

Multicultural Education

Research Article

Homepage: www.MC-caddogap.com**DIFFERENCE BETWEEN THE LEVEL OF GRIT AND RESILIENCE AMONG MOTHERS OF DISABLED CHILDREN BELONGS TO VARIOUS CULTURES IN PAKISTAN****Dr. Fozia Aamir Siddiqui***Assistant Professor, Department of Psychology University of Sindh, Jamshoro***Dr. Farhat Jokhio***Assistant Professor, Department of Psychology University of Sindh, Jamshoro***Ibarat Ali Laghari***M.Phil. Scholar, University of Karachi***Hina Mukhtiar***M.Phil. Scholar, University of Karachi***ABSTRACT**

Pakistan's cultural diversity and the significant role of mothers in caregiving for disabled children emphasize the importance of understanding the levels of grit and resilience among these mothers within various cultural contexts. Despite the pressing need for such insights, research on this topic in Pakistan remains limited. This research aims to investigate the levels of grit and resilience among mothers of disabled children in Karachi, Pakistan, representing diverse cultural backgrounds. It was hypothesized that there will be significant differences in the levels of grit and resilience among mothers of disabled children from different cultural backgrounds. Non probability purposive sampling technique was used to select a sample of 40 participants, including, 10 mothers from each of the Punjabi, Sindhi, Balochi, and Pakhtoon cultural groups, all residing in Karachi city. Grit and resilience levels were assessed using standardized scales. To measure Grit among mothers, The Grit Scale (Duckworth, 2007) and Brief Resilience Scale (Smith et al., 2008) were administered among mothers of disabled children. Statistical analysis showed, significant mean differences in grit levels among mothers from different cultural backgrounds, highlighting the impact of culture on individual characteristics and coping mechanisms. However, no significant differences were found in resilience levels, suggesting a potential common ground for mothers of disabled children irrespective of their cultural backgrounds. These findings highlight the need for cultural relevant support services and interventions to address the unique challenges faced by mothers of disabled children. Additionally, this research provides a foundation for future investigations into the intricate dynamics between cultural factors, grit, resilience, and maternal caregiving experiences. Ultimately, it contributes valuable insights into the diverse experiences of these mothers in multicultural society of Pakistan.

ARTICLE INFO**Keywords:**

Grit, Resilience, Mothers, disabled children

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1. INTRODUCTION

Pakistan, a country characterized by its rich culture, engage with a multifaceted challenge: providing care and support for disabled individuals. Within this situation, mothers emerge as central figures, undertaking the

primary responsibility for the well-being of their disabled children. This role encompasses a broad spectrum of care, from addressing physical needs to offering emotional support. In navigating these complex caregiving dynamics, mothers often rely on two foundational attributes: grit and resilience to fulfill their responsibilities of caretaking of children.

Grit, a concept introduced by Angela Duckworth (2007), consists of passion and perseverance in the pursuit of long-term goals. Mothers of disabled children frequently exhibit grit in their unyielding commitment to nurturing and advocating for their children's development and quality of life. It is their enduring determination that motivate them to meet the challenges they face in their efforts to care their children (Duckworth, 2007). On the other hand, resilience, a concept central to the field of psychology, denotes the capacity to rebound from adversity and to adapt positively in the face of hardship (Smith et al., 2008). For mothers in Pakistan, resilience emerges as an essential ability. They face many stressors, ranging from the emotional problems of their children toll of witnessing their child's struggles to find a healthcare system to meet the diverse needs of disabled children (Connor & Davidson, 2003). A defining characteristic of Pakistan is its striking cultural diversity. The nation comprises various ethnic, linguistic, and regional groups, each endowed with its own distinct traditions, belief systems, and values (Apsara, 2021). Within this situation, caregiving practices are profoundly influenced by cultural norms, impacting the coping mechanism of mothers. For instance, in some cultures, disability may be stigmatized, creating additional layers of challenge for mothers who navigate both societal prejudice and the practical aspects of caregiving (Ramchandani et al., 2009). In contrast, other cultural groups may be more inclusive and accepting, potentially fostering a stronger support network for mothers (McConnell, 2014; Matsumotu, 2016). Moreover, cultural beliefs regarding the origins of disability and the role of spirituality in healing may exert a profound influence on caregiving practices (Masten, 2018). For instance, in some cultures, disability may be stigmatized, creating additional layers of challenge for mothers who face both societal prejudice and the practical aspects of caregiving (Ramchandani et al., 2009). In contrast, other cultural groups may be more inclusive and accepting, potentially fostering a stronger support network for mothers (McConnell, 2014; Matsumotu, 2016). Moreover, cultural beliefs regarding the origins of disability and the role of spirituality in healing may exert a profound influence on caregiving practices (Masten, 2018). The interaction between culture, grit, and resilience within the context of maternal caregiving for disabled children in Pakistan remains an understudied issue. The diversity of cultural norms, values, and practices necessitates a proper understanding of how these factors influence to shape the experiences of mothers. The significance of this study lies in its potential to address the existing research gap by shedding light on the levels of grit and resilience among mothers of disabled children in Pakistan. By exploring how cultural diversity within Pakistan influences their caregiving experiences, this research can contribute to understand support services and policies that align with the specific needs of mothers in diverse cultural contexts. The significance of grit and resilience in the lives of mothers raising disabled children is well-established in the global literature. These behaviors are widely recognized as fundamental to the ability of mothers to meet the unique challenges associated with caring for their disabled children (Duckworth, 2016; Masten, 2018). However, within the specific and multicultural landscape of Pakistan, a notable research gap exists concerning how these attributes appear and are shaped by diverse cultural backgrounds. While international studies underscore the crucial roles of grit and resilience in maternal caregiving for disabled children, the experiences of mothers in Pakistan remain relatively less investigated. This research is of great significance to understand the levels of grit and resilience among mothers of disabled children, from diverse cultural backgrounds within Pakistan. It is important to understand how these mothers adapt and respond to the challenges they face, particularly within the framework of their specific cultural contexts. In essence, this study seeks to understand the complex connections between cultural diversity, grit, and resilience among mothers of disabled children in Pakistan. Further present research will provide a foundation for future research in the field of parenting of disabled children in various cultures.

2. LITERATURE REVIEW

Grit, as defined by Duckworth (2007), represents the fusion of passion and perseverance in the pursuit of long-term goals. This multifaceted trait has achieved recognition as an essential quality that compels individuals to face obstacles and achieve enduring objectives. Complementary to grit is the concept of resilience, as conceptualized by Masten (2018), which is the capacity to adapt and rebound from adversity. In the context of maternal caregiving, particularly in the realm of raising disabled children, the importance of these behaviors increases (Smith et al., 2018). Existing literature highlight the important role of grit and resilience in helping mothers to fulfill their responsibility of caretaking of disabled children. Grit, help mothers to remain firm in their caregiving roles over the long term (Duckworth, 2016). It increases their enduring commitment to nurturing and

improving the development and well-being of their disabled children. The grit equips mothers to confront a variety of challenges with much determination. Further, Resilience, on the other hand, assumes the role of a buoy in turbulent waters (Masten, 2018). Mothers who exhibit resilience demonstrate the capacity to effectively cope with the inevitable stressors and setbacks inherent in caregiving for disabled children. They possess the ability to bounce back from adversities, adapting positively in the face of hardship (Connor & Davidson, 2003). Moreover, empirical evidence underscores that mothers with higher levels of grit and resilience are better positioned to understand and fulfill the multifaceted challenges accompanying the caregiving journey (Ryder & Dere, 2010). It is through these attributes that mothers can not only persevere in their roles but also find the strength to cope up successfully variety of emotional, physical, and societal obstacles they encounter Cultural norms, values, and traditions are significantly associated with caregiving practices and the experiences of mothers raising disabled children. Pakistan, a country characterized by its cultural diversity, a multitude of cultures coexist, each adorned with its own distinct customs and belief systems (Mirza, Davidson & Rahman, 2009; Apsara, et al., 2021). These cultural elements exert influence on the way in which families perceive disability, the roles ascribed to mothers, and the availability of social support systems (McConnell, Davidson & Breitkreuz, 2014). In some cultural contexts, disability may be associated by stigma, a phenomenon that cause heightened isolation, stress and intensified challenges for mothers (Ramchandani et al., 2009). Conversely, other cultural groups may embrace more inclusive and accepting behaviors helping mothers with a robust support network. Understanding of these profound cultural variations is an important endeavor, as it highlights the importance of multifaceted experiences of mothers belonging to diverse cultural groups in Pakistan. (Apsara et al., 2021). Despite the increasing interest of research investigating grit, resilience, and caregiving, a clear gap persists when it comes to comprehending the influence of cultural diversity within Pakistan on the levels of grit and resilience among mothers of disabled children. The bulk of existing studies predominantly revolve around Western contexts and often fail to exhibit the required cultural sensitivity demanded by the complex experiences of mothers in Pakistan (Mirza, et al., 2009). Within the sphere of caregiving, studies have emphasized the critical importance of grit and resilience in enabling mothers to navigate the challenges of raising disabled children (Sharifian et al., 2023). However, these insights have primarily been drawn from Western cultural contexts, which may not fully capture the dynamics at play within Pakistan's rich and diverse cultural landscape.

This research endeavors to comprehensively explore into the levels of grit and resilience among mothers of disabled children representing diverse cultural backgrounds within Pakistan. This research is an effort to contribute further in the literature about grit, resilience and cultural influences on caregiving practices of mothers in a collectivistic culture of Pakistan

Research Objectives:

Following are the research objectives for the current study;

1. To assess the levels of Grit among mothers of disabled children:
2. To examine the levels of Resilience among mothers of disabled children

Hypotheses

H1: There will be significant variations in the levels of grit among mothers of disabled persons from different cultural backgrounds.

H2: There would be significant variations in the levels of resilience among mothers of disabled persons from different cultural backgrounds.

3. RESEARCH METHODOLOGY

This is quantitative research, with cross-sectional correlational design, and survey method was used to investigate the levels of grit and resilience among mothers of disabled children from four diverse cultural backgrounds in Karachi Pakistan. The target population consisted of mothers of disabled children residing in Karachi Pakistan, belonging to the Punjabi, Sindhi, Balochi, and Pakhtoon cultural groups. Total number of (40) Participants was selected using non-probability purposive sampling technique. Age of the participants was 25 and above. Data was collected using two scales including; Grit Scale, developed by Duckworth (2007), and Brief Resilience Scale was used to measure resilience by (Smith et al., 2008).

4. RESULTS

Table 1: Frequency Table of Participant's Age

| | Age | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | 28.00 | 1 | 2.5 | 2.5 | 2.5 |
| | 29.00 | 1 | 2.5 | 2.5 | 5.0 |
| | 30.00 | 1 | 2.5 | 2.5 | 7.5 |
| | 32.00 | 1 | 2.5 | 2.5 | 10.0 |
| | 33.00 | 5 | 12.5 | 12.5 | 22.5 |
| | 34.00 | 3 | 7.5 | 7.5 | 30.0 |
| | 35.00 | 7 | 17.5 | 17.5 | 47.5 |
| | 36.00 | 7 | 17.5 | 17.5 | 65.0 |
| | 37.00 | 5 | 12.5 | 12.5 | 77.5 |
| | 38.00 | 4 | 10.0 | 10.0 | 87.5 |
| | 39.00 | 1 | 2.5 | 2.5 | 90.0 |
| | 40.00 | 1 | 2.5 | 2.5 | 92.5 |
| | 41.00 | 1 | 2.5 | 2.5 | 95.0 |
| | 42.00 | 1 | 2.5 | 2.5 | 97.5 |
| | 45.00 | 1 | 2.5 | 2.5 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

Table 1 presents a frequency distribution of the ages of the research participants. The table displays the frequency, percentage, valid percentage, and cumulative percentage for each age category. A total of 40 participants were included in the analysis. The age categories range from 28 to 45 years, with varying frequencies of participants falling into each category. The most common age category is 35 years, with 7 participants, representing 17.5% of the total sample. The table provides a comprehensive overview of the distribution of participants' ages in the study.

Table 2: Family system of the participants

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | Joint | 8 | 20.0 | 20.0 | 20.0 |
| | Nuclear | 32 | 80.0 | 80.0 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

Table 2 provides information on the family systems of the research participants. It presents a frequency distribution of two categories: "Joint" and "Nuclear," representing different family structures. 8 participants, accounting for 20% of the sample, reported being part of a joint family system. The majority of participants, 32 individuals (80% of the sample), indicated that they belong to a nuclear family system.

Table 3: Socioeconomic Status of the Participants

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Middle | 26 | 65.0 | 65.0 | 65.0 |
| | Lower | 14 | 35.0 | 35.0 | 100.0 |
| | Total | 40 | 100.0 | 100.0 | |

Table 3 presents a frequency distribution of the socioeconomic status of the research participants. The table categorizes participants into two groups: "Middle" and "Lower," based on their reported socioeconomic status. 26 participants, constituting 65% of the sample, identified their socioeconomic status as middle-class. 14 participants, making up 35% of the sample, indicated that they belong to lower-class socioeconomic category. While no participant reported as having upper-class background.

Table 4: Crosstabs between Ethnicity and number of children of the participants

| | | Ethnicity * Children Cross-tabulation | | | | | | |
|--------------------|----------|---------------------------------------|---|----|----|---|---|-------|
| | | Children | | | | | | |
| Number of Children | | 1 | 2 | 3 | 4 | 5 | 6 | Total |
| Ethnicity | Punjabi | 0 | 2 | 3 | 5 | 0 | 0 | 10 |
| | Sindhi | 2 | 5 | 3 | 0 | 0 | 0 | 10 |
| | Balochi | 1 | 1 | 2 | 2 | 2 | 2 | 10 |
| | Pakhtoon | 0 | 0 | 3 | 6 | 1 | 0 | 10 |
| Total | | 3 | 8 | 11 | 13 | 3 | 2 | 40 |

Table 4 presents a cross-tabulation analysis that explores the relationship between participants' ethnicity and the number of children they have. The table displays the distribution of participants across different ethnic backgrounds (Punjabi, Sindhi, Balochi, and Pakhtoon) and the number of children they have (ranging from 1 to 6).

Table 5: One-way ANOVA of the Grit Scale between different cultures of Pakistan

| Descriptive Scores on Grit Scale from different cultures | | | | | | | | |
|--|------|-------------------------|---------|----------|---------|---------|---------|-------|
| | | 95% Confidence Interval | | | | | | |
| | | Std. | Std. | for Mean | | Minimum | Maximum | |
| N | Mean | Deviation | Error | Lower | Upper | | | |
| Punjabi | 10 | 34.7000 | 3.33500 | 1.05462 | 32.3143 | 37.0857 | 30.00 | 40.00 |
| Sindhi | 10 | 35.4000 | 3.16930 | 1.00222 | 33.1328 | 37.6672 | 31.00 | 41.00 |
| Balochi | 10 | 40.5000 | 3.56682 | 1.12793 | 37.9484 | 43.0516 | 35.00 | 46.00 |
| Pakhtoon | 10 | 37.7000 | 3.52924 | 1.11604 | 35.1753 | 40.2247 | 33.00 | 42.00 |
| Total | 40 | 37.0750 | 3.99607 | .63183 | 35.7970 | 38.3530 | 30.00 | 46.00 |

Table 5 provides an overview of the results of a one-way Analysis of Variance (ANOVA) conducted to assess the differences in scores on the Grit Scale among participants from various cultural backgrounds in Pakistan. The mean score on the Grit Scale for Punjabi participants is 34.70, with a standard deviation of 3.34. The 95% confidence interval for the mean Grit score ranges from 32.31 to 37.09, with scores ranging from 30.00 to 40.00. Sindhi participants have a mean Grit score of 35.40, with a standard deviation of 3.17. The 95% confidence interval for the mean Grit score falls between 33.13 and 37.67, with scores ranging from 31.00 to 41.00. The mean Grit score for Balochi participants is 40.50, with a standard deviation of 3.57. The 95% confidence interval for the mean Grit score ranges from 37.95 to 43.05, with scores ranging from 35.00 to 46.00. Participants from the Pakhtoon cultural group have a mean Grit score of 37.70, with a standard deviation of 3.53. The 95% confidence interval for the mean Grit score falls between 35.18 and 40.22, with scores ranging from 33.00 to 42.00. The total sample of 40 participants has an overall mean Grit score of 37.08, with a standard deviation of 3.99. The 95% confidence interval for the mean Grit score is between 35.80 and 38.35, with scores ranging from 30.00 to 46.00.

Table 6: ANOVA
Scores on Grit Scale from different cultures

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 205.675 | 3 | 68.558 | 5.917 | .002 |
| Within Groups | 417.100 | 36 | 11.586 | | |
| Total | 622.775 | 39 | | | |

Table 6 provides the results of an Analysis of Variance (ANOVA) conducted to assess the differences in Grit Scale scores among participants from different cultural backgrounds in Pakistan. The results of the ANOVA indicate that there is a statistically significant difference in Grit Scale scores among the cultural groups ($F(3, 36) = 5.917, p = .002$). In other words, the mean Grit Scale scores of participants from at least one cultural group are significantly different from the mean scores of participants from other cultural groups. This suggests that cultural background has an influence on participants' levels of grit.

Table 7: Post Hoc Tests for scores of Grit scale between multiple cultural backgrounds

| Multiple Comparisons | | | | | | |
|----------------------|---------------|-----------------------|------------|------|-------------------------|---------|
| Tukey HSD | | | | | | |
| (I) Ethnicity | (J) Ethnicity | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| | | | | | Lower | Upper |
| Punjabi | Sindhi | -.70000 | 1.52224 | .967 | -4.7997 | 3.3997 |
| | Balochi | -5.80000* | 1.52224 | .003 | -9.8997 | -1.7003 |
| | Pakhtoon | -3.00000 | 1.52224 | .218 | -7.0997 | 1.0997 |
| Sindhi | Punjabi | .70000 | 1.52224 | .967 | -3.3997 | 4.7997 |
| | Balochi | -5.10000* | 1.52224 | .010 | -9.1997 | -1.0003 |
| | Pakhtoon | -2.30000 | 1.52224 | .442 | -6.3997 | 1.7997 |
| Balochi | Punjabi | 5.80000* | 1.52224 | .003 | 1.7003 | 9.8997 |
| | Sindhi | 5.10000* | 1.52224 | .010 | 1.0003 | 9.1997 |
| | Pakhtoon | 2.80000 | 1.52224 | .272 | -1.2997 | 6.8997 |
| Pakhtoon | Punjabi | 3.00000 | 1.52224 | .218 | -1.0997 | 7.0997 |
| | Sindhi | 2.30000 | 1.52224 | .442 | -1.7997 | 6.3997 |
| | Balochi | -2.80000 | 1.52224 | .272 | -6.8997 | 1.2997 |

*. The mean difference is significant at the 0.05 level.

Table 7 presents the results of Tukey's HSD post-hoc tests, which were conducted to further investigate the differences in Grit Scale scores among participants from different cultural backgrounds (ethnicities). The table provides information on the mean differences between specific pairs of ethnicities, the standard error of the differences, the significance level (Sig.), and the 95% confidence intervals for the mean differences. Punjabi vs. Sindhi: The mean difference between Punjabi and Sindhi participants in Grit Scale scores is -0.70, with a standard error of 1.52. However, this difference is not statistically significant (Sig. = 0.967). The 95% confidence interval for the mean difference ranges from -4.80 to 3.40. Punjabi vs. Balochi: There is a statistically significant difference in Grit Scale scores between Punjabi and Balochi participants. Balochi participants have significantly lower scores on the Grit Scale, with a mean difference of -5.80 (Sig. = 0.003). The 95% confidence interval for the mean difference ranges from -9.90 to -1.70. Punjabi vs. Pakhtoon: The mean difference in Grit Scale scores between Punjabi and Pakhtoon participants is -3.00, but this difference is not statistically significant (Sig. = 0.218). The 95% confidence interval for the mean difference spans from -7.10 to 1.10. Sindhi vs. Balochi: There is a statistically significant difference in Grit Scale scores between Sindhi and Balochi participants. Balochi participants have significantly lower scores on the Grit Scale, with a mean difference of -5.10 (Sig. = 0.010). The 95% confidence interval for the mean difference ranges from -9.20 to -1.00. Sindhi vs. Pakhtoon: The mean difference in Grit Scale scores between Sindhi and Pakhtoon participants is -2.30, but this difference is not statistically significant (Sig. = 0.442). The 95% confidence interval for the mean difference spans from -6.40 to 1.80. Balochi vs. Pakhtoon: There is no statistically significant difference in Grit Scale scores between Balochi and Pakhtoon participants (Sig. = 0.272). The mean difference is 2.80, and the 95% confidence interval for the mean difference ranges from -1.30 to 6.90. The table also indicates that mean differences marked with an asterisk (*) are statistically significant at the 0.05 level, signifying significant variations in Grit Scale scores among specific pairs of ethnicities. These post-hoc tests provide additional insights into which cultural groups differ significantly in terms of their levels of grit.

Table 8: One-way ANOVA of the Brief Resilience Scale between different cultures of Pakistan

| Descriptive Scores on Brief Resilience Scale from different cultures | | | | | | | | |
|--|----|--------|----------------|------------|----------------------------------|--------|---------|---------|
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower | Upper | | |
| Punjabi | 10 | 3.4667 | .39907 | .12620 | 3.1812 | 3.7521 | 2.83 | 4.17 |
| Sindhi | 10 | 3.1167 | .36047 | .11399 | 2.8588 | 3.3745 | 2.67 | 3.67 |
| Balochi | 10 | 2.9833 | .60067 | .18995 | 2.5536 | 3.4130 | 1.67 | 3.83 |
| Pakhtoon | 10 | 3.0167 | .44061 | .13933 | 2.7015 | 3.3319 | 2.17 | 3.83 |
| Total | 40 | 3.1458 | .48214 | .07623 | 2.9916 | 3.3000 | 1.67 | 4.17 |

Table 8 presents the results of a one-way Analysis of Variance (ANOVA) conducted to assess the differences in scores on the Brief Resilience Scale among participants from various cultural backgrounds in Pakistan. The mean score on the Brief Resilience Scale for Punjabi participants is 3.4667, with a standard deviation of 0.39907. The 95% confidence interval for the mean score ranges from 3.1812 to 3.7521, with scores ranging from 2.83 to 4.17. Sindhi participants have a mean Brief Resilience Scale score of 3.1167, with a standard deviation of 0.36047. The 95% confidence interval for the mean score falls between 2.8588 and 3.3745, with scores ranging from 2.67 to 3.67. The mean Brief Resilience Scale score for Balochi participants is 2.9833, with a standard deviation of 0.60067. The 95% confidence interval for the mean score ranges from 2.5536 to 3.4130, with scores ranging from 1.67 to 3.83. Participants from the Pakhtoon cultural group have a mean Brief Resilience Scale score of 3.0167, with a standard deviation of 0.44061. The 95% confidence interval for the mean score falls between 2.7015 and 3.3319, with scores ranging from 2.17 to 3.83. The total sample of 40 participants has an overall mean Brief Resilience Scale score of 3.1458, with a standard deviation of 0.48214. The 95% confidence interval for the mean score is between 2.9916 and 3.3000, with scores ranging from 1.67 to 4.17.

Table 9: ANOVA
Scores on Brief Resilience Scale from different cultures

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 1.469 | 3 | .490 | 2.320 | .092 |
| Within Groups | 7.597 | 36 | .211 | | |
| Total | 9.066 | 39 | | | |

Table 9 provides the results of an Analysis of Variance (ANOVA) conducted to assess the differences in Brief Resilience Scale scores among participants from different cultural backgrounds in Pakistan. The results of the ANOVA indicate that there is no statistically significant difference in Brief Resilience Scale scores among the cultural groups ($F(3, 36) = 2.320, p = 0.092$). In other words, the mean Brief Resilience Scale scores of participants from different cultural backgrounds in Pakistan do not significantly differ. The p-value (0.092) is greater than the conventional alpha level of 0.05, suggesting that there is no evidence to reject the null hypothesis of no difference in resilience levels among the cultural groups. This ANOVA analysis suggests that cultural background may not be a significant factor in explaining the variations in Brief Resilience Scale scores among the participants.

Table 10: Post Hoc Tests for scores of Resilience scale between multiple cultural backgrounds

| | | Multiple Comparisons Tukey HSD | | | 95% Confidence Interval | |
|---------------|---------------|-----------------------------------|------------|------|-------------------------|--------|
| (I) Ethnicity | (J) Ethnicity | Mean Difference (I-J) | Std. Error | Sig. | Lower | Upper |
| Punjabi | Sindhi | .35000 | .20544 | .337 | -.2033 | .9033 |
| | Balochi | .48333 | .20544 | .105 | -.0700 | 1.0366 |
| | Pakhtoon | .45000 | .20544 | .145 | -1.033 | 1.0033 |
| Sindhi | Punjabi | -.35000 | .20544 | .337 | -.9033 | .2033 |
| | Balochi | .13333 | .20544 | .915 | -.4200 | .6866 |
| | Pakhtoon | .10000 | .20544 | .962 | -.4533 | .6533 |
| Balochi | Punjabi | -.48333 | .20544 | .105 | -1.0366 | .0700 |
| | Sindhi | -.13333 | .20544 | .915 | -.6866 | .4200 |
| | Pakhtoon | -.03333 | .20544 | .998 | -.5866 | .5200 |
| Pakhtoon | Punjabi | -.45000 | .20544 | .145 | -1.0033 | .1033 |
| | Sindhi | -1.0000 | .20544 | .962 | -.6533 | .4533 |
| | Balochi | .03333 | .20544 | .998 | -.5200 | .5866 |

Table 10 presents the results of Tukey's HSD post-hoc tests, which were conducted to further investigate the differences in Brief Resilience Scale scores among participants from different cultural backgrounds (ethnicities). The table provides information on the mean differences between specific pairs of ethnicities, the standard error of the differences, the significance level (Sig.), and the 95% confidence intervals for the mean

differences. Punjabi vs. Sindhi: The mean difference in Brief Resilience Scale scores between Punjabi and Sindhi participants is 0.35000, with a standard error of 0.20544. However, this difference is not statistically significant (Sig. = 0.337). The 95% confidence interval for the mean difference ranges from -0.2033 to 0.9033.

Punjabi vs. Balochi: There is a statistically significant difference in Brief Resilience Scale scores between Punjabi and Balochi participants. Balochi participants have significantly higher scores, with a mean difference of 0.48333 (Sig. = 0.105). The 95% confidence interval for the mean difference ranges from -0.0700 to 1.0366. Punjabi vs. Pakhtoon: The mean difference in Brief Resilience Scale scores between Punjabi and Pakhtoon participants is 0.45000, but this difference is not statistically significant (Sig. = 0.145). The 95% confidence interval for the mean difference spans from -0.1033 to 1.0033. Sindhi vs. Balochi: There is no statistically significant difference in Brief Resilience Scale scores between Sindhi and Balochi participants (Sig. = 0.915). The mean difference is 0.13333, and the 95% confidence interval for the mean difference ranges from -0.4200 to 0.6866. Sindhi vs. Pakhtoon: There is no statistically significant difference in Brief Resilience Scale scores between Sindhi and Pakhtoon participants (Sig. = 0.962). The mean difference is 0.10000, and the 95% confidence interval for the mean difference spans from -0.4533 to 0.6533.

Balochi vs. Pakhtoon: There is no statistically significant difference in Brief Resilience Scale scores between Balochi and Pakhtoon participants (Sig. = 0.998). The mean difference is 0.03333, and the 95% confidence interval for the mean difference ranges from -0.5200 to 0.5866.

Pakhtoon vs. Punjabi: The mean difference in Brief Resilience Scale scores between Pakhtoon and Punjabi participants is -0.45000, but this difference is not statistically significant (Sig. = 0.145). The 95% confidence interval for the mean difference spans from -1.0033 to 0.1033. Pakhtoon vs. Sindhi: There is no statistically significant difference in Brief Resilience Scale scores between Pakhtoon and Sindhi participants (Sig. = 0.962). The mean difference is -0.10000, and the 95% confidence interval for the mean difference spans from -0.6533 to 0.4533. Pakhtoon vs. Balochi: There is no statistically significant difference in Brief Resilience Scale scores between Pakhtoon and Balochi participants (Sig. = 0.998). The mean difference is -0.03333, and the 95% confidence interval for the mean difference ranges from -0.5866 to 0.5200. The table also indicates that none of the mean differences are statistically significant at the 0.05 level except for the difference between Punjabi and Balochi participants. This suggests that, in general, there are no significant differences in Brief Resilience Scale scores among most pairs of ethnicities.

5. DISCUSSION

The present study aimed to investigate the levels of grit and resilience among mothers of disabled children from diverse cultural backgrounds in Karachi, Pakistan. The study also investigated the potential influence of cultural factors on these attributes. The findings are discussed below in the context of the research objectives, existing literature, and implications for caregiving and support services. H1: There will be significant variations in the levels of grit among mothers from different cultural backgrounds in Karachi, Pakistan. The first hypothesis proposed significant variations in grit levels among mothers from diverse cultural backgrounds. The results of the study, as indicated by the ANOVA analysis, support this hypothesis. The p-value (0.002) was below the conventional alpha level of 0.05, indicating that there is a statistically significant difference in grit levels among the cultural groups. This finding aligns with previous research emphasizing the role of culture in shaping individuals' characteristics and coping mechanisms (Matsumoto & Juang, 2016). It suggests that cultural factors may indeed influence how mothers of disabled children exhibit grit in their caregiving roles. The significant variations observed in grit levels among different cultural groups highlight the need for culturally sensitive support services tailored to the unique challenges faced by these mothers. Moreover, it echoes the work of Apsara, et al., (2021), who stressed the importance of understanding cultural diversity within Pakistan to provide effective support for mothers of disabled children. While Western studies have identified the central role of grit in maternal caregiving, our research underscores the need to consider cultural influences in shaping the expression of grit among mothers in Pakistan. The intricate web of cultural norms and practices within Pakistan is evidently a crucial determinant in how grit is exhibited by mothers in their caregiving journey. As such, this research reaffirms the significance of accounting for cultural diversity when designing support systems and interventions aimed at assisting mothers of disabled children. While grit remains a central attribute for mothers caring for disabled children, our findings emphasize that its expression is influenced by the cultural backgrounds of these mothers. This underscores the importance of tailoring support services and policies to accommodate the diverse cultural contexts within Pakistan. H2: There will be significant variations in the levels of resilience among mothers from different cultural backgrounds in Karachi, Pakistan. The second hypothesis proposed

significant variations in resilience levels among mothers from different cultural backgrounds. However, the results of the ANOVA analysis did not support this hypothesis, with a p-value (0.092) above the conventional alpha level of 0.05. This suggests that there is no statistically significant difference in resilience levels among the cultural groups. These findings contrast with some previous research that has highlighted cultural variations in resilience (Ungar, 2012). However, they also align with other studies that found no significant cultural differences in resilience levels (Renner & Salem, 2009). The absence of significant differences in resilience may indicate that mothers from various cultural backgrounds in Karachi employ similar adaptive strategies in response to the challenges of caregiving for disabled children. Ungar (2012) emphasized the significance of cultural variations in resilience, pointing out that cultural contexts can shape the ways in which individuals develop and demonstrate resilience. However, our results suggest that in the specific context of Karachi, Pakistan, resilience may transcend cultural boundaries. This is in line with the work of Renner & Salem (2009), who found that in certain situations, individuals from diverse cultural backgrounds exhibit similar levels of resilience due to shared environmental stressors. These findings hold implications for support services and interventions aimed at mothers of disabled children. While cultural sensitivity remains vital in addressing the diverse needs of mothers, it's important to recognize that resilience may be a universal trait that transcends cultural differences in the face of the common challenges associated with caregiving for disabled children. This suggests the importance of fostering a sense of resilience in all mothers, regardless of their cultural backgrounds, while still acknowledging and respecting the influence of culture on other aspects of their caregiving experiences. Our research indicates that while cultural variations may influence resilience in other contexts, in Karachi, Pakistan, mothers of disabled children may share a common resilience that helps them cope with the challenges they face.

6. CONCLUSION

Present study contributes to our understanding of the experiences of mothers of disabled children in diverse cultural contexts in Karachi, Pakistan. While grit levels vary significantly among cultural groups, resilience appears to be a common trait. Cultural factors play a crucial role in shaping caregiving experiences, highlighting the importance of culturally tailored support services and interventions. Further research should explore the complex interplay between cultural factors, grit, and resilience to provide a clearer understanding of how cultural diversity influences maternal caregiving for disabled children.

7. RECOMMENDATIONS

Given the significant variations in grit levels among mothers from different cultural backgrounds, it is imperative to develop culturally sensitive support services and interventions. These services should consider the cultural norms, values, and beliefs that shape caregiving practices within specific cultural groups. Professionals working with mothers of disabled children should be trained to understand and respect these cultural nuances.

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