# **Educational Administration: Theory and Practice**

2024, 30(09), 845-852 ISSN: 2148-2403

https://kuey.net/ Research Article



# Exploring The Relationship Between Parental Stress Levels and Emotional Regulation Difficulties in Hearing-Impaired Children

Aks E Noor1\*, Prof. Dr. Nidhi Agarwal2

Citation: Aks E Noor, et al. (2024). Exploring The Relationship Between Parental Stress Levels and Emotional Regulation Difficulties in Hearing-Impaired Children, Educational Administration: Theory and Practice, 30(09), 845-852

Doi: 10.53555/kuey.v30i9.9676

ARTICLE INFO	ABSTRACT			
ARTICLE INFO	This study explores the impact of parental stress on emotional regulation difficulties in hearing-impaired children. The goals are to identify various levels of parental stress, investigate its relationship with emotional regulation problems, and explore trends between different levels of stress. Quantitative correlational research design was employed using the Parental Stress Scale (PSS) and the Difficulties in Emotion Regulation Scale (DERS) to measure the parent-child dyads. Findings indicate a strong and positive relationship ( $r = 0.971$ , $p < 0.001$ ), with children whose parents have high levels of stress showing higher difficulties in emotional regulation ( $M = 103.05$ , $SD = 11.84$ ) than children of moderate ( $M = 74.42$ , $SD = 9.36$ ) and low-stress parents ( $M = 54.62$ , $SD = 9.81$ ). These results point out the acute necessity for programs designed to reduce parental stress, formal training in emotional regulation, and greater access to			
	mental health and special education services. It is suggested that counseling,			
	peer support groups, and policy-driven interventions be established to			
	strengthen parental well-being and child emotional development.			

# 1.1 Introduction

There are difficulties in raising a kid with hearing loss, and these difficulties can have a big effect on the wellbeing of the parents. According to research, parents of children with hearing loss frequently deal with higher levels of stress than parents of children without disabilities (Zaidman-Zait, 2008). Both the child's emotional development and the parent-child connection may suffer as a result of this increased stress (Pipp-Siegel & Yoshinaga-Itano, 2002).

As per the definition of emotion regulation, it is essential that the children manage and respond appropriately to emotional experiences; otherwise, the child will suffer in social and emotional development (Crandall et al., 2015). Children with hearing impairment are more likely to suffer from behavioral and emotional difficulties because of the barriers in communication and social isolation (Stevenson et al., 2015). The quality of parenting, including the ability to manage stress, plays a significant role in fostering effective emotional regulation in children (Rutherford et al., 2015).

Understanding the relationship between parental stress and children's emotional regulation is important, particularly regarding hearing impairment. The purpose of this study is to investigate the various levels of parental stress, to analyze the relationship between parental stress levels and difficulties in emotional regulation among hearing-impaired children, and to compare difficulties in emotional regulation among hearing-impaired children whose parents have different levels of stress.

#### 1.2 Research Objectives

The following are the research objectives for the study:

- 1. to explore the different levels of parental stress
- 2. to study the correlation of parental stress with emotional regulation difficulty in hearing-impaired children.
- 3. to compare emotional regulation difficulties among hearing-impaired children of parents with high, moderate, and low stress levels.

<sup>&</sup>lt;sup>1\*</sup>PhD Scholar, Faculty of Social Sciences and Humanities, Lincoln University College, Malaysia, aenoor.phdscholar@lincoln.edu.my; aksenoor@iub.edu.pk

<sup>&</sup>lt;sup>2</sup>Principal Supervisor, Faculty of Social Sciences and Humanities, Lincoln University College, Malaysia, dr.nidhi@lincoln.edu.my

### 1.3 Research Questions

- 1. What are the different levels of parental stress experienced by parents of hearing-impaired children?
- 2. What is the relationship between parental stress levels and emotional regulation difficulties in hearing-impaired children?
- 3. Do hearing-impaired children of parents with high stress levels exhibit greater emotional regulation difficulties compared to those with moderate or low parental stress?

# 1.4 Null Hypotheses

- 1. Ho1: There is no significant variation in the levels of parental stress
- 2. Ho2: There is no significant relationship between parental stress levels and emotional regulation difficulties in hearing-impaired children.
- 3. Hos: There is no difference among emotional regulation difficulties among hearing-impaired children of parents with high, moderate, and low stress levels.

# 1.5 Significance of Study

This study is significant as it examines how parental stress affects emotional regulation in hearing-impaired children, providing insights for psychologists, educators, and policymakers. Hearing-impaired children often struggle with emotional regulation due to communication barriers (Stevenson et al., 2015). These issues can be made worse by high parental stress, which can affect the child's general wellbeing (Rutherford et al., 2015). Parents may improve their coping mechanisms and eventually aid in their children's emotional development by being aware of the various stress levels.

This study might draw attention to the need for parental mental health support programs in Pakistan, where there is a lack of knowledge and funding for special needs schooling. The children with hearing loss, when not properly guided by financial status, society embarrassment, and no availability for specialized education, the parent gets stressed. In this research work, the focus will be to support better counselor services and support systems and also ensure an inclusive policy in the area of education so that it can improve the outcomes for both the parent and the child.

# 1.6 Literature Review

Children with hearing impairments tend to exhibit a lot of behavioral issues because their communication systems tend to go wrong with a multitude of the parent and child situations. Many parents of hearing-impaired children live under severe stresses: the child's stigmatization, their limited income, and uncertainty about their child's future (Hintermair, 2006). In particular, these stresses will influence the child's health, affecting the capacity for the children to learn how to control their emotions. Emotional regulation is generally defined as a set of behaviors that recognize emotion, label it appropriately in terms of social norms, and suppress it (Gross, 1998). Due to impaired auditory input, children with hearing impairments cannot decode emotional signals from voice, tone, or discourse. This would leave them with severe emotional regulation challenges (Ketelaar et al., 2017). As an example, caregivers tend to experience stress and may exhibit behavior problems or anxiety. Based on studies, it is suggested that children with parental stress tend to be emotionally ill-adjusted in the development of a sense of control over their behavior (Anthony et al., 2005). According to Noor, Agarwal, and Saifi (2023), the academic performance of the children depends upon their emotional maturity; emotional regulation therefore assumes a greater significance for the development of children. Emotional control is, thus, especially difficult for children with a hearing loss, for the children have to learn these from their parent by parental modeling and the cues of sight. It has been shown that parental stress correlates positively with behaviors like aggressiveness, avoidance, and withdrawal, all of which result from failing to learn emotional regulation skills in children (Rieffe et al., 2011). Besides, some of the parenting styles are likely to have farreaching effects on the children's temperamental features, which might influence emotional regulation, according to Akhter, Iqbal, and Noor (2021).

In children with hearing loss, there is a rather complicated and multifaceted relationship between parental stress and children's problems of emotional regulation. The children of the stressed mothers, according to Pipp-Siegel, Sedey, and Yoshinaga-Itano (2002), are less emotionally adaptive. The second research of a similar nature to the current one done by Javed, Noor, and Ramzan (2022) highlighted personality traits and self-esteem in college students while noting the lasting impact that the emotional development of an individual in the earliest years has on psychological well-being. Furthermore, Fida et al. (2021) emphasized the connection between parental emotional intelligence and improved emotional regulation in kids, indicating that treatments aimed at addressing parental stress management may have a favorable effect on kids' results.

# 1.6.1 Theoretical Perspectives on Parental Stress and Emotional Regulation i. Bronfenbrenner's Ecological Systems Theory

Environmental circumstances heavily influence parental stress and its repercussions on children. Bronfenbrenner's Ecological Systems Theory (1979) suggests that a child's development is impacted by relationships within several environmental levels, from family and school to community and larger societal structures. At the microsystem, parental stress operates directly on emotional regulation in children through day-to-day interactions and emotional modeling. As parents feel chronically stressed, lack patience, or experience emotional exhaustion, they themselves can have problems in giving emotional support and so their children would be exposed to increased emotional dysregulation (Bronfenbrenner, 1979).

At the exosystem level, external sources of stress including economic hardship, inability to access specialized education, and restricted social support further augment parental stress. Akhter, Iqbal, and Noor (2021) identified that socioeconomic status mediates the development of emotional regulation, which indicates the manner in which environmental adversity exacerbates parenting stress and, as a result, child outcomes. Research indicates that parents with greater financial and social capital feel less stress, enabling them to give more emotional support to their children (Levinger & Alhuzail, 2018).

# ii.Lazarus and Folkman's Stress and Coping Theory

Parental stress is also shaped by how parents cope with challenges. Lazarus and Folkman's Stress and Coping Theory (1984) explains that individuals respond to stress through adaptive or maladaptive coping strategies. Parents of hearing-impaired children often experience chronic stress due to the demands of caregiving, communication difficulties, and social isolation (Zafar & Khan, 2014). The way parents regulates their stress directly impacts their parenting behaviors and, in turn, influences their child's emotional regulation.

Research indicates that adaptive coping strategies—like social support seeking, formal parenting practices, and training for emotional regulation—are associated with improved child outcomes (Zaidman-Zait et al., 2016). Parents using emotion-focused coping, mindfulness, and professional counseling are likely to display positive parenting behavior, which helps improve children's emotional regulation skills (Safari et al., 2022). In contrast, parents who use avoidance coping or suppression of emotions can inadvertently help bring about increased emotional dysregulation in their offspring (Farahmand & Adibsereshki, 2024).

# iii.Gross's Process Model of Emotion Regulation

Gross's Process Model of Emotion Regulation (1998) sheds light on how children who are deaf acquire emotional regulation techniques. Emotional regulation encompasses various processes such as situation selection, cognitive reappraisal, and response modulation (Gross, 2014). Since children who are deaf receive few auditory cues, they tend to use nonverbal communication, visual information, and parental feedback to establish emotional regulation processes (Eyuboglu & Mercan, 2021).

Parental stress is central to this process. When parents are highly stressed and emotionally dysregulated, children are likely to develop maladaptive patterns of emotional regulation, including frustration, impulsivity, or social withdrawal (Holt et al., 2020). Parents who demonstrate healthy emotional regulation strategies, including problem-solving, self-awareness, and positive emotional expression, lead to enhanced emotional regulation ability in their children (Mortazavi Kiyasari et al., 2023).

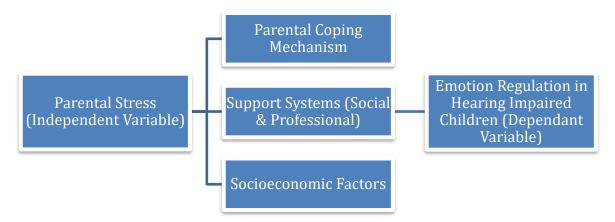
#### 1.6.2 Cultural and Social Support Factors in Pakistan

In Pakistan, where resources and awareness regarding children with special needs are often limited, addressing parental stress becomes particularly important. Akhter, Iqbal, and Noor (2021) pointed out that the cultural stigma surrounding disability adds to the stress experienced by parents, leading them to become socially withdrawn and less engaged with intervention services. Additionally, families face challenges due to restricted access to specialized education, financial assistance, and professional counseling (Zafar & Khan, 2014). To reduce parental stress and foster children's emotional growth, these findings emphasize the importance of culturally appropriate support systems, including parent education classes, community mental health programs, and easily accessible special education services.

#### 1.6.3 Conclusion

Recent studies emphasize the impact of parental stress on emotional regulation, particularly children with hearing impairments. Gross's Process Model of Emotion Regulation, Lazarus and Folkman's Stress and Coping Theory, and Bronfenbrenner's Ecological Systems Theory are some of the theoretical frames for understanding how parental stress might affect the ability of children to emotionally regulate themselves. Research highlights coping strategies, parents' emotional intelligence, and social support as possible avenues to mitigate such effects. Children may gain much more from reduced parental stress through various interventions in the form of planned parent education or easy access to support. This study seeks to provide a detailed understanding of the effects of different levels of parental stress on the emotional regulation of hearing-impaired children in Pakistan and provide evidence-based recommendations for parental well-being.

#### 1.7 Theoretical Framework



#### Theoretical Foundations lay on:

- Bronfenbrenner's Ecological Systems Theory
- Lazarus & Folkman's Stress and Coping Theory
- Gross's Process Model of Emotion Regulation

# 1.8 Methodology of the Study

# Research Design of the Study

This research uses a quantitative, correlational design to explore the relationship between parental stress and emotional regulation in children with hearing impairments. Data is collected through surveys completed by parents and their hearing-impaired children, allowing for statistical analysis of how parental stress impacts the emotional regulation of these children.

#### **Population:**

This study was designed to access hearing-impaired children aged 10 years and older studying in special education institutions of Bahawalpur District Punjab, Pakistan, and their parents. Sample and Sampling

To ensure representativeness and statistical significance, the study selected eighty parent-child pairs. Inclusion criteria for participants were selected from special education schools serving children with hearing impairment through purposive sampling.

#### Research Tools of the Study

The study is based on previously validated research instruments to measure parental stress and emotional control among children with hearing disabilities. Parental Stress Scale (PSS): The PSS is a widely validated scale for the assessment of parental stress level (Berry & Jones, 1995) with a good Cronbach's  $\alpha = 0.83$ . The DERS has a Cronbach's alpha value over 0.80

#### Data Collection and Ethical Consideration

We used a structured survey to gather information, ensuring that participants remain anonymous and that we follow ethical standards. Before collecting any data, we obtained permission from parents and approval from special education institutions. We promised participants that their information would be kept confidential and that taking part in the survey was entirely their choice, while children completed the DERS to measure emotional regulation difficulties. Where necessary, question items in the questionnaires were explained to participants in simpler language or using sign language. The data collection process was conducted in a controlled environment within the school setting to ensure consistency.

#### Data Analysis Procedure

The collected data was computed using both descriptive and inferential statistics. Descriptive statistics, including mean, standard deviation, and frequency distributions, summarized the participants' responses. Pearson correlation analysis was conducted to determine the strength and direction of the relationship between parental stress and children's emotional regulation difficulties. Further test was applied to compare emotional regulation scores among children of parents experiencing different stress levels (low, moderate, high). All statistical analyses were conducted using SPSS, ensuring rigor and accuracy in interpreting results.

### Limitations and Delimitations of the Study Limitations:

- 1. The study is limited to self-reported data from the participants, which may be influenced by social desirability bias.
- 2. The sample consists only of hearing-impaired children and their parents from Bahawalpur District.
- 3. The study captures the data at a single point of time.
- 4. The study focuses on parental stress but does not consider other potential influences on children's emotional regulation, such as peer relationships, school environment, or genetic factors.

#### **Delimitations:**

- 1. The study only focuses on only male and female hearing-impaired children.
- 2. The study is delimited to children aged 10 and above.

# 1.9 Results and Interpretation

Table 1 Levels of Parental Stress

Parental Stress level	Number of Parents (N=80)	Percentage (%)					
Low Stress (18-41)	34	42.5%					
Moderate Stress (42-65)	26	32.5%					
High Stress (66-90)	20	25.0%					

Table 1 indicates that parental stress levels among parents of hearing-impaired children vary significantly. Among the 80 participants, 42.5% reported low stress levels, while 32.5% experienced moderate stress, and 25.0% fell into the high-stress category. Thus, the first null hypothesis that 'there is no significant variation in the levels of parental stress" is rejected. The minimum number of parents in each stress category was 20, while the maximum was 34, suggesting that stress distribution among parents is somewhat balanced but leans towards the lower and moderate stress ranges. Parents experiencing high stress levels may struggle with emotional regulation, support provision, and coping mechanisms, potentially affecting their child's emotional regulation abilities. Understanding these stress variations can help in designing targeted interventions to support parents in managing stress and improving overall child outcomes.

Table 2 Correlation between Parental Stress & Difficulties in Emotional Regulation

Variables	r	p-value
Parental Stress & Difficulties in Emotion Regulation	0.971	0.000

*Note*: N = 80. Significance level: p < 0.01

Pearson correlation analysis was used to establish the relationship between the variables. The result indicates a strong positive correlation between Parental Stress Scale (PSS) scores and Difficulties in Emotion Regulation Scale (DERS) scores (r = 0.971, p < 0.001, N = 80). This finding suggests that higher parental stress is significantly associated with greater emotional regulation difficulties in hearing-impaired children. Since p < 0.01, the correlation is highly significant, meaning we reject the null hypothesis (Ho2). This confirms that as parental stress increases, emotional regulation difficulties in hearing-impaired children also increase. These results further emphasize the importance of stress management interventions for parents to enhance emotional stability in their children.

Table 3 Emotional Regulation Difficulties across Parental Stress Levels

Parental Stress Levels	N	M (DERS Score)	SD
Low Stress	34	54.62	9.81
Moderate Stress	26	74.42	9.36
High Stress	20	103.05	11.84
Total	80	77.36	21.82

Where N = 80, M = Mean Score, SD = Standard Deviation

The results indicate that hearing-impaired children of parents with high stress levels exhibit significantly greater emotional regulation difficulties compared to those with moderate or low parental stress. The mean DERS score for children whose parents have low stress levels was M = 54.62 (SD = 9.81), while children of moderate-stress parents had a higher mean score (M = 74.42, SD = 9.36). The highest emotional regulation difficulties were observed in children of high-stress parents (M = 103.05, SD = 11.84), indicating that as parental stress increases, emotional regulation difficulties in children also increase. Thus, Ho3 is rejected as emotional regulation difficulties vary between different levels of parental stress.

#### 2.0 Discussion

This study investigated how parental stress influences emotional regulation difficulties in hearing-impaired children. The study's findings provide important perspectives into how parental psychological well-being affects children's ability to manage emotions, reinforcing existing research both globally and in Pakistan. The study highlights the critical need for parental support systems to mitigate stress and promote healthier emotional development in hearing-impaired children.

The results in Table 1 indicate that parental stress among parents of hearing-impaired children varies significantly, with 42.5% of parents reporting low stress, 32.5% experiencing moderate stress, and 25.0% falling into the high-stress category. These findings align with other research showing that parents of disabled kids feel more stress due to financial issues, social judgment, and communication barriers. Studies by Zafar and Khan in 2014, along with Akhter, Iqbal, and Noor in 2021, say parents of special needs children face significant mental suffering, especially in areas with limited resources. The absence of professional counseling, social inclusion opportunities, and specialized education support adds to their stress. Additionally, a study by Noor, Agarwal, and Saifi in 2023 highlights a strong link between children's emotional maturity and parents' mental health. This underscores the importance of support programs for parents to reduce stress and promote healthy child development.

The second objective aims to explore the relationship between the parental stress and emotional regulation. The study found a strong positive correlation (r = 0.971, p < 0.001) between parental stress levels and emotional regulation difficulties in hearing-impaired children, confirming that higher parental stress is associated with greater difficulty in emotional regulation. This supports previous global research that highlights the role of family stress in shaping child emotional outcomes (Pipp-Siegel, Sedey, & Yoshinaga-Itano, 2002; Quittner et al., 2010). Javed, Noor, and Ramzan (2022) explored personality traits and self-esteem in university students and found that early childhood emotional regulation significantly impacts self-esteem and social adjustment later in life. Like the findings of present study, it suggests that the children of highly stressed parents may struggle with emotional self-regulation, leading to long-term psychological challenges. Furthermore, Fida et al. (2021) highlighted that parental emotional intelligence plays a crucial part in moderating the effects of stress on child development, emphasizing the importance of stress management and emotional intelligence training for parents.

Globally, studies by Weber et al. (2023) and Holt et al. (2020) have demonstrated that children of highly stressed parents exhibit higher levels of emotional dysregulation, impulsiveness, and social withdrawal, particularly in special needs populations. These findings reinforce the conclusion that targeted parental interventions, such as counseling and support networks, can significantly improve emotional regulation outcomes in children.

Table 3 containing descriptive statistics revealed a clear trend showing that as parental stress increases, emotional regulation difficulties in children also increase. Children of low-stress parents had the lowest emotional regulation difficulties (M = 54.62, SD = 9.81), whereas children of moderate-stress parents exhibited greater difficulties (M = 74.42, SD = 9.36), and children of high-stress parents struggled the most (M = 103.05, SD = 11.84). Parents of special needs children, particularly in low-resource settings, experience significant psychological distress. These parents' stress levels are raised by the dearth of professional counseling resources, social inclusion possibilities, and specialized educational assistance (Akhter, Iqbal, and Noor, 2021). Furthermore, because mothers often take on most caregiving duties, prior research indicates that maternal stress is typically higher than paternal stress (Holt et al., 2020). Families with less income and limited access to services often experience higher levels of stress (Weber et al.,

2023). To help these families, we can introduce programs that educate parents and provide mental health services within the community. These efforts can strengthen family bonds, creating a more supportive environment for children's emotional development.

# 2.1 Conclusion

The study shows that when parents are more stressed, their children, particularly those with hearing impairments, struggle more with managing their emotions. To help these children, we need to provide emotional regulation training and stress management therapies and develop family support programs. Access to mental health services and educational support for parents of special needs children is crucial. This aligns with research from both Pakistan and other countries. Future research should explore how parental stress affects children over time and find ways to reduce these negative effects to ensure that children with hearing impairments can grow emotionally in a healthy way.

# 2.2 Implications and Recommendations

The findings emphasize the importance of helping parents reduce stress through financial aid, support groups, and psychiatric care. Training programs that teach parents and children how to control their emotions can greatly improve emotional wellbeing. Schools, therapists, and lawmakers must collaborate to set up support systems for parents of children with hearing impairments, fostering a positive learning environment.

Future research should investigate how parental stress affects children's emotional growth over the years. It could also study other factors that help reduce stress, such as coping strategies, parental emotional intelligence, and strong family support. Evaluating programs aimed at reducing stress for parents with disabled children is crucial. Additionally, this research could include other specific groups with unique needs to enhance policies and deepen our understanding of family and child stress-related interactions.

In conclusion, the level of parental stress significantly influences how children with hearing impairments handle their emotions. Through support interventions, awareness campaigns, and policy reforms, it is possible to significantly advance parental welfare alongside child emotional development, which would create a healthier and more adaptive family context.

#### References

- 1. Akhter, N., Iqbal, S., & Noor, A. E. (2021). Impact of parents' authoritative style on personality traits of children: A case study of elementary class students in Pakistan. Journal of Elementary Education, 29(2), 37-50.
- 2. Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behaviour and preschoolers' social competence and behaviour problems in the classroom. Infant and Child Development, 14(2), 133-154.
- 3. Berry, J. O., & Jones, W. H. (1995). The Parental Stress Scale: Initial psychometric evidence. Journal of Social and Personal Relationships, 12(3), 463-472.
- 4. Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Harvard University Press.
- 5. Calderon, R., & Greenberg, M. T. (2011). Social and emotional development of deaf children: Family, school, and program effects. In M. Marschark & P. E. Spencer (Eds.), The Oxford handbook of deaf studies, language, and education (Vol. 1, pp. 188-199). Oxford University Press.
- 6. Crandall, A., Deater-Deckard, K., & Riley, A. W. (2015). Maternal emotion and cognitive control capacities and parenting: A conceptual framework. Developmental Review, 36, 105–126.
- 7. Farahmand, H., & Adibsereshki, N. (2024). The effectiveness of emotion regulation training on reducing parental stress and improving emotion regulation in children with hearing impairment. Journal of Deaf Studies and Deaf Education, 29(1), 45-56.
- 8. Fida, F., Akhter, N., Iqbal, S., Noor, A., & Salamat, L. (2021). Role of emotional intelligence in career advancement of university teachers. Humanities & Social Sciences Reviews, 9(2), 616-624. https://doi.org/10.18510/hssr.2021.9257
- 9. Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. Journal of Psychopathology and Behavioral Assessment, 26(1), 41-54.
- 10. Gross, J. J. (2014). Emotion regulation: Conceptual and practical issues. In J. J. Gross (Ed.), Handbook of emotion regulation (2nd ed., pp. 3-20). Guilford Press.
- 11. Guralnick, M. J. (2000). Early intervention for children with intellectual disabilities: An update. Journal of Applied Research in Intellectual Disabilities, 13(3), 177-190.
- 12. Hintermair, M. (2006). Parental resources, parental stress, and socioemotional development of deaf and hard of hearing children. Journal of Deaf Studies and Deaf Education, 11(4), 493-513.
- 13. Javed, R., Noor, A. E., & Ramzan, F. (2022). Relationship of personality traits Hexaco and self-esteem in university students. Journal of Social Sciences Review, 2(4), 107-113.
- 14. Ketelaar, L., Rieffe, C., Wiefferink, C. H., & Frijns, J. H. (2012). Does hearing lead to understanding? Theory of mind in toddlers and children with cochlear implants. Journal of Pediatric Psychology, 37(9), 1041-1050.
- 15. Noor, A., Agarwal, N., & Saifi, I. L. (2023). A comparative analysis of emotional maturity and academic performance among secondary school students. International Journal of Emerging Trends in Education, 1(2), 22-29.
- 16. Pipp-Siegel, S., & Yoshinaga-Itano, C. (2002). Parenting stress among parents of children with hearing loss: The impact of child and family characteristics. Journal of Deaf Studies and Deaf Education, 7(1), 1–17.
- 17. Rieffe, C., Netten, A. P., Broekhof, E., & Veiga, G. (2015). The role of the mother-child interaction in the development of emotion regulation: A longitudinal study in hearing and deaf children. Development and Psychopathology, 27(4pt1), 1237-1247.
- 18. Rutherford, H. J. V., Wallace, N. S., Laurent, H. K., & Mayes, L. C. (2015). Emotion regulation in parenthood. Developmental Review, 36, 1–14.

- 19. Safari, M., & Hemmati, F. (2022). The effect of emotion regulation training on the emotional and behavioral problems of children with hearing impairment. International Journal of Pediatric Otorhinolaryngology, 154, 111000.
- 20. Stevenson, J., Kreppner, J., Pimperton, H., Worsfold, S., & Kennedy, C. (2015). Emotional and behavioural difficulties in children and adolescents with hearing impairment: A systematic review and meta-analysis. European Child & Adolescent Psychiatry, 24(5), 477–496.
- 21. Zafar, S., & Khan, M. N. (2014). Stress, anxiety and depression among parents of physically disabled children. Annals of Pakistan Institute of Medical Sciences, 10(1), 20-23.
- 22. Zaidman-Zait, A. (2008). Parenting stress and coping: Mothers and fathers of deaf and hearing children. American Annals of the Deaf, 153(4), 412–424.