

**RELATIONSHIP OF EMOTIONAL DISTURBANCE IN  
CHILDREN WITH HEARING IMPAIRMENT AND  
STRESS IN MOTHERS**

**Shafaq Ahmed\*** and  
**Sarwat Jahan Khanam**  
Institute of Clinical Psychology  
University of Karachi

**ABSTRACT**

*The objective of this study is to evaluate the association of emotional disturbance in children with hearing impairment and level of stress in their mothers. Sample was comprised of 50 hearing impaired children, equally distributed gender wise, between age ranges of 5 to 12 years selected from different special education centers; and their mothers (n=50). Entire sample belong to middle socioeconomic status and approached through the authorities of the special school. Emotional disturbance was evaluated through Scale for Assessing Emotional Disturbances (Epstein & Cullinan, 1998) and stress among mothers was explored through Parenting Stress Index (Abidin, 1995). Pearson Product Moment Coefficient Correlation suggest significant relationship between emotional problems of hearing impaired children and stress in their mothers ( $r=.412$ ,  $p<.01$ ). Besides the fact that one cannot suggest the causative factor in this relationship, findings are consistent with the previous researches indicating that along with hearing impairment there are associated psychological, emotional and behavioral problems that are contributory factors to aggravated level of stress in mothers.*

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**Keywords:** Emotional disturbance, Stress, Hearing impairment

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\*Correspondence Address Shafaq Ahmad, Research Officer, Institute of Clinical Psychology, University of Karachi (email: shafaq\_ahmad17@hotmail.com)

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### **INTRODUCTION**

The child's inability to register knowledge through his auditory ways definitely causes significant lacking in his information processing. Emotional disturbances and psychological problems have been associated characteristics of hearing impairment. Due to society's sole dependence on communication, children with hearing impairment lack in social reciprocity. Consequently their social, emotional development lags behind and causes behavior problems. The vulnerability to develop emotional problems in children with hearing impairment increases in cases where they have hearing parents and peers with whom they cannot interact to explain their ideas. Along with the prevalence of emotional disturbances in children with hearing impairment, their hearing parents also tend to be at increased risk of having emotional as well as psychological problems. Stress is the commonly reported and studied factor which parents experience most frequently in raising a child with hearing impairment. Child's behavior problems cause mothers to experience negative feelings and stress as a parent. Consequently they also have multiple emotional problems and often displace their anger towards children, that in turn causes more emotional problems in children and this cycle goes on.

Emotional competence in children with hearing impairment is affected by their ability to understand the causative factors behind emotions (Reiffe & Terwogt, 2002). Brubaker and Szakowski (2000) analyzed the works of Greenberg and Kusche (1989), Schnitjer and Hirshoren (1981), Tavormina, Boll, Dunn, Loscomb and Taylor (1981) and Watson, Henggeler, and Whelan (1990), suggesting that deaf children tend to be vulnerable to develop behavior problems, specifically externalizing or conduct problems.

Disability not only affects the individual but also their family. As Seligman (1991) asserts that "A disability in one family member affects the entire system and in turn affects the disable person" (p. 27). Rearing an exceptional child within a family not only affects or disturb the structure of the family but also affects mental health of its members specifically, the psychological well being of parents (Esdaile & Greenwood, 2003). Causing and aggravating marital conflicts, separation, negative communication, financial problems, depression, hopelessness, anger, embarrassment, and suicidal tendencies could be the resultant factors of mental health issues and marital problems among parents of children with disabilities (Mehrabi, 2006).

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Prevalence of behavior or emotional problems in children increases when their mothers also experience any psychological strain related or unrelated to child's disability. Abidin, Jenkins and Mc Ghaughey (1992) examined the relationship between Parenting Stress Index scores and behavioral problems in children. He found that Parent domain, Child domain and Life Stress found to be significant domains in predicting subsequent behavioral problems including conduct disorder, social aggression, attention problem, anxiety and withdrawal. Studies suggest that positive correlation exist between parenting stress and behavior-emotional problems in children with hearing impairment (Adams & Tidwell, 1989; Holden & Ritchie, 1991; Hagborg, 1989).

The cause and effect relation studies suggest that parenting stress affects child's behaviors negatively. Anthony, Anthony, Glanville, Naiman, Waanders, and Shaffer (2005) found that parents who had stress were less nurturing, had low expectation and were stricter towards their children. Effects of parental stress were found beyond home and causing adjustment problems among children in school. In addition, children also had internalizing and externalizing behaviors.

Mother's perception about child's characteristics alters when they experience psychological problems. In a detailed study, Prior, Glazner, Sanson, and Debelle, (2006) collected data from mothers of children with hearing impairment. Mothers who scored higher on anxiety, depression and overall problems when measured through General Health Questionnaire, rated their children with more difficult temperament.

Quittner, Barker, Cruz, Snell, Grimley, Botteri, and the CDaCI Investigative Team (2010) concluded the studies of Crnic and Low (2002), Hintermair (2006), and Lederberg and Everhart (2000) proved that increased parental stress lead to poorer social and emotional development and higher levels of behavior problems in deaf and hard of hearing children.

Considering the above mentioned literature it was hypothesized that there will be a positive relationship between maternal stress and emotional problems in children with hearing impairments.

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### METHOD

#### *Participants*

Participants of the study included 50 children and their mothers. These children were known case of hearing impairment irrespective of the type of impairment. The hearing impaired children were selected from deaf sections of special education schools to ascertain their diagnosis. Children with other co morbid disorders were not selected in sample i.e. children with mental retardation, Attention Deficit Hyperactive disorder, Cerebral Palsy or any other psychological as well as physical disorders. The ages of children ranged from 5 to 12 years. Entire sample was drawn from middle socioeconomic status to ensure the homogeneity.

Mothers of the same children, who were selected for the study, were included in the study. The sample was controlled on the basis of their educational level of minimum intermediate, i.e. the minimum requirement to respond to the measures being used, married and middle socioeconomic status. Widow, divorced and separated mothers were not selected to maintain homogeneity.

#### *Measures:*

#### **Demographics**

Demographic information was taken related to age, gender, education, birth order, and socioeconomic status of children and their mothers.

#### **Parenting Stress Index (PSI):**

Parenting Stress Index (PSI) is a measure to assess stress of parents while rearing children of age range from 1 month to 12 years old. It is developed by Abidin (1995). It is comprised of three main domains: *Child domain, Parent domain and Life Stress*. Most of the items on child and parent domain are responded on 5 point scale by circling Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (DA), and Strongly Disagree (SD). Some of the items are responded on different format by phrasing “For next statement choose your responses from the choices 1 to 5. Life Stress domain is responded on Yes or No options. The computed Coefficients of normative sample ranged from .70 to .83 for the subscales of child domain and from .70 to .84 for subscales of parent

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domain. Overall reliability coefficients for two domains and Total Stress scale were .90 or larger that proved high level of internal consistency.

### **Scale for Assessing Emotional Disturbance:**

Scale for Assessing Emotional Disturbance (SAED) developed by Epstein and Cullinan (1998). It is a rating scale that is used to understand emotional and behavioral disorders of children and adolescents with age range from 5 to 18 years who might meet the criteria for emotionally disturbed Education Disabilities. There are 8 open ended questions given to note child's athletic, academics, social, family and community strengths. SAED is a reliable scale and its average Alpha Coefficient of subscales exceeds .75.

### ***Procedure:***

The entire sample was drawn from Karachi. Selected schools were approached from the complete list of special schools for hearing impaired children in Karachi.

Consent was taken from the authorities of schools. Consent was also taken from mothers and they were assured that all the information they provide will be kept confidential and will be used for study purpose only. They were given right to withdraw at any time during administration of the measure if they wished to. A demographic form was filled that included child's age, gender, grade level, socioeconomic status, residential area, number of siblings, birth order, type of hearing impairment, prevalence and type of physical disability in sibling of that child, parent's age, education, profession and duration of marriage. After demographic form Scale for Assessing Emotional Disturbances, and Parenting Stress Index were administered.

### ***Scoring and Statistical Analysis:***

Statistical Package for Social Sciences (SPSS, v12.0) was used to analyze data statistically. Pearson Product Moment Coefficient Correlation was calculated to measure the significance of the relationship between parenting stress and emotional disturbance.

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### RESULTS

**Table 1**  
*Demographic information of children*

Groups	Gender	N	Age		Birth Order			
			<i>M</i>	<i>SD</i>	first	middle	last	Only
Hearing Impaired children	Male	25	8.9	2.196	9	14	2	0
	Female	25	8.5	1.938	5	11	9	0

**Table 2**  
*Demographic information of mothers (n=50)*

Variables	Number
Education	
Intermediate	21
Graduate	20
Postgraduate	9
Profession	
Housewife	45
Working	5
Family structure	
Nuclear	34
Joint	16

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**Table 3**  
*Relationship of stress in mothers with emotional disturbance in children*

Variables	r	Significance
Overall Emotional Disturbance	.41*	.01
<b>Subscales</b>		
Inability to Learn	.297*	.05
Relationship Problems	.077	.05
Inappropriate Behavior	.506*	.01
Unhappiness or Depression	.235	.01
Physical Symptoms and Fear	.322*	.05

## DISCUSSION

Result shows that there is significant relationship exist between emotional problems of children with hearing impairment and stress in their mothers ( $r=.412$ ,  $p<.01$ ). The interplay between parental and children's characteristics constitute the nature of the interaction among parents and children. Same phenomenon operates in the families of deaf children. Likewise, parental psychological problems, for example, stress tend to induce or exacerbate behavior and emotional problems in deaf children. Toth (n.d) studied 14 students and their parents in a pre and post-test for the conduction of a social communication skills program for the deaf children and their parents. She found low self-esteem in deaf children and high level of stress in parents. Author gathered data from school record and evaluated that parents had received help to reduce existing problem between parent child interactions and voiced their apprehension related to depression, aggression, and actual and covert harm to self or others in children. Nine families received counseling for the reduction of problems in parents and children. One out of twelve students committed suicide at home who had received services for the harm to self or others.

The interplay of the parental stress and emotional problems is complex to make judgment about what causes the other. It can be either the case that child's

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emotional problems cause parental stress or vice versa. Parents have tendency to reduce their expectations from a child with hearing impairment. This lack of confidence on the part of parents inhibits child's potential and makes it difficult for him to interact in society. Ultimately, behaviors of children with hearing impairment are considered to be immature and emotionally delayed due to tendency of lower expectations.

Family has been viewed as the central place from where a child's communication, emotional and cognitive development. Number of literature suggest that parents who had higher levels of stress generally have children who experience and display problems in their children, thus, parental stress seems to be an important factor behind the child development. Hintermaire (2006) found negative association between parental stress and socio-emotional problems in deaf children. Pipp-Seigel, Sedey, and Yoshinaga-Itano (2002) stressed the importance of parent child interaction; higher stress in parents is linked to behavior problems in children.

Successful coping by mothers has been found to be associated as predictor of decreased behavior problems in children. Calderon and Greenberg (1993) found that mothers who were successful in acquiring strategies to cope with the stress, had children with higher degree of emotional sensitivity, reading competence, and problem solving skills, they also exhibit low impulsivity, better cognitive flexibility and social competence.

Webster-Stratton (1990) linked the parental experience and rearing practices. He found a close relationship between parental stress and maladaptive ways of parenting that is punishments, discipline, and constraints. In this context, Schlesinger and Acree (1984) pointed out that inflexible, meddling, and disobliging parenting styles are linked to poor adjustment among children with hearing impairment. Further studies suggest that inappropriate communication between parent and child that are shortfalls in parent's responsiveness and social communication, irrational and unclear demands and expectations are associated with behavior problems in deaf children (Brubaker & Szakowski, 2000). Quittner et al. (2010) explored that content specific stress was more prevalent in parents of deaf children as compared to parents of hearing children. Behavior problems were higher in deaf children as evaluated by both, parent's reporting and through observation.

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There are studies suggesting positive correlation between parenting stress and behavior problems including conduct disorder, social aggression, attention problem and anxiety withdrawal among children with hearing impairment (Abidin, Jenkins & McGhaughey, 1992; Holden, & Ritchie, 1991), parental stress and poorer social and emotional development and higher levels of behavior problems in deaf and hard of hearing children (Crnic & Low, 2002; Hintermair, 2006; Lederberg & Everhart, 2000), and between inconsistent parenting and behavior problem in children (Brubaker & Szakowski, 2000), and between maternal stress and teacher's reported immaturity in children (Hagborg, 1989). More the parents perceive children as misbehaving the more will be the parental stress in hearing parents of hearing impaired children (Adams, & Tidwell, 1989). Summing up, children with hearing impairment have emotional problems that are manifested in various ways. Consequently, their mothers also experience significant stress level. This interplay creates dysfunctional mother-child interaction causing significant positive association between child's emotional problems and their mother's stress.

### ***Limitations and Recommendations***

This study was conducted on a small sample size that belonged to middle socioeconomic status, thus the findings cannot be generalized among different socioeconomic status. All children were taken from different special schools and the children from mainstream schools have been excluded. Future study should be focused on the inclusion of sample from heterogeneous socioeconomic status and educational setups.

### ***Conclusion***

Hearing impairment, as a sensory deficit hampers a child's functioning thus increases its vulnerability to develop emotional, behavioral and psychological problems. These problems are manifested in various areas of child's general functioning. As a result, parents generally, and mothers specifically, become more affected due to increased burden in rearing that child. Limited resources, maladaptive coping and inadequate awareness about child's disability and its management generate stress among mothers. In turn, the parent-child interaction is affected negatively causing more problems in children and in mothers as well.

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