School Social Behavior of Hearing-Impaired Adolescents from Public and Private Schools

Sobia Bashir^{*} Muhammad Naveed Riaz** Jawwad Muhammad Shujaat** Tehmina Saqib*

Abstract

The present study purports to measure the school social behavior of hearing-impaired adolescents from public and private schools. It was hypothesized that hearing-impaired adolescents from private school are likely to have better school social behavior as compared to hearing-impaired adolescents from public school. For this purpose, School Social Behavior Scale (Ismail, 2002) was used to measure social competence and antisocial behavior. Hearingimpaired adolescents (N = 110) were taken from public and private schools. Findings indicated significant mean differences in school social behavior between hearing-impaired adolescents of public and private schools. Moreover, results revealed significant differences across gender, and hearing levels of hearing impaired adolescents. Mild hearing impaired adolescents scored significantly higher on social competence as compared to severe hearing impaired adolescents who scored significantly higher on anti-social behavior. Mild hearing impaired adolescents scored significantly higher on school social behavior. Hearing-impaired boys scored significantly higher on antisocial social behavior as compared to hearing-impaired girls. Findings are pretty insightful in understanding the role of level of hearing impairment, gender, public and private school system in school social behavior among hearing-impaired adolescents.

Keywords: Mild, Moderate, Severe and Profound Hearing Impairment, School Social Behavior, Social Competence, Antisocial Behavior

^{*} Qauid-i-Azam University Islamabad

^{**} University of Sargodha, Sargodha

Introduction

Educational institutions in general and schools in particular provide are an important place for students to act out their competencies and enjoy their relationships. Early years of life play a vital role in the development of social skills of adolescents. The social experiences in schools leave enduring imprints on social life of the students (Bursuch, & Asher, 1996). Adolescents with impairment in general and hearing-impaired adolescents in particular face numerous difficulties in school life and related scenarios (Moeller, Tomblin, Yoshingaga-Itano, Connor, & Jerger, 2007). Development of social skills, peer relationships, and academic performance of the students is extremely influenced by hearing impairment (Moeller, 2007). In order to cope with such hardships, school system plays a central role because such students need special attention and care. Schools play a vital role in developing the social skills of the adolescents.

Social skills generally refers to the abilities to understand, manage, and express the social and emotional aspects of one's life in a way that enables the successful management of life tasks such as learning, forming relationships, solving everyday problems, and adapting the complex demands of growth and development (Caldarella & Merrell, 1997). It includes impulsivity control, self-care, self and others awareness (Schloss, 1990). Social skills are considered as behaviors that enhance friendship, peer acceptance, and other positive relational outcomes (Ladd, 1999). Social skills include showing interest in others, asserting needs, communicating effectively, and showing consideration and sympathy. They begin developing at birth and continue to develop throughout the course of childhood and adolescence (Matsy & Schwab, 2006).

The degree to which students are able to establish and maintain satisfactory interpersonal relationships, gain peer acceptance, establish and maintain friendships, and terminate negative or pernicious interpersonal relationships defines social competence and predicts adequate long-term psychological and social adjustment (Gresham, Sugai, & Horner, 2001). Individual's circle of friends can support his or her development of social competence by (1) learning how to interact with people in a manner that he can accept and respond to positively, (2) helping to teach him social skills, and (3) letting other people know that they are individual's friends and that developed many positive qualities. Nobody develops social competence or learns social skills in isolation. And nothing overcomes negative relational schemas better than positive peer interaction (Frederickson & Turner, 2003).

School social behavior is described as an international conduct in which in individual behaves by keeping in view the audience in a given setting. The audiences are the individuals with whom an individual interacts in daily life activities. An adolescent with social behavior perceives the interacting people as thinking and perceiving persons who exhibit morality who rationally behave are their actions and reactions carry rational meanings. The individual also believes that the behaviors of the interacting people are predictable and he or she set expectations regarding other's actions in the specific scenarios. Individuals exhibiting social behavior manifest an intention to invoke in other self-certain intentions and experiences (Rummel, 1999).

The academic success of the deaf and hard of hearing students is directly influenced the school social behavior (Horner, 1999). Similarly, a good deal of literature on school social behavior these effective practices among students with disabilities studying in general education system (Lewis, Sugai, & Colvin, 1998). Beside this, school factors that encourage appropriate school behavior among **students** with disabilities include adequate resources, administrative support, enough time availability for joint planning by teachers and special education experts to enhance the adoptability, and offering refresher courses to the teachers in the general education system after specific periods of time (Janney, Snell, Beers, & Raynes, 1995).

School social behavior is a two dimensional construct. The broad categories of school social behavior include social competence and antisocial behavior. Social competence is viewed as an individual's ability to act effectively and properly in various social scenarios (Chen, 2000). Social competence is a compilation of many interrelated components, which jointly work for successful social interactions. Effective social skills and ability to develop and maintain constructive relationships are examples of the different elements, which together form social competence (Odom, McConnel, & McEvoy, 1992).

Antisocial behavior is not instantaneous and arbitrary in nature, instead it remains intact in the long run resulting in multiple problems including academic, familial, social, and adjustment related issues (Robins, 1996). The antisocial behavior can be further classified into two broader categories including overt antisocial behavior and covert antisocial behavior. The distinction between overt aggression and covert antisocial behavior (e.g., stealing, lying, and truancy) has a long psychometric history (Quay, 1998). A bipolar dimension emerged with one end consisting of such acts as arguing, attacking, hitting others, fighting, and threatening (overt antisocial behavior) and the other pole comprising such clandestine activities as violence, fire setting, lying, cheating, stealing, and truancy (covert behavior) (Johnson, Wilson, & Douglas, 2004).

McMahon (1994) illustrates that physical deficits also create risks for the development of antisocial behavior. In special children with physical impairment, a study on diagnosis, assessment and treatment of externalizing problems revealed multiple disruptive behaviors like aggression and suspiciousness. The researchers attributed these behaviors as causes of their physical disability. Similarly, children and adolescents with hearing impairment exhibit different sorts of antisocial behaviors. Inability to maintain friendships and failure to maintain healthy relations with class fellows are among the prominent antisocial tendencies of the hearing impaired children and adolescents. They frequently involve in damaging, malicious, and destructive activities (Merrell, 2003).

Along with such shortcomings, researchers have identified adolescents who are hearing-impaired have language and communication skills, regardless of the degree of hearing loss (Remmel, & Peters, 2009). Therefore, with the help of special education, not only individuals with mild and moderate loss, but also with severe and even profound loss can be improved on oral communication, interpersonal and academic skills, and reduced aggressive behaviors (Nomani, as cited in Naz, 2001). Results of the study on the effects of social skills and social behaviors of hearingimpaired adolescents in different special school settings indicated that students improved in facilitative schools and having social problem-solving skills, especially in making comprehensible steps implied in the solution of interpersonal problems (Paul & Jackson, 1993). Similarly, mild and moderate hearing-impaired students exhibited better academics and social-competence than severe and profound impaired. Severe and profound displayed excessively aggressive behavior in classroom settings (Frustenberg & Doyal, 1994). This indicates that severity of hearing loss significantly contributes to social competence and antisocial behavior. Beside this, environmental factors, degree of hearing loss, hearing aids, and teacher attention and attitude also significantly affected the child's behavior (Satapathy, 2000).

Ahlberg (2000) discovered that adolescents with severe and profound hearing impairment exhibit less academic skills due to their severe hearing impairment. Beside academic deficits, wide variety of discrepancies in social skills is also observed. The most prominent deficiencies included acquisition deficit (never learned it), performance deficit (learned it but cannot or will not do it), fluency deficit (does not do it very well or in all contexts), at risk of disruptive behaviors (vulnerable for delinquency), aggression and hostility (Gresham, Sugai, & Horner, 2001). If the expectations for social competence are not met, the result usually involves discipline or management problems. These are the other types of anti-social behavior. As environmental factors induce an impact on human beings and the development of desirable and undesirable characteristics in them, types of schooling strongly influence children's achievements, management skills and interpersonal skills (Nunes & Pretzlik, 2001).

Due to a wide range of environmental and biological factors, the partial of full decrease in understanding sounds is characterized as hearing impairment (Grieve, 2003). Hearing disabled students can be classified into two broad categories including deaf and hard of hearing. The classification of deaf is based on the inability to understand the speech not only through the ears alone but also with the help of hearing aids (Brill, MacNeil, & Newman, 2000). As far as the normal hearing is concerned, the ability to hear sounds in the range of 0–25 decibels (dB) is classified as normal hearing. Hearing impaired individuals are classified into four categories including mild, moderate, severe, and profound. This classification is based on the degree of severity is hearing loss respectively. Another classification of hearing impairment is based on the use of ears while listening sounds. Individuals using one ear are known as unilateral whereas individuals using both years are described as bilateral. The degree of loudness is used to measure the severity of hearing loss. Decibels are used as standards to estimate the degree of loudness. Decibels are based on the assumption that before being detected by an individual, a sound must attain (Burton, Goldberg, & Tiburon, 1999). According to Grieve (2003), on the basis of the decibels, hearing impaired individuals can be classified into following categories:

- 1. Mild, in which a child hears, sounds from 26–40 dB. Speech and conversation are usually unaffected but distant sounds may be difficult to hear.
- 2. Moderate, in whom a child hears sounds from 41–70 dB. The ability to form sounds and hear normal conversation is affected.
- 3. Severe, in which a child hears, sounds from 71–90 dB. The child requires a hearing aid to hear conversations.
- 4. Profound, in which a child can only hear, sounds above 90 dB. A hearing aid may help but the child will not be able to articulate words normally.

Frostad and Ahlberg (2000) identified the variables that influence the hard of hearing and deaf students. The most important variables were reported as background of the student, past experiments, factors related to parents, teachers and school. Researcher—while comparing the hearing-impaired students from theelementary, secondary, and high schools—found that hard of hearing and deaf children from elementary and high classes exhibited healthier psychosocial adjustment. Along with the class-related differences, use of hearing aids, modes of communication, academic achievement, and environmental factors were also instrumental in determining psychosocial adjustment among hard of hearing and deaf students.

In the recent years, special education and training has received much attention in dealing with special children. Adoyo (2004) discovered that improved academic skills, appropriate emotional adjustment, and increased social competence were the resultant outcomes of the training and special education. Beside these positive outcomes, aggression level of the students receiving training and special education was also decreased. In Pakistan, education system can be classified into two major segments including public school system and private school system. Public schools are funded and administratively controlled by the Government of Pakistan. These are purely non-profit organizations in which necessary facilities are not available as compared to their private counterparts. Private schools, on the other hand, are the educational institutions developed by local and foreign investors in Pakistan. These schools provide sufficient facilities to their students (Sultana, 1993).

The prominent role of school social behavior is observed during the periods of later childhood and early adolescence when students takes social initiatives and associate themselves with multiple social groups. Social behaviors learned in these years of life determine the social behaviors of students in the long run. Thus imprints of their social behaviors in the coming years reside in the early social experiences at school. Cognitive tasks, academic skills, interpersonal skills and self-management skills of the students in these years are greatly dependent upon the school related variables including learning techniques and teaching methods. Thus deficits in these abilities are attributed to the inappropriate schooling. Along with school related factors, the personal factors like life style, socio-economic status, and modern facilities availability also influence the degree of effective growth of these abilities (Siperstein & Parker, 2008).

School climate comprising of superior qualities influences the intellectual abilities and social behaviors of the students (Eccle, 1996). Major objective of the present study was to examine the school social behavior among hearing-impaired adolescents. Previous research observed negative aspects in special students, major as social isolation and adjustment problems and do not observed their improvements and impact of school system, which plays most important role in their positive and negative behaviors (Satapathy, 2000). For the present study, following hypotheses were formulated:

Ho₁ Hearing-impaired adolescents of private schools exhibit better school social behavior as compared to hearing-impaired adolescents of public schools.

- Ho₂ The mild and moderate hearing-impaired adolescents exhibit better social competence as compared to severe and profound hearing-impaired adolescents.
- Ho₃ The mild and moderate hearing-impaired adolescents show less antisocial behavior as compared to severe and profound hearing-impaired adolescents.
- Ho₄ Hearing-impaired boys score higher on antisocial behavior than hearing impaired girls.



Conceptual Framework

Figure: Schematic presentation of the role of sector of education, levels of hearing impairment, and gender in school social behavior among hearing impaired adolescents

Method of Study

The present study was a cross-sectional survey research carried out to investigate the school social behavior among adolescents belonging to public and private school with mild, moderate, severe and profound hearing impairments. Similarly, the study examined gender differences in anti-social behavior.

Participants

In the present study, purposive sampling technique was employed to collect data from special hearing-impaired public and private schools. The sample (N = 110) consisted of hearing-impaired adolescents girls (n = 50) and boys (n = 60). From private school were (girls = 25, boys = 30). The hearing-impaired girls from public school were (n = 25) and boys were (n = 30). They were students of class 9th (n = 62) and 10th (n = 48) from special hearing-impaired public and private schools. The

sample was selected from two schools of Rawalpindi and Islamabad. These schools are exclusively established for special children with disabilities. Thus the criterion for the admission of these students is disability not academic background or intellectual abilities. Teachers who had rated these adolescents were those who had taught them for the last one year. The teachers rated the school social behavior because of the scale requirement and they could better evaluate their behavior in the classroom or in the school behavior. The school administration provided the information regarding the adolescents with four levels of impairment.

Measure

Urdu version of School Social Behavior Scale (SSBS) was used in the present study (Ismail, 2002). It is used for Elementary and secondary age students. It was used with adolescent students. The School Social Behavior Scale consists of 65 items with major subscales Social Competence (32 items) and Antisocial Behavior (33 items). Social Competence constitutes three subscales: Interpersonal Skills, Self-management Skills, and Academic Skills. Antisocial Behavior also contains three subscales: Hostile-irritable, Antisocial-aggressive, and Demanding-disruptive. School Social Behavior Scale is scored with the help of 5-point rating scale. Never was rated as 1, rarely as 2, often as 3, very often as 4, and always as 5. Scores on Social Competence could range from 32 to 160, scores on antisocial fluctuate could from 33 to 165. For the present study, reliability of School Social Behavior Scale was found to be .92 whereas social competence was .98, and antisocial behavior turned out to be .92.

Procedure

The data was collected from public and private schools of hearing-impaired students. The School Social Behavior Scale was completed by class teachers of hearing-impaired students. Teachers rated their hearing-impaired students on School Social Behavior Scale. For this purpose, researcher got permission from the respective director of special education and principals of the schools. Teachers who were required to rate the hearing-impaired adolescents; were those who had taught these adolescents for the last one year, and they were aware of each and every adolescent. Teachers were also instructed to respond to each and every item of the scale. The teachers were also thanked for their time and effort. After the collection of the data, appropriate statistical analyses were carried out to test the aforementioned hypotheses. The scale was used in the present study with the permission of the author. Permission regarding the data collection was obtained from the

administration of the targeted schools. Informed consent was obtained from the teachers and the hearing impaired adolescents.

Results

The present study was sought to examine the school social behavior among mild, moderate, severe and profound hearing impaired adolescents belonging to public and private school. Similarly, the study investigated the anti-social behavior among girls and boys. One-Way ANOVA, independent sample *t*-test was applied to test the hypotheses.

Table 1: Descriptive statistics, Alpha reliability coefficients and zero-order correlations for all study variables (N = 110)

Study Variables	М	SD	α	1	2	3
1. Social Competence	118.87	27.84	.97	-	68*	.70*
2. Anti-Social Behavior	59.12	23.30	.95		-	66*
3. School Social Behavior	117.99	20.70	.97			-
* <i>p</i> <.01						

Table 1 shows descriptive statistics, Alpha reliability coefficients and zeroorder correlations for all study variables. The reliability coefficients range from .95 for Anti-Social Behavior Scale to .97 for Social Competence and School Social Behavior Scale. The reliability coefficients show that all the scales have high internal consistency. The results indicate that social competence has significant negative correlation with anti-social behavior (r = -.68, p < .01) and significant positive correlation with school social behavior (r = .70, p < .01). Anti-social behavior has significant negative correlation with school social behavior (r = -.66, p < .01).

Table 2: Means, Standard Deviations and F-values on Social Competence, Antisocial Behavior, and School Social Behavior (N = 110)

Benavior, and School Social Benavior (17 – 110)											
	Mild (<i>n</i> = 28)		Moderate $(n = 25)$		Severe $(n = 27)$		Profound $(n = 30)$				
Variables	М	SD	М	SD	М	SD	М	SD	F	р	Post-Hoc
Social Competence	135.50	20.67	127.22	15.95	113.83	24.13	101.97	31.85	11.101	.000	1>2>3>4
Anti-Social Behavior	50.80	20.67	53.13	15.96	60.48	21.86	26.95	4.62	4.490	.005	1<2<3<4
School Social Behavior	186.30	11.30	180.35	16.99	174.30	16.57	128.45	4.88	3.234	.025	1>2>3>4

Table 2 shows the results of One Way Analysis of Variance for the sub-scales of School Social Behavior Scale with respect to mild, moderate, severe, and profound hearing-impaired adolescents. [1] The results indicate significant mean differences on social competence [$F_{3, 106} = 11.101$, p < .001]. Mild hearing impaired adolescents significantly scored high on social competence (M = 135.50, p < .001) as compared to

46

moderate (M = 127.22, p <.001), severe (M = 113.83, p <.001), and profound hearing impaired adolescents (M = 101.97, p <.001). [2] The results indicate significant mean differences on antisocial behavior [$F_{3, 106} = 4.490$, p <.01]. Severe hearing impaired adolescents significantly scored high on anti-social behavior (M = 60.48, p <.01) as compared to mild (M = 50.80, p <.01), moderate (M = 53.13, p <.01), and profound hearing-impaired adolescents (M = 26.95, p <.01). [3] The results indicate significant mean differences on school social behavior [$F_{3, 106} = 3.234$, p <.05]. Mild hearing impaired adolescents significantly scored high on school social behavior (M = 186.30, p <.05) as compared to moderate (M = 180.35, p <.05), severe (M = 174.30, p <.05), and profound hearing-impaired adolescents (M = 128.44, p <.05).

Table 3: Mean, Standard Deviation and t-values for adolescents from private and public schools and girls and boys on the School Social Behavior Scale (N = 110)

Sr.	Dependent Variable	Independent Variable	Categories of IV	Ν	М	SD	t(108)	р	Cohen's d
1.	School Social Behavior	Educational Sector	Private sector	55	181.51	19.30	2.03	.04	.77
			Public sector	55	173.91	21.77			
2.	Anti-Social Behavior	Gender	Boys	60	63.93	25.03	2.42	.01	.81
			Girls	50	53.34	19.75			

Table 3 shows differences between [1] hearing-impaired adolescents of the public and private sector schools on the school social behavior. Results indicated that significant mean differences between public and private hearing-impaired adolescents on School Social Behavior Scale [$t_{108} = 2.03$, p < .05] indicating higher scores for private school students (M = 181.51, p < .05) as compared to public schools students (M = 173.91, p < .05). [2] Table 3 shows differences between the hearing-impaired boys and hearing-impaired girls on the antisocial social behavior subscale of School Social Behavior Scale. Results indicate significant mean differences between hearing-impaired boys and hearing-impaired girls on antisocial behavior [$t_{108} = 2.42$, p < .05]. Hearing-impaired boys significantly scored high on antisocial social behavior (M = 63.93, p < .01) as compared to hearing-impaired girls (M = 53.34, p < .01).

Discussion

The first hypothesis that adolescents belonging to private sector schools are more likely to display school social behavior as compared to adolescents belonging to public sector schools was supported by the finding. Type of schooling exerts substantial influences on academic achievement and social behavior such delinquency and antisocial behavior (Furrer, 2003). The school social behavior was better in private school students as compared to public school students because the nature of both environments were different. Some important factors were observed in both public and private school settings. Many educators have begun to clearly see that one of the best ways to target social skills education in adolescents is in the classroom (Flook, Repetti, & Ullman, 2005). Many schools have taken on the philosophy that, when schools attend systematically to student's social and emotional skills, the academic achievement of hearing-impaired increases, the incidence of the problems decrease, and the quality of relationships surrounding each student improves (Andersson, Olsson, Rydell, & Christian, 2000).

An alternate explanation of high school social behavior among private schools students can be due to the financial background of the private school students. Private school students are definitely belonging to wealthier families as compared to public school student consequently rich families provides more support to their impaired children. Thus home life and support has great impact on the social behaviors of these students on general and school social behavior in particular. In this regard home environment and social support i.e. support of family, friends and significant others is an important factor to consider while investigating the school social behavior among hearing impaired children. Home and school are two important aspects but the present study solely focused on school. Future research can focus on the role of home life and social support to investigate the issue from a broader spectrum.

Schloss (1991) found that hearing-impairment does not predispose difficulties in social development of hearing-impaired. Special attention from teachers, parents and peers can result in normal social adjustment for the hearing-impaired. Boekaerts (2002) emphasizes that schools' structure should adopt new appropriate effective measures in the environment that will enable students to achieve educational goals, but also fulfillment of their social-emotional goals and needs (e.g. being accepted, having harmonic relations with peers, being awarded for investing effort, being respected, offering help to others).

The second hypothesis indicated that mild and moderate hearing-impaired adolescents would score higher on social competence subscale as compared to severe and profound hearing-impaired adolescents were supported. mildand moderate hearing-impaired adolescents have more ability to interact with others because they have some ability to listen to others, and learn skills better as compare to severe and profound hearing-impaired adolescents (Spencer, Koester, & Meadow-Orlans, 1994). Hard of hearing adolescents (mild and moderate) have better social, emotional, cognitive skills, behavior and appropriate adoption in their social surrounding than sever and profound hearing-impaired adolescents (Snowling, Bishop, Stothard, Chipchase, & Kaplan, 2006). Research has also shown that social competence related to daily routine of social life deaf (severe and profound) have problem in playing active role in the classroom because they may be at more risk of developing behavior problems (Foster, 1998).

Third hypothesis specifying that mild and moderate hearing-impaired adolescents would acquire lower scores on antisocial behavior subscale as compared to severe and profound hearing-impaired adolescents was also supported in the present research. Severe and profound hearing-impaired tend to display inappropriate social behaviors. Experts feel that as language learning is disrupted for severe and profound hearing-impaired, they may be at high risk for the development of behavior problems. Well-established theories of development suggest that language and communication are major causes in the development of behavioral control (Huesmann& Guerra, 1997).

Result of the fourth hypothesis specifying hearing-impaired boys will score higher on antisocial behavior than hearing-impaired girls was supported. Research illustrates that increased impulsivity is one of the major causes of antisocial behavior (Vostanis, Heys, &DuFeu, 1997). Significant correlation was also found between impulsivity and antisocial behavior in hearing-impaired boys and girls and boys showed high level of impulsivity and antisocial behavior as compared to girls (Russo & Beidel, 2000). It has also been observed that boys are more vulnerable than girls to individual, familial, and environmental risk factors for antisocial behavior (Edelbrock, Rende, & Plomin, 1999). Male adolescents have higher rates of risk factors for antisocial behavior, including more hyperactivity, and more peer problems than adolescent girls. Research had shown that boys exhibit more physical aggression and violence than girls at every age (Nelson, Martella, & Marchand-Martella, 2002).

Conclusion

The main aim of the present study was to examine the school social behavior among hearing-impaired adolescents. Role of various demographic variables in school social behavior was also examined. The most important finding of the study was that the type of schooling is important for hearing-impaired adolescents because it assists to improve school behavior. The results also indicated that hearing-impaired levels are strongly associated with social competency and antisocial behavior, because their behavior depends on their hearing ability to understand the world. The study can be helpful in policy making regarding the special education of the hearingimpaired adolescents in general and the role of school system in particular. Government of the Punjab, Pakistan has established institutions of the special education all over the province. In the light of the current findings, the school environment of the public sector schools should be made more productive by incorporating the qualities of private sector schools.

Implications, Limitations and Suggestions

The present study has applied significance in the special education sector of Pakistan. It shares valuable insights regarding the role of level of hearing impairment, gender and school system in school social behavior. Especially school system can be taken into consideration during the policy making regarding the special education of the hearing impaired adolescents. This study was conducted only in the local areas of Islamabad and Rawalpindi. The sample was relatively small in size. Other cities of Pakistan are not included in this study so the results cannot be generalized on the entire population. Hence it can be suggested that for further studies the sample should be better representative of the whole population of different areas. Secondly, the present study measured the effects of hearing-impairment levels, types of school, and gender on their school social behavior of hearing-impaired adolescents. Classroom climate, teacher student relationship, home environment and social support can be incorporated for further studies in future. The present sample comprised many associated problems with school behavior such as shyness; emotional problems, peer rejection and social adjustment can also be investigated in the future research.

References

- Achenbach, T. M., &Edelbrock, C. S. (1978). The classification of child psychopathology: A view and analysis of empirical efforts. *Psychological Bulletin*, 85, 1275-1301.
- Adoyo, P. O. (2004). Kenyan Sign Language and Simultaneous Communication. Differential Effects on Memory and Comprehension in Deaf Children in Kenya, 5,25-36.
- Ahlberg, F. P. (2000). Solving story-based arithmetic problems: Achievement of children with hearing-impairment and their interpreting of meaning. *Journal of Deaf Studies and Deaf Education*, 4(4), 283–293.
- Andersson, G., Olsson, E., Rydell, A. M., & Christian, H. L. (2000).Social competence and behavioral problems in children with hearing impairment.*International Journal of Audiology*, 2(39), 88-92.

- Boekaerts, M. (2002).Bringing about change in the classroom: Strengths and weaknesses of the self-regulated learning approach–EARLI presidential address.*Learning and Instruction*, *12*, 589-604.
- Brill, L., &MacNeil, F., & Newman, P. J. (2000).Diagnostic overshadowing among school psychologists working with hearing-impaired learners.*American Annals of the Deaf, 131*(94), 305-309.
- Bursuch, W. D., & Asher, S. R. (1996). The relationship between social competence and achievement in elementary school children. *Journal of Clinical Child Psychology*, 15, 41-49.
- Burton, H., Goldberg, K., & Tiburon, M. (1999). Alexander Graham Bell Association for the Deaf.*Developmental Psychology*, 36(3), 302-314. Retrieved November 25th, 2009 from: 337-5220. http://www.agbell.org.
- Caldarella, P., & Merrell, K. W. (1997). Common dimensions of social skills of children and adolescence: taxonomy of positive behavior. *School Psychology Review*, *26*(2), 265-279.
- Chen, X. (2000). Sociable and pro-social dimensions of social competence in Chinese children: Common and unique contributions to social, academic, and psychological adjustment. *Developmental Psychology*, *36*(3), 302-314.
- Eccles, J. S. (1996). The influence of ethnic discrimination and ethnic identification on African American adolescents different types of schools and socioemotional adjustment. University of Michigan.
- Edelbrock, C., Rende, R. D., &Plomin, R. (1999). A twin study of competence and problem behavior in childhood and adolescence. *Journal of Child Psychology and Psychiatry*, 36, 775-785.
- Elias, M. (1997).Bringing about change in the classroom: Strengths and weaknesses of the self-regulated learning approach. *Learning and Instruction*, *12*, 589-604.
- Flook, L., Repetti, R.L., &Ullman, J. (2005).Classroom social experiences as predictors of academic performance.*Developmental Psychology*, 41(2), 319-327.

- Foster, S. (1998). Pattern of communication in deaf adolescents. *Journal of Rehabilitation of the Deaf*, 22, 37-56.
- Frederickson, H., & Turner, K. (2003). Promoting social interaction between young children with hearing-impairments and their peers. *Exceptional Children*, 60, 262–275.
- Frostad, S., &Alhberg, S. (2000).Communication as Social Engagement: implications for interaction between deaf and hearing person.*Scandinavian Audiologist*,27, 116-124.
- Frustenberg, K., & Doyal, G. (1994). The relationship between emotional-behavioral functioning and personal characteristics on performance outcomes of hearing-impaired students. *American Annals of the Deaf, 139*(4), 410-414.
- Furrer, C. (2003).Sense of relatedness as a factor in children's academic engagement and performance.*Journal of Educational Psychology*, 95, 148-162.
- Gresham, F. M., Sugai, G., & Horner, R. H. (2001).Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children*, 67, 331-344.
- Grieve, T. (2003). Did popping painkillers make Rush lose his hearing. Retrieved September 8th, 2009 from: http://dir.salon.com/story/news/feature/2003/ 10/07/ rush_drugs/index.html.
- Horner, R.H. (1999). Discipline and behavioral support: Preferred processes and practices. *Effective School Practices*, 17(4), 10-22.
- Huesmann, L.R., & Guerra, N.G. (1997). Children's normative beliefs about aggression and aggressive behavior. *Journal of Personality and Social Psychology*, 72, 408-419.
- Ismail, M. L. (2002). Academic performance and school social behavior of attention deficit hyperactivity disorder (ADHD) & non-ADHD children .Unpublished M.PhilDissertation.National Institute of Psychology, Quaid-I-Azam University, Islamabad.
- Janney, R. E., Snell, M. E., Beers, M. K., &Raynes, M. (1995).Integrating students with moderate and severe disabilities into general education classes. *Exceptional Children*, *61*, 425–439.

- Johnson C, Wilson B, Douglas L. (2004). Early language impairment and young adult delinquent and aggressive behavior. *Journal of Abnormal Child Psychology*, 32(4), 453-467.
- Ladd, G. W. (1999). Peer relationships and social competence during early and middle childhood. *Annual Review of Psychology*, *50*, 333-359.
- Lewis, T.J., Sugai, G., & Colvin, G. (1998).Reducing problem behavior through a school-wide system of effective behavioral support: Investigation of a schoolwide social skills training program and contextual interventions. *School Psychology Review*, 27, 446-459.
- Matsy, J., Schwab, Y. (2006, January). Ask the expert: social skills. Retrieved from http://www.nyufaces.org/files/articles/january_0.pdf
- Mcahon, A. (1994). *Treatment of antisocial behavior in children and adolescents*. Homewood, IL: The Dorsey Press.
- Merrell, K. W. (2003). *Behavioral, social, and emotional assessment of children and adolescents* (2nd ed.). Mawhah, NJ: Lawrence Erlbaum Associates.
- Moeller, M. P. (2007). Current state of knowledge: psychosocial development in children with hearing impairment. *Ear & Hearing*, 28, 729-739.
- Moeller, M.P., Tomblin, B., Yoshingaga-Itano, C., Connor, C., Jerger, S. (2007). Current state of knowledge: language and literacy of children with hearing impairment. *Ear & Hearing*, 28, 740-753.
- Myers, D. G. (1992). Psychology (3rded.). New York: Worth Publisher, Inc.
- Naz, S. (2001).Attitude of parents towards their physically handicapped children and perceived family support of the physically handicapped children. Unpublished M.Sc research Report, National Institute Psychology, Quaid-i-Azam University, Islamabad.
- Nelson, J.R., Martella, R., & Marchand-Martella, N. (2002).Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders*, 10.136-148.

- Nunes, T., & Pretzlik, U. (2001).Deaf children's social relationships in mainstream schools. Deafness and Education International, *3*(3).45-60.
- Odom, S., McConnel, S., &McEvoy, M. (1992). *Social competence of young children* with disabilities. Maryland: Paul H. Brooks Publishing.
- Paul, P., & Jackson, D. (1993).Toward a psychology of deafness: Theoretical and empirical perspectives. Boston, MA: Allyn & Bacon. Retrieved 5th, 2009 from: http://ehe.osu.edu/edtl/faculty/PaulPeter.htm.
- Quay, A. C. (1998). *Classification: Psychopathological disorders of childhood* (3rded.). New York: Wiley.
- Remmel, P., & Peters, K. (2009).Theory of Mind and language in children with cochlear implants. *Journal of Deaf Studies and Deaf Education*, 14(2), 218-236.
- Robbins, L. (1996). Study Childhood predictors of adult antisocial behavior: Replications from longitudinal studies. *Psychological Medicine*, *8*, 611-622.
- Rummel, R. J. (1999). *Social Behavior and Interaction*. Retrieved November 8, 2009, from http://www.hawaii.edu/powerkills/TCH.CHAP9.HTM
- Russo, C., & Beidel, N. (2003) Students with special educational needs in the inclusive classroom: Social integration and self-concept. *European Journal of Special Needs Education*, 18, 197-208.
- Satapathy, S. (2000).*Psychosocial and demographic correlates of academic performance of hearing-impaired adolescents*. Unpublished Ph.D. Dissertation, Joho University, India.
- Schloss, N. K. (1990). *Teaching social skills to hearing-impaired students*. Washington, DC: Alexander Graham Bell Association.
- Siperstein, G. N., & Parker, R. C. (2008). Toward an understanding of social integration: A special issue. *Exceptionality*, *16*, 119-124.
- Snowling, M. J., Bishop, D. V. M., Stothard, S. E., Chipchase, B., &Kaplan, C. (2006).Psychosocial outcomes at 15 years of children with a preschool history of speech-language impairment. *Journal of Child Psychology and Psychiatry*, 47(8), 759-765.

- Spencer, P., Koester, L. S., & Meadow-Orlans, K. (1994). Communicative interactions of deaf and hearing children in a day care center: An exploratory study. *American Annals of the Deaf, 139*, 12–18.
- Vostanis, P., Heys, M., &DuFeu, M. (1997). Behavioral and emotional problems in hearing-impaired children: A preliminary study of teacher and parent ratings. *European Journal of Special Needs Education*, 12(3), 239-246.
- Webster, A. A., & Carter, M. (2007). Social relationships and friendships of children with developmental disabilities: Implications for inclusive settings. A systematic review. *Journal of Intellectual and Developmental Disabilities*, 32, 200-213.