commendatore, M., Mautone, A., Caparello, C., Maggio, M. G., et al. (2024). Caregivers of children with autism spectrum disorders: The role of guilt sensitivity and support. *Journal of Clinical Medicine*, 13(14), 4249.
- Rusu, P. P., Candel, O.-S., Bogdan, I., Ilciuc, C., Ursu, A., & Podina, I. R. (2025). Parental stress and well-being: A meta-analysis. *Clinical Child and Family Psychology Review*, 28(2), 255-274. <https://doi.org/10.1007/s10567-025-00515-9>
- Scaffidi Abbate, C., Misuraca, R., Roccella, M., Parisi, L., Vetri, L., & Miceli, S. (2022). The role of guilt and empathy on prosocial behavior. *Behavioral Sciences*, 12(3), 64. <https://doi.org/10.3390/bs12030064>
- Shahali, S., Tavousi, M., Sadighi, J., Kermani, R. M., & Rostami, R. (2024). Health challenges faced by parents of children with disabilities: A scoping review. *BMC Pediatrics*, 24(1), 619. <https://doi.org/10.1186/s12887-024-05104-3>
- Shattnawi, K. K., Bani Saeed, W. A. M., Al-Natour, A., Al-Hammouri, M. M., Al-Azzam, M., & Joseph, R. A. (2021). Parenting a child with autism spectrum disorder: Perspective of Jordanian mothers. *Journal of Transcultural Nursing*, 32(5), 474-483.
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, 58(1), 345-372. <https://doi.org/10.1146/annurev.psych.56.091103.070145>
- ter Heide, F. J. J., & Olff, M. (2023). Widening the scope: Defining and treating moral injury in diverse populations. *European Journal of Psychotraumatology*, 14(2), 2196899. <https://doi.org/10.1080/20008066.2023.2196899>
- Wahab, R., & Ramli, F. F. A. (2022). Psychological distress among parents of children with special needs. *International Journal of Education, Psychology and Counseling*, 7(46), 498-511.
- Wisso, T., Melke, A., & Josephson, I. (2024). Exploring moral injury among parents with children in out-of-home care. *Child & Family Social Work*, 29(3), 679-688. <https://doi.org/10.1111/cfs.13127>