



The Role of Gender, Age and Education in the Emotional Responses of Parents of Children with Developmental Challenges

Naeema Arzeen¹, Saima Arzeen², Roomana Zeb³, Muttahid Shah⁴

¹ Department of Psychology, University of Peshawar, Pakistan.

² Department of Psychology, University of Peshawar, Pakistan.

³ Department of Psychology, University of Peshawar, Pakistan.

⁴ M.Phil. Scholar, Department of Psychology, Muslim Youth University, Islamabad, Pakistan.

Email: muttahidshah@yahoo.com

ARTICLE INFO

Article History:

Received: October 20, 2023

Revised: December 17, 2023

Accepted: December 18, 2023

Available Online: December 19, 2023

Keywords:

Positive Experience

Negative Experience

Developmental Challenges

Demographics Variables

Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

This research endeavor sought to explore how demographic factors such as gender, age, and parental education influence the emotional experiences of parents' of children with developmental challenges. Utilizing a cross-sectional research design and purposive sampling, data were gathered from various regions in KP (Peshawar) and Punjab (Wah Cantt, Islamabad, and Jhelum). The study comprised a total of 150 participants, with an equal gender distribution (75 fathers and 75 mothers). Data collection tools included a consent form booklet, a demographic information sheet, and the Scale of Positive and Negative Experience. The study's findings unveiled that fathers of children with disability reported more positive experiences as compared to mothers. Additionally, it was observed that older parents exhibited a broader spectrum of both positive and negative emotions as compared to their younger counterparts. Furthermore, significant differences in negative emotions were identified based on educational levels. The results suggest that mothers may be susceptible to heightened negative emotional experiences, possibly due to their extensive caregiving responsibilities, in contrast to fathers who often participate more in social and recreational activities. These findings underscore the importance of implementing targeted supportive services for mothers by mental health professionals. Addressing negative emotional states is crucial in mitigating potential psychological, physical, and emotional challenges associated with the caregiving role. This study enhances our comprehension of emotional dynamics concerning demographics, emphasizing the necessity for tailored interventions to assist parents in navigating the distinctive challenges they encounter.

© 2023 The Authors, Published by iRASD. This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License

Corresponding Author's Email: muttahidshah@yahoo.com

1. Introduction

Emotions wield a profound and multifaceted influence across various dimensions of human existence, enriching our lives with layers of meaning and significance (Ekman, 1999). Their crucial function lies in enabling the expression of our innermost thoughts and feelings, serving as a fundamental component of interpersonal communication (Keltner & Gross, 1999). Within the family unit, encompassing parents, siblings, grandparents, and other close relatives, the expression of emotions plays a critical role in addressing basic needs and nurturing relationships (Fivush, 2007). Ekman (1999) asserts that emotions are integral to the human experience, contributing nuanced layers of meaning to our lives beyond individual introspection. They play a vital role in interpersonal dynamics, as emphasized by Keltner and Gross (1999), serving as a medium for conveying inner thoughts and feelings to others. In the familial sphere, emotional expression takes on heightened importance, acting as a linchpin for fulfilling basic

needs and cultivating meaningful relationships (Fivush, 2007). As highlighted by Ekman (1999); Fivush (2007); Keltner and Gross (1999), emotions serve as the threads that intricately weave the fabric of our existence, adding nuance and significance to the human journey especially parenting (parent – child bond). Positive emotional exchanges, including warmth, love, and responsiveness, contribute significantly to the development of a secure attachment between parents and children, forming the bedrock for a child's sense of security and trust (Bowlby, 2008). While the journey into parenthood is undoubtedly fulfilling, it often brings with it elevated expectations for one's children. However, receiving a diagnosis that suggests a misalignment between these expectations and the reality of a child's condition can trigger profound emotional distress for parents (Diener et al., 2009; Heifetz & Dyson, 2017; Romanchuk, 2008). Learning about their children's illnesses evokes a spectrum of emotional responses from parents, ranging from denial, rejection, and disappointment to self-blame and despair (Hartley et al., 2010). These early emotional reactions may have lasting consequences on the personalities and overall well-being of both parents and children (Severenchuk, 2007). Regrettably, individuals with disabilities, encompassing physical, mental, cognitive, or behavioral challenges, may still encounter societal discrimination and unjust treatment even in contemporary cultures. Such discrimination can exacerbate the already formidable challenges faced by disabled children and their families. The presence of developmental challenges in a child can significantly disrupt the familial dynamic, prompting parents not only to concern themselves with the child's health but also to contemplate the potential impact on the routines and self-esteem of their other siblings. As noted by Gohel, Mukherjee, and Choudhary (2011), parents of children with developmental challenges often grapple with both physical and psychological stress, disrupting their daily routines. The complexities of managing a child's condition and navigating societal biases contribute to the intricate tapestry of challenges faced by families in these circumstances.

Parents raising children with developmental challenges face significant societal and familial pressures, often contending with prevalent stigma (Wong, Mak, & Liao, 2016). Responses to the challenges posed by disability vary among families, influenced by factors such as the nature and severity of the impairment, the child's characteristics, and the overall family structure. Certain parents engage in recreational and constructive pursuits, benefiting from diverse forms of support within their social networks. These positive patterns contribute to a more optimistic perspective on disability, allowing parents to perceive their children as responsibilities rather than burdens (Ravindranadan & Raju, 2008). Conversely, some circumstances expose parents to formidable challenges, encompassing emotional, financial, physical, and psychological hardships. The resultant adverse effects, including anxiety, depression, personality disorders, and other health issues, often lead to diminished self-esteem, inadequate coping mechanisms, a decline in overall well-being, and a compromised quality of life for parents (Wong et al., 2016). Consequently, the experience of raising a child with a disability proves intricate and diverse, significantly influenced by social and emotional variables. Acknowledging the spectrum of reactions and difficulties encountered by parents in these situations is crucial to offering resources and support that enhance both their well-being and that of their children (Eklund, Bäckström, & Tuveesson, 2014).

Caregivers of children with developmental challenges navigate a complex landscape marked by both distinctive joys and challenges. Positive experiences often manifest as achievements, resilience, and close bonds with their children. Conversely, unfavorable encounters may involve stress, social stigma, and difficulties accessing appropriate support. In the intricate realm of parenting, where parents undeniably contribute to the development of children with developmental challenges, there exists a noticeable gap in our understanding of the dynamic interplay between parents' demographic characteristics (such as gender, age, and educational attainment) and the positive and negative experiences they undergo. Theoretical frameworks rooted in developmental psychology underscore the substantial influence of parental attributes on the overall well-being of both parents and children. For instance, Bowlby (2008) attachment theory posits that the nature of parent-child relationships significantly shapes a child's socio-emotional development. Empirical research findings present a mosaic of information, indicating the profound and intricate interplay between parents' individual characteristics and the array of positive and negative experiences they encounter. Zocchetti (2023) study examining the relationship between parental age and coping strategies in families with children with developmental challenges unveils age-related differences in resilience and adaptive approaches. Similarly, research by Jaiswal, Subramanyam, Shah, and Kamath (2018) on psychopathology and

copied strategies in parents of children with developmental challenges suggests that, at a given age, mothers are more susceptible to psychopathological issues such as stress and depression compared to fathers. Moreover, a meta-analysis conducted by Ntinda and Hlanze in 2015 highlights the significant impact of parents' educational backgrounds on their access to specialized resources and support networks, subsequently influencing their experiences in raising children with developmental challenges. The amalgamation of these theoretical perspectives and empirical discoveries underscores the importance of unraveling the intricate connections between demographic factors and the experiences of parenting. The primary goal of the present study is to address the current gap in knowledge by presenting a detailed portrayal of the various narratives shaped by parents. Leveraging both theoretical frameworks and empirical evidence, our aim is to shed light on the intricate intersections of age, gender, and educational attainment with the positive and negative dimensions of their parental experiences. The comprehension of these dynamics holds significance for crafting precise interventions, guiding policy formulation, and cultivating a societal environment marked by heightened empathy and compassion. This research serves as a conduit connecting theoretical concepts with practical realities, enriching our understanding of the intricate terrain involved in caring for children with developmental challenges.

2. Methods

2.1. Objectives

1. To investigate gender differences in negative and positive emotions experienced by parents of children with developmental challenges.
2. To find how age relates with negative and positive emotions among parents of children with developmental challenges.
3. To see how education contributes in positive and negative emotions experienced by parents of children with developmental challenges.

2.2. Hypotheses

1. There will be significant gender differences among mothers and fathers of children with developmental challenges in the use of positive and negative emotions.
2. Age will be correlated with the use of positive and negative emotions.
3. Highly educated parents of children with developmental challenges will score high on positive emotions as compared to less educated children.

2.3. Instrument

Diener et al. (2009) developed the 12-item Scale of Positive and Negative Experience (SPANE) to assess both positive and negative affective experiences through self-reporting. The Positive Experience subscale measures pleasant feelings, while the Negative Experience subscale assesses negative emotions. Scores on the Positive (SPANE-P) and Negative (SPANE-N) subscales range from 6 to 30. By subtracting the negative score from the positive score, SPANE-B scores range from -24 to 24, providing a balanced measure of emotions. Cronbach's alpha values above 0.70, indicating consistent evaluation of the same construct, are considered suitable for research. The SPANE generally demonstrates strong reliability, with alpha values falling within or above the acceptable range, ensuring a robust assessment of both positive and negative affective experiences.

2.4. Sample

The study's total sample encompassed 150 participants, categorized into two gender-based groups: fathers (n=75) and mothers (n=75) of developmental challenges children. These participants were carefully selected from regions in KP (Peshawar) and Punjab (Wah Cantt, Islamabad, and Jhelum). Inclusion criteria mandated the participation of parents of developmental challenges children with mild to moderate impairments. All participating parents belonged to the middle-class demographic, with ages ranging from 21 to 46 years and above, and were residents of urban areas.

2.5. Procedure

For data collection, a purposive sampling technique was employed, utilizing reliable and validated instruments, including the Scale of Positive and Negative Experience, along with a demographic information sheet and a consent form. Initially, permissions were obtained from the heads of special institutes and mainstream schools, including principals and directors, in Peshawar, Wah Cantt, Islamabad, and Jhelum. Subsequently, the respective teachers provided

lists of students and their parents' contact information, with parental consent acquired and a comprehensive explanation of the study's objectives provided. The children's levels of developmental challenges were confirmed using the DSM-V (2013) checklist. Upon the study's conclusion, heartfelt appreciation was extended to all participating parents for their invaluable contributions and feedback. Data analysis involved the application of descriptive statistics, encompassing the computation of frequencies and percentages for demographic variables. Gender differences were assessed utilizing a T-test in SPSS (Version 21).

3. Results

This table presents descriptive for the study variables of Parents of children with Developmental Challenges (n = 150). The data distribution for both Positive Experience (PE) and Negative Experience (NE) appears to be normal, as indicated by skewness values of 0.33 and 0.15, respectively. Similarly, kurtosis values for PE (-0.92) and NE (-1.27) suggest a relatively normal distribution with a moderate degree of flatness. In terms of scale reliability, Cronbach's alpha values are reported. For Positive Experience (PE), the alpha value is 0.84, indicating high internal consistency among the items measuring positive experiences. For Negative Experience (NE), the alpha value is 0.87, suggesting strong internal reliability of the items assessing negative experiences.

Table 1: Descriptives for study variables of Parents of children with Developmental Challenges (n = 150)

Variable	M	S.D.	No of Items	α	Range		Skewness	Kurtosis
					Potential	Actual		
PE	13.21	6.40	6	.84	6-30	6-30	.33	-.92
NE	12.09	5.29	6	.87	6-30	6-24	.15	-1.27

Note. PE= Positive Experience; NE= Negative Experience

Moreover, the range of scores for both PE and NE is reported (6-30 for PE and 6-30 for NE), providing an understanding of the variability in responses. These findings collectively suggest that the data is reliable and normally distributed, providing a robust foundation for further analysis in the study of Parents of children with Developmental Challenges."

Table 2: Gender Differences on Self measure of SPANE Positive and Negative Experience among Parents of children with developmental challenges (n=150)

Subscales	Fathers (n = 75)		Mothers (n = 75)		t(148)	CI 95%			Cohen's d
	M	SD	M	SD		p	LL	UL	
Positive Experience	21.41	4.72	15.92	7.65	4.92	.000	6.98	16.78	.86
Negative Experience	8.86	3.61	12.54	6.72	3.88	.000	3.26	7.63	.68

Note. CI = Confidence Interval; LL= Lower Limit; UL= Upper Limit

Table 2 presents gender differences in self-reported Positive Experience and Negative Experience scores among parents of children with developmental challenges (n = 150). The results indicate significant gender-related mean differences within this parent group. Fathers, on average, reported significantly higher scores on Positive Experience (M = 21.41, SD = 4.72) compared to mothers. This difference is statistically significant ($t(148) = 4.92, p < .01$), with a Cohen's d effect size of 0.86. Conversely, mothers exhibited higher mean scores on Negative Experience (M = 12.54, SD = 6.72) in comparison to fathers, and this difference is also statistically significant ($t(148) = 3.88, p < .01$) with a Cohen's d effect size of 0.68. The confidence intervals for both differences do not overlap with zero, further supporting the robustness of these gender-related distinctions.

Table 3: Correlation between age, positive and negative emotions of parents of children with Developmental challenges (N=150)

Measures	1	2	3
Age	1		
PE	.438**	1	
NE	.387**	.68*	1

Note. **. Correlation is significant at the 0.01 level (2-tailed); *. Correlation is significant at the 0.05 level (2-tailed).

Table 3 illustrates the correlation matrix between age and the emotional experiences (Positive Emotions - PE and Negative Emotions - NE) of parents raising children with developmental challenges (N = 150). The correlation between age and Positive Emotions is statistically significant ($r = .438, p < .01$), indicating a moderate positive association. Additionally, a statistically significant correlation is observed between age and Negative Emotions ($r = .387, p < .05$), suggesting a moderate positive relationship. These findings suggest that, within this parent group, there is a tendency for older parents to report higher levels of positive emotions. Moreover, an increase in age is associated with a slight elevation in negative emotional experiences. It's important to note that these correlations do not imply causation, and other variables may contribute to the observed relationships. Further research is encouraged to explore the nuanced dynamics between age and emotional experiences in the context of parenting children with developmental challenges."

Table 4: Comparative Analysis of Positive and Negative Experiences among highly educated and less educated parents (N=150)

Subscales	Highly educated (Masters)		Less educated (Matric)		t(127)	p	Cohen's d
	M	SD	M	SD			
Positive Experience	18.50	5.53	12.28	6.34	3.72	.001	1.04
Negative Experience	15.00	4.80	11.37	5.31	2.58	.011	0.72

The results presented in Table 4 depict a comparative analysis of positive and negative experiences between highly educated (Masters) and less educated (Matric) parents in a sample of 150 individuals. The data reveal statistically significant differences in both positive and negative experiences. For positive experiences, highly educated parents (M = 18.50, SD = 5.53) reported significantly higher mean scores than their less educated counterparts (M = 12.28, SD = 6.34), $t(127) = 3.72, p = .001, \text{Cohen's } d = 1.04$. This substantial effect size indicates a notable difference in positive experiences between the two groups. Similarly, in the domain of negative experiences, highly educated parents (M = 15.00, SD = 4.80) exhibited significantly higher mean scores compared to less educated parents (M = 11.37, SD = 5.31), $t(127) = 2.58, p = .011, \text{Cohen's } d = 0.72$. While the effect size is smaller than for positive experiences, it still signifies a meaningful distinction in negative experiences between the highly and less educated parent groups.

4. Discussion

This study meticulously examined the intricate interplays among gender, age, and educational background and their impact on emotional states—both positive and negative—within the context of parents raising children with developmental disabilities. Conducted within the specific family dynamics of Pakistani households, the research not only affirms existing findings but also uncovers nuanced processes within this unique environment. The findings presented in Table 2 shed light on an intriguing aspect of the emotional landscape within families raising children with developmental challenges, especially in the context of Pakistani parents. The results align with the central hypothesis, suggesting that fathers tend to report higher levels of positive emotions compared to mothers, irrespective of their children's disability status. This observation is in line with earlier research conducted by (Feldman & Werner, 2002; Olsson & Hwang, 2008), which consistently found that fathers of disabled children commonly express greater levels of well-being than mothers, thus corroborating established findings. One possible reason for this discrepancy in happy emotional experiences could be found in the different roles and coping mechanisms that mothers and fathers employ. According to previous research (Ruble & Dalrymple, 1993), fathers who actively participate in a range of social and work-related activities find opportunities to seek professional assistance and engage in recreational activities. This can lead to a heightened sense of positive. On the other hand, our results support the hypothesis that moms of children with disabilities face higher than average levels of negativity. This is consistent with a larger body of research that links personality traits, mood, brain reactivity, and caregiving obligations to the gender gap (Kring & Gordon, 1998; Nolen-Hoeksema, 2012; Stevens & Hamann, 2012). In Pakistani culture, mothers might be prone to encountering negative emotional states, given their prevalent role as primary caregivers responsible for addressing daily behavioral challenges and meeting their children's basic needs. The ongoing caregiving responsibilities, limited opportunities for external activities, and a lack of diverse support options further compound the challenges faced by mothers. These intricate

dynamics underscore the urgent requirement for targeted interventions and support systems tailored to the unique emotional experiences of both mothers and fathers in the realm of parenting children with developmental challenges.

The second hypothesis of this study explored the correlation between the age of parents raising children with developmental challenges and their expression of both positive and negative emotions. The empirical support obtained from the study's findings facilitates a detailed analysis within the specific context of Pakistani families, considering factors such as social, psychological, and cultural influences. The information presented in Table 3 unmistakably indicates that, when contrasted with younger parents, those who are older and raising children with developmental challenges tend to manifest higher levels of positive emotions. This distinction based on age in emotional expression is a direct outcome of the distinct parenting experiences associated with raising children, particularly those with developmental challenges. Older parents, in response to the intricate challenges of parenthood, often exhibit an enhanced capacity for emotional resilience and the development of adaptive coping strategies. Existing research supports the idea that, as they navigate these challenges and formulate effective coping mechanisms for their children, they are consequently more likely to experience an abundance of positive emotions (Durkin et al., 2008). Moreover, well-established support networks positively influence the emotional well-being of older parents, contributing to an elevated state of positive emotions (Bougher-Muckian, Root, Coogle, & Floyd, 2016). Older parents often possess increased self-confidence and a heightened ability to navigate the emotional aspects of raising a child with developmental challenges due to their accumulated years of parenting experience. Prior research suggests that this heightened experience can mitigate stress levels and foster an overall state of happiness (Green & Baker, 2011; Kurtz-Nelson & McIntyre, 2017). In contrast, younger parents may predominantly depend on peers, extended family, or other support systems as they navigate the intricate terrain of parenting a child with developmental disabilities. It's crucial to recognize that older parents may, at times, experience heightened negative emotions due to the cumulative impact of pressures and evolving roles. Advanced age can bring about limitations in social networks and reduced social interactions, exacerbating feelings of loneliness and negative emotions when grappling with the intricate demands of caring for a disabled child. This situation is particularly pronounced in Pakistan, where traditional caregiving roles intensify caregivers' sense of responsibility and emotional burden (Al-Yagon & Margalit, 2009). As highlighted by Green and Baker (2011), these nuanced findings underscore the importance of age-sensitive interventions that consider the diverse array of emotional experiences within this demographic.

To shed light on the intricate interplay of education, societal factors, and emotional experiences, the third hypothesis of this study explored emotional disparities between well-educated and less-educated parents of intellectually challenged children. As illustrated in Table 4, the study not only confirmed this hypothesis but also uncovered nuanced subtleties. According to the findings, parents with higher education levels, raising children with intellectual disabilities, tend to experience more positive emotions compared to their less-educated counterparts. Comprehending these outcomes necessitates consideration of various factors. Highly educated parents, in addition to heightened positive emotions, benefit from a wealth of information, coping skills, emotional regulation, and extensive social networks (Dunst, Trivette, & Hamby, 2014; Lavee, Sharlin, & Katz, 1996; Lopes & Salovey, 2004; Seltzer, Floyd, Song, Greenberg, & Hong, 2011). Furthermore, higher education is often associated with elevated social status and financial stability, potentially mitigating stress related to financial concerns and positively influencing emotional well-being (HDI, United Nations Development Programme, 2016). Conversely, the study's results, as indicated in Table 4, suggest that highly educated parents of children with developmental challenges also scored high on negative emotions compared to their less educated counterparts. Possible explanations for this phenomenon include heightened expectations, increased awareness of developmental obstacles, and the enduring impact of societal stigma (Culp, Culp, Noland, & Anderson, 2006; Giallo, Roberts, Emerson, Wood, & Gavidia-Payne, 2014; Mitra, Faulkner, Buliung, & Stone, 2014). Furthermore, the educational background and financial status of highly educated parents may contribute to feelings of isolation and lack of support, resulting in negative emotions (Anwer et al., 2022). These results underscore the importance of considering both the positive and negative aspects of education to fully grasp the emotional experiences of Pakistani parents raising children with intellectual disabilities. The findings recognize the benefits and potential drawbacks of the educational and

socioeconomic status of highly educated parents, emphasizing the need for tailored interventions and support systems that address their specific emotional challenges.

4.1. Limitations and Directions for Future Research

Recognizing the valuable insights provided by this study into the emotional experiences of parents across diverse family contexts, it is crucial to acknowledge its inherent limitations. While the cross-sectional research approach adopted in this study offers helpful information, it comes with certain drawbacks. To delve deeper into the dynamic nature of emotional states over time, future studies could benefit from employing longitudinal research designs. This approach would allow for a more nuanced understanding of how emotions evolve in response to various circumstances, capturing fluctuations and trajectories that might be overlooked in a single snapshot (Harkness et al., 2015). It is noteworthy that the study predominantly focused on educated parents with similar socioeconomic backgrounds. While narrowing the scope facilitates in-depth analysis, it introduces the potential for bias. Subsequent studies should consider broadening the participant pool to include parents from diverse socioeconomic backgrounds. Such an approach would yield a more comprehensive understanding of the potential influences of socioeconomic conditions on emotional experiences. Exploring emotional dynamics in a more varied socioeconomic environment would enhance the external validity and generalizability of the findings to a broader population. Furthermore, the cultural context of this study was predominantly urban. To ensure a more inclusive representation of cultural diversity within a nation like Pakistan, future research should expand its scope to encompass various cultural contexts for comparison. Investigating emotional experiences in different cultural settings can enhance the study's cross-cultural validity and contribute to a richer understanding of parental emotions. By employing a diverse cultural lens, researchers can ascertain whether the observed trends hold true across various cultural contexts, thereby improving the generalizability of the study's conclusions. Recognizing the close interplay between emotions and cultural nuances is crucial, and accounting for this variation ensures that the research findings have broader applicability.

5. Conclusion

By delving into the intricate emotional dynamics within families navigating developmental challenges in their children, our research uncovers a poignant narrative demanding swift attention and targeted interventions. The emotional landscape of raising children with special needs emerges as a profound journey significantly shaping individuals' overall well-being. Our findings emphasize the heightened emotional strain, particularly experienced by mothers, underscoring the crucial importance of robust support networks. The exploration of gender-related variations in the emotional states of parents with intellectually disabled children contributes a significant chapter to the existing body of knowledge. Aligning seamlessly with broader data, our results affirm the prevailing trend that fathers generally report higher levels of well-being. Involved fathers, supported by diverse networks, appear to foster a more positive outlook. In contrast, mothers—especially those raising children with disabilities—encounter heightened negative emotions, consistent with established gender differences in emotional responses.

The investigation into the relationship between age and emotional expression adds nuanced layers to our understanding. Older parents, drawing on support networks and years of parenting experience, exhibit heightened levels of happiness and joy. However, it's crucial to recognize instances where individuals may experience strong negative emotions due to evolving responsibilities and accumulated stressors, emphasizing the ongoing need for support systems as parents age. The analysis of emotional experiences among parents with varying educational levels reveals an intriguing paradox. Parents with advanced degrees, equipped with resources and problem-solving abilities, exhibit higher levels of positive emotions. Yet, they also grapple with elevated negative emotions, highlighting the complex interplay between societal pressures and expectations when raising children with developmental challenges. In the absence of adequate support networks, mental health providers become pivotal players capable of crafting tailored interventions to address the specific challenges mothers face in navigating the demands of raising children with special needs. Our research not only contributes to the academic discourse on parental emotions but also advocates for concrete, focused initiatives to enhance the mental health of parents in diverse family situations. While our results illuminate important trends, it is essential to acknowledge the limitations of our research. The use of a cross-sectional research design and the focus on educated parents from comparable socioeconomic

backgrounds may introduce certain biases. Future studies encompassing parents from a diverse range of socioeconomic backgrounds and employing longitudinal methods could provide a more comprehensive understanding of emotional experiences. Moreover, expanding the cultural contexts for comparison beyond metropolitan regions may enhance the cross-cultural validity of our research. These considerations present opportunities for further research to build upon our discoveries and deepen our comprehension of the emotional dynamics in families dealing with developmental challenges.

References

- Al-Yagon, M., & Margalit, M. (2009). Positive and negative affect among mothers of children with intellectual disabilities. *The British Journal of Development Disabilities*, 55(109), 109-127.
- Anwer, S., Riaz, S., Jawa, R., Naseer, M. A., Memon, A. G., Nazir, H., & Janjua, M. M. (2022). Awareness, Knowledge, and Satisfaction of physiotherapy treatment in cerebral palsy children's parents.: Awareness, Knowledge, and Satisfaction of Physiotherapy Treatment. *Pakistan BioMedical Journal*, 305-308. doi:<https://doi.org/10.54393/pbmj.v5i5.417>
- Bougher-Muckian, H. R., Root, A. E., Coogle, C. G., & Floyd, K. K. (2016). The importance of emotions: The socialisation of emotion in parents of children with autism spectrum disorder. *Early Child Development and Care*, 186(10), 1584-1593. doi:<https://doi.org/10.1080/03004430.2015.1112799>
- Bowlby, J. (2008). *Attachment: Basic books*.
- Culp, A. M., Culp, R. E., Noland, D., & Anderson, J. W. (2006). Stress, marital satisfaction, and child care provision by mothers of adolescent mothers: Considerations to make when providing services. *Children and Youth Services Review*, 28(6), 673-681. doi:<https://doi.org/10.1016/j.childyouth.2005.06.009>
- Diener, E., Wirtz, D., Biswas-Diener, R., Tov, W., Kim-Prieto, C., Choi, D.-w., & Oishi, S. (2009). New measures of well-being. *Assessing well-being: The collected works of Ed Diener*, 247-266. doi:https://doi.org/10.1007/978-90-481-2354-4_12
- Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2014). Relationships between family risk and opportunity factors and parent and child functioning. *Journal of Educational and Developmental Psychology*, 4(2), 10.
- Durkin, M. S., Maenner, M. J., Newschaffer, C. J., Lee, L.-C., Cunniff, C. M., Daniels, J. L., . . . Zahorodny, W. (2008). Advanced parental age and the risk of autism spectrum disorder. *American journal of epidemiology*, 168(11), 1268-1276. doi:<https://doi.org/10.1093/aje/kwn250>
- Eklund, M., Bäckström, M., & Tuveson, H. (2014). Psychometric properties and factor structure of the Swedish version of the Perceived Stress Scale. *Nordic journal of psychiatry*, 68(7), 494-499. doi:<https://doi.org/10.3109/08039488.2013.877072>
- Ekman, P. (1999). Basic emotions. *Handbook of cognition and emotion*, 98(45-60), 16.
- Feldman, M. A., & Werner, S. E. (2002). Collateral effects of behavioral parent training on families of children with developmental disabilities and behavior disorders. *Behavioral Interventions: Theory & Practice in Residential & Community-Based Clinical Programs*, 17(2), 75-83.
- Fivush, R. (2007). Maternal reminiscing style and children's developing understanding of self and emotion. *Clinical Social Work Journal*, 35, 37-46. doi:<https://doi.org/10.1007/s10615-006-0065-1>
- Giallo, R., Roberts, R., Emerson, E., Wood, C., & Gavidia-Payne, S. (2014). The emotional and behavioural functioning of siblings of children with special health care needs across childhood. *Research in developmental disabilities*, 35(4), 814-825. doi:<https://doi.org/10.1016/j.ridd.2014.01.017>
- Gohel, M., Mukherjee, S., & Choudhary, S. (2011). Psychosocial impact on the parents of mentally retarded children in Anand District. *Healthline*, 2(2), 62.
- Green, S., & Baker, B. (2011). Parents' emotion expression as a predictor of child's social competence: children with or without intellectual disability. *Journal of Intellectual Disability Research*, 55(3), 324-338. doi:<https://doi.org/10.1111/j.1365-2788.2010.01363.x>
- Harkness, K. L., Bagby, R. M., Stewart, J. G., Larocque, C. L., Mazurka, R., Strauss, J. S., . . . Kennedy, J. L. (2015). Childhood emotional and sexual maltreatment moderate the

- relation of the serotonin transporter gene to stress generation. *Journal of Abnormal Psychology*, 124(2), 275. doi:<https://doi.org/10.1037/abn0000034>
- Hartley, S. L., Barker, E. T., Seltzer, M. M., Floyd, F., Greenberg, J., Orsmond, G., & Bolt, D. (2010). The relative risk and timing of divorce in families of children with an autism spectrum disorder. *Journal of Family Psychology*, 24(4), 449. doi:<https://doi.org/10.1037/a0019847>
- Heifetz, M., & Dyson, A. (2017). Mindfulness-based group for teens with developmental disabilities and their parents: A pilot study. *Mindfulness*, 8, 444-453. doi:<https://doi.org/10.1007/s12671-016-0616-7>
- Jaiswal, S. V., Subramanyam, A. A., Shah, H. R., & Kamath, R. M. (2018). Psychopathology and coping mechanisms in parents of children with intellectual disability. *Indian journal of psychiatry*, 60(3), 312. doi:https://doi.org/10.4103/psychiatry.IndianJPsychiatry_259_17
- Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition & Emotion*, 13(5), 467-480.
- Kring, A. M., & Gordon, A. H. (1998). Sex differences in emotion: expression, experience, and physiology. *Journal of personality and social psychology*, 74(3), 686. doi:<https://doi.org/10.1037/0022-3514.74.3.686>
- Kurtz-Nelson, E., & McIntyre, L. L. (2017). Optimism and positive and negative feelings in parents of young children with developmental delay. *Journal of Intellectual Disability Research*, 61(7), 719-725. doi:<https://doi.org/10.1111/jir.12378>
- Lavee, Y., Sharlin, S., & Katz, R. (1996). The effect of parenting stress on marital quality: An integrated mother-father model. *Journal of family issues*, 17(1), 114-135. doi:<https://doi.org/10.1177/019251396017001007>
- Lopes, P. N., & Salovey, P. (2004). Toward a broader education: Social, emotional, and practical skills. *Building academic success on social and emotional learning: What does the research say*, 76-93.
- Mitra, R., Faulkner, G. E., Buliung, R. N., & Stone, M. R. (2014). Do parental perceptions of the neighbourhood environment influence children's independent mobility? Evidence from Toronto, Canada. *Urban Studies*, 51(16), 3401-3419. doi:<https://doi.org/10.1177/0042098013519140>
- Nolen-Hoeksema, S. (2012). Emotion regulation and psychopathology: The role of gender. *Annual review of clinical psychology*, 8, 161-187. doi:<https://doi.org/10.1146/annurev-clinpsy-032511-143109>
- Olsson, M. B., & Hwang, C. P. (2008). Socioeconomic and psychological variables as risk and protective factors for parental well-being in families of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 52(12), 1102-1113. doi:<https://doi.org/10.1111/j.1365-2788.2008.01081.x>
- Ravindranadan, V., & Raju, S. (2008). Emotional intelligence and quality of life of parents of children with special needs. *Journal of the indian academy of applied psychology*, 34, 34-39.
- Romanchuk, O. (2008). Disabled child in the family and society. *Lviv: Litopys*.
- Ruble, L. A., & Dalrymple, N. J. (1993). Social/sexual awareness of persons with autism: A parental perspective. *Archives of sexual behavior*, 22, 229-240. doi:<https://doi.org/10.1007/BF01541768>
- Seltzer, M. M., Floyd, F., Song, J., Greenberg, J., & Hong, J. (2011). Midlife and aging parents of adults with intellectual and developmental disabilities: Impacts of lifelong parenting. *American journal on intellectual and developmental disabilities*, 116(6), 479-499. doi:<https://doi.org/10.1352/1944-7558-116.6.479>
- Severenchuk, H. (2007). Psychological correction work with mothers of children from special needs. *Pathologists*, 3, 14-15.
- Stevens, J. S., & Hamann, S. (2012). Sex differences in brain activation to emotional stimuli: a meta-analysis of neuroimaging studies. *Neuropsychologia*, 50(7), 1578-1593. doi:<https://doi.org/10.1016/j.neuropsychologia.2012.03.011>
- Wong, C. C., Mak, W. W., & Liao, K. Y.-H. (2016). Self-compassion: A potential buffer against affiliate stigma experienced by parents of children with autism spectrum disorders. *Mindfulness*, 7, 1385-1395. doi:<https://doi.org/10.1007/s12671-016-0580-2>
- Zocchetti, G. (2023). PARENT-CHILD ATTACHMENT WHEN PARENTING A CHILD WITH A DISABILITY.