Deaf Adolescents: Finding a Place to Belong

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by

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ABSTRACT

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This thesis explores the psychological, social and behavioral effects of deafness on adolescents. The family and school environment are presented as the two main contexts within which the adolescent develops and where these effects are generally manifested. The family systems theory is used as the theoretical perspective through which the development of the deaf adolescent is examined.

The thesis begins with an overview of deafness, including causes of deafness, and basic demographics of deaf students in the U.S., as well an explanation of the Deaf community and culture. From here the author discusses the role of communication in the deaf adolescent's life, particularly in terms of the family environment. The influence of family members on the deaf child is explored, particularly in regards to the parent-adolescent relationship. Next is an overview of the educational options for deaf children, including the implications of each type of environment (separate schools for the deaf and public, "mainstream" schools).

This is followed by an examination of identity formation in the deaf adolescent, focusing particularly on three components of identity: personality development, self-concept and self-esteem. Two additional psychological factors, depression and emotional intelligence, are also given attention. From here the author moves on to discuss how socialization is affected, particularly in regards to peer interactions at school. After this foundation is laid, the behavior problems common to deaf children are noted, along with suggested causes of these problems. Finally, the author discusses the increased risk of abuse deaf adolescents face, as well as the reasons for the increased risk and the possible long-term effects of abuse on the adolescent.

The thesis concludes with a brief discussion of the implications of this research. Suggestions are presented as to how parents and family members can help to alleviate the problems demonstrated by many deaf adolescents, and how the adolescent can learn to embrace his/her deafness, rather than allowing it to create barriers in his/her development.

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Introduction: Deaf Adolescents

Adolescence is generally regarded as an important time of growth and change in a child's life. The child is not only maturing physically, but mentally and emotionally as well. Many important decisions are made, such as who the child will develop relationships with, both inside and outside of the family, what behaviors they will choose to take part in, and what interests they will develop as they "grow up." For the average hearing child, this period may be stressful as they struggle to develop their own identity and independence, while at the same time depending on support from family and friends.

For the deaf adolescent, this time may be even more complicated. Impaired communication with both family members and peers may lead deaf adolescents to struggle with certain psychological issues, such as developing self esteem, and these struggles may lead to further social and behavior problems (English, 2002). This thesis will explore the psychological, social and behavioral difficulties faced uniquely by deaf adolescents. The family systems theory will be used as the theoretical perspective from which to examine this issue; consequently the influence of the family on the deaf child will come up in nearly every realm discussed. In addition, the role of communication in the adolescent's development will be emphasized, as this is a major aspect that sets deaf adolescents apart from hearing adolescents. Finally, in order to best understand the complexity of the psychological, social, and behavioral domains of the deaf child's life, it necessary to begin with an overview of deafness, including the definition of the term, causes of hearing impairment, basic demographics of deaf students in the U.S., and explanation of the Deaf community/culture. From here the focus will turn to the family

life surrounding the deaf child and the impact of the parent-child relationship on the deaf adolescent. Next, the school environment will be reviewed, as well as a discussion of the differences between educating the child at a special school for deaf children and providing a "mainstream" education. Once this groundwork is laid, psychological components, such as identity development and self esteem will be examined; these issues will then lead into the concept of peer interaction and how socialization in the deaf adolescent is affected, followed by a discussion of the risk of abuse in deaf children. Finally, the thesis will conclude with a review of the implications of this research, and how families can help their deaf adolescent make a healthy adjustment into adulthood.

Literature Review

Definitions

Defining deafness is not an easy task. Unlike blindness, there is no "legal limit" for someone to be considered deaf (Holt, 1994). Consequently, there is more than one term to describe a person who has difficulty hearing, and these words may vary in definition. However, there are a few expressions that will be defined here according to their generally agreed-upon definitions. First, the term "deafness" generally refers to partial or total hearing loss, and generally also assumes the inability to hear and understand speech. A second word, "hearing impaired" is simply used to describe a person with any degree of hearing loss. A third phrase, "hard of hearing," refers to a person who experiences hearing loss but is still able to hear and understand speech (Higgins, 1996).

Furthermore, those who are hearing impaired are either referred to as "deaf" or "Deaf." The seemingly minute grammatical difference of using a lowercase "d" or a capital "D" is actually very important. Those individuals who simply claim the auditory impairment but do not associate with the Deaf community and culture use the term "deaf," with a lowercase "d" (Ladd, 2003; Marschark, 2003). On the other hand, a person who considers himself or herself to be part of the Deaf community and culture will use the term "Deaf" to describe themselves (Ladd, 2003; Marschark, 2003). Following this rule, those two different terms will be use d accordingly throughout the remainder of this paper.

Causes of Deafness

To further understand deafness, it is important to know what causes hearing loss. Again, there is not a simple explanation for this. According to research by Holt (1994), the cause of 58.5% of cases of deafness in children was reported to be unknown. Of cases in which the cause of deafness is known, complications during pregnancy or birth are most commonly reported, accounting for 8.7% of cases (Holt, 1994). Examples of complications may include anything from prematurity to birth trauma to Rh incompatibility. Following closely behind is meningitis, which causes approximately 8.1% of cases (Holt, 1994). Other infections and/or fever, including measles and mumps, account for 4.0% of incidences of deafness, while Otitis media is considered to cause 3.7% of cases (Holt, 1994). Maternal rubella, once a leading cause of deafness, now only contributes to 2.1% of cases, and Cytomegalovirus an additional 1.3% (Holt, 1994).

Hearing loss in children is generally placed into one of two categories: onset of hearing loss at birth, or onset after birth (Holt, 1994). The aforementioned causes of pediatric deafness that fit into the first category include complications during pregnancy/birth, maternal rubella and Cytomegalovirus. The remaining causes, including meningitis, other infections/fever, Otitis media and trauma contribute to onset after birth (Holt, 1994). Medical advances have caused a reduction in some cases of deafness, for example maternal rubella. This disease, which from 1982 to 1983 was known to have caused over 9,000 cases of deafness, decreased in incidence to less than 1,000 cases only 10 years later (Mitchell, 2006).

These listed causes of deafness relate primarily to children experiencing hearing loss. Adults with this condition may note additional causes of sensory impairment, ranging from ear infection to injury, noise, or simply aging (Holt, 1994). As shown, there is a wide variety of factors that cause deafness, and in the majority of cases the cause is not known.

Demographics of Deaf Students

There are several interesting factors to note regarding the demographics of deaf students, which paint a backdrop for understanding the psychological, social and behavioral issues they face. To begin, deafness is more likely to occur in males (Mitchell, 2006). This is true for males of any age, although this gender gap becomes wider after age 18. In addition, over 40% of deaf students are not Caucasian, with Hispanic students representing the second-highest group of deaf adolescents in the U.S. and African-American students making up the third (Mitchell, 2006). It is important to note that these statistics are reflective of the normal hearing population, and do not demonstrate a higher percentage of diversity in the deaf student population (Mitchell, 2006).

Deafness is also more common among residents of rural parts of the country, and prevalence increases as family income decreases. Specifically, a family making less than \$10,000 a year is twice as likely to have a hearing impaired family member as a family making over \$50,000 (Bodner-Johnson & Sass-Lehrer, 2003). On a similar note, hearing impairment is more common among non-high school graduates than among high school

graduates. Additionally, it is interesting to note that according to a Gallaudet research study, 44.1% of all deaf and hard-of-hearing students in the U.S. up to age 18 receiving services are from ethnically diverse families (Bodner-Johnson & Sass-Lehrer, 2003). Finally, although the definitions of deafness vary greatly, as discussed above, the total number of deaf persons in the United States is somewhere around 550,000, or .25% of the total population (Holt, 1994), and deaf children account for around 1% of children with disabilities in the U.S. who are receiving special services (Sullivan & Knutson, 1998).

The Deaf Community/Culture

As will be shown shortly, a significant determinant of how well a deaf adolescent adjusts psychologically and socially is their involvement, or lack thereof, in the Deaf community (Desselle & Pearlmutter, 1997). However, in order to understand the Deaf community and its influence on the teenager's life, one must first understand how the community came about. The Deaf culture and community today are generally thought to be maintained by Deaf institutions, such as schools for the Deaf. However, these institutions did not even exist in the U.S. until the early 1800s. The first permanent school for the deaf began in 1817 in Hartford, Connecticut (Jankowski, 1997). The story of how this school began is very unique.

A Connecticut man named Mason Fitch Cogswell had a deaf daughter named Alice. Cogswell's neighbor, Thomas Hopkins Gallaudet, was intrigued by Alice, and was convinced by Cogswell to go to England to study their methods of education for the Deaf, with the goal of creating similar educational systems in the U.S. Gallaudet thus

proceeded to England, but with little luck. The British system of education for the Deaf was run primarily by one family, the Braidwoods, who used oralism (an educational approach which teaches deaf persons to use their residual hearing and lipreading to communicate with hearing people) as their method of teaching. The Braidwoods, however, considered their methods a family secret and refused to reveal their practices to Gallaudet (Jankowski, 1997).

This did not turn out to be the end of Gallaudet's mission, however. He soon learned that a French man named Abbé Sicard was coming London to present an exhibition including demonstrations by his deaf students. One of these former students, Laurent Clerc, had become a teacher at Sicard's institution and so greatly impressed Gallaudet that Gallaudet followed him to Paris to observe his methods. Later on, Gallaudet persuaded Clerc to return to America with him. Upon their return, they, together with Cogswell, established the American School for the Deaf in Hartford. This school, and the ones that soon followed, became the breeding grounds for the Deaf community (Jankowski, 1997).

A community of deaf persons grew from these schools as more and more deaf children came to be educated together. These children developed their own form of sign language which they used to communicate with each other and their teachers. Having formed their own language, and as a result of living together for so many years at these residential schools, a community was formed. Thus, schools for the deaf have been and continue to be vital to the Deaf community. Not only did they serve as the beginning

place for American Sign Language, the native language of the Deaf, but they play many other important roles as well.

The community that began to form among the residents of the first school for the Deaf grew stronger and stronger over the years. These people who had begun to form their own language through living together at the schools felt so connected at the schools that many did not wish to leave. By 1870, over 40% of graduates from Deaf schools stayed to work at the school they attended, and between the years 1817 and 1911, 24 former Deaf students created their own schools for the Deaf (Jankowski, 1997). These schools were very important in the lives of Deaf students, and allowed for close relationships to form among them.

This has not changed over the years; many deaf students today view their school community as a sort of "alternative family." As will be shown, this sense of belonging becomes even more important for those students whose family does not use American Sign Language and thus has little communication with the child (Ladd, 2003).

Oftentimes these schools are the first place deaf children meet other deaf persons, communicate effectively with others and, essentially, find acceptance (Jankowski, 1997; Ladd, 2003; Terwogt, 2004). As one deaf woman described (using ASL grammar), "When me small, me believed I was the only Deaf person in the world. Then I went to Deaf school, and found I could gesture to them and be understood, that was *it* right away – I loved it!" (Ladd, 2003, p.301). This woman relates a situation common to many deaf children; outside the Deaf school they feel excluded, but once inside they find a place they can fit in, and just as important, where they can communicate with others. This

sense of community becomes very important when compared to the home situation of many deaf children and lack of belonging they feel there (Desselle & Pearlmutter, 1997).

The Deaf community also has its own culture, commonly referred to as the Deaf culture. This subculture, as opposed to other subcultures such as race and religion, tends to be more clearly defined as its boundaries are highly dependent upon the mode of communication used by its members (Marschark, 2007). As American Sign Language is the common language used in the Deaf community, one must be able and willing to use ASL in order to participate in the Deaf community. Thus, in order for deaf children to find their place in this community, they must be taught ASL; once they have developed this language, bonds generally form quickly between them and other users of ASL (Desselle & Pearlmutter, 1997).

The Deaf subculture is also unique in that it is often out of view of many hearing people; unless a hearing person comes into contact with a Deaf person, they may never be aware that such a community exists in the U.S. However, despite the fact that this community may be "in the shadows" to many hearing people, the culture is very much alive. They have their own set of values, attitudes and beliefs just as any other subculture does, and have even established their own Deaf Awareness Week (in September). Finally, the National Association of the Deaf (NAD), an organization central to the community, has existed since 1880 (Marschark, 2007).

The Deaf community/culture may never penetrate the lives of the majority culture in the U.S., but to a Deaf person, it may be everything. In fact, research indicates that deaf children who are denied the opportunity to identify with the Deaf community

may be more likely to develop a negative self-image and lower expectations of themselves than those who are permitted to become part of the community (Ridgeway, 1993). This concept of identifying with the Deaf community (or not) is a major issue in the life of a deaf adolescent. The next section will explore the impact family has on the development of the deaf adolescent, including how the parents' view of the Deaf community can have a significant impact on the child's self-concept.

The Importance of Communication/Family Life

In all families, whether or not they include deaf persons, communication is the means by which family members build relationships and feel close to each other. Being able to voice their own opinions and ideas allows family members to develop ties with each other; communication is also the means by which conflict is resolved, plans are made and tasks assigned. Access to family communication allows access to family life; thus, a deaf child born into a hearing family may miss the majority of this communication, and this impediment may have a significant impact on the child's life (Bodner-Johnson & Sass-Lehrer, 2003). In order to understand the significance of family communication and its impact on the deaf adolescent, it is necessary to first take a look at parent-adolescent communication in an all-hearing family.

Literature shows the adolescent's relationship with their parents to have a strong impact on their development in many different domains. Numerous well-replicated studies have demonstrated how the parent-adolescent relationship can affect such issues as risk-taking behaviors and depression in the child (Yu et al., 2006). Risk-taking, a

characteristic common to many adolescents, refers to involvement in such potentially harmful activities as alcohol and drug abuse and risky sexual behavior. This participation in risky behaviors is also connected with depression in many adolescents (Yu et al., 2006). However, despite the risk that their teenagers may choose to participate in such activities, there are steps parents can take to help protect their adolescents from these risks.

The first major step is developing open communication with the adolescent. Parent-adolescent communication has been shown to be a protective factor against adolescent risk-taking behaviors (Guilamo-Ramos, 2006). As an example, one study showed that adolescents who had not discussed sex with their parents were more likely to take part in risky sexual behaviors than those who had discussed it with their parents (Guilamo-Ramos, 2006). Taking open communication a step further, "parental monitoring" also has a large effect on decision-making for adolescents. It has been well documented that as the adolescent perceives more parental monitoring, they are less likely to take risks and to be depressed (Yu et al., 2006). Open communication is vital to parental monitoring; the parent and the adolescent must be able to communicate effectively for monitoring to be effective (Yu et al., 2006).

Another component of parent-adolescent communication is disclosure.

Adolescents may choose to either disclose personal information to their parents or keep such information secret. As may be expected, higher rates of adolescent disclosure are correlated with lower behavior problems and delinquency (Smetana et al., 2006).

Ironically, however, parents tend to think their adolescent is revealing more than they

actually are, even in strong parent-child relationships. This is especially true for middle adolescents and in regards to what they share about their relationships with friends (Smetana et al., 2006). Thus, it is important for parents to maintain an open line of communication with their children, so that the adolescent will feel comfortable disclosing information to their parents.

It is also appropriate to note that the more time adolescents spend away from home, the more time they have to deal with events and information by themselves and to keep these things secret (Smetana, Metzger, Gettman, & Campione-Barr, 2006). This concept is particularly relevant to deaf adolescents, as we will later discuss how many deaf teenagers tend to reside at their deaf school away from their parents (Spencer, Erting, & Marschark, 2000). This physical separation between the adolescents and the parents permits more secrecy and less disclosure on the adolescent's part, which could lead to potential behavioral problems (Smetana et al., 2006).

As mentioned, poor parent-adolescent communication not only leads to participation in risky behaviors, but may also lead to depression in teenagers (Yu et al., 2006). Depressed adolescents tend to perceive less parental monitoring than do non-depressed adolescents, and they describe their communication with their parents as being less open and positive (Yu et al., 2006). Here it is important to highlight the word "perceived"; that is, it is not necessarily the actual level of communication between parents and adolescents that is so influential, but rather the degree of communication that adolescent perceives. In fact, parents tend to view their communication and relationships with their children in a more positive light than their adolescents do, and this disparity is

more extreme in depressed teens than it is in non-depressed teens (Yu et al., 2006). Additionally, not only can poor communication be harmful for the adolescents, but strong communication can be very beneficial; adolescents are shown to be more resilient when they have better attachment and communication with their parents (Yu et al., 2006). Adolescents are more likely to engage in this communication when they perceive their parents to be trustworthy, knowledgeable and accessible (Yu et al., 2006). It is when these characteristics are present in the relationship that parents may have an effect on the adolescent's attitude towards issues such as participation in risky behaviors.

Finally, in order for parent-adolescent communication to have a positive effect, the communication itself must be successful. According to Guilamo-Ramos (2006), there are five components to communication; the first is the source of communication (the parent), next is the message, then the medium through which the message is transmitted (i.e., face-to-face or written down, or in the case of a deaf child, can be audibly or visually), the receiver of the message (the adolescent), and the context in which the communication takes place. Each of these factors affects how the message is received by the adolescent (Guilamo-Ramos, 2006); in the case of the deaf child born to hearing parents, if the medium is not one that the child can understand (i.e., an audible message as opposed to a visual one), the communication may be futile. This impaired communication may place the adolescent more at risk for factors such as depression and other problem behaviors (Yu et al, 2006).

This issue of poor communication between hearing parents and deaf adolescents is worthy of being studied, as the majority of such adolescents experience impaired

communication at home. Approximately 90% of deaf children have hearing parents, and it has been estimated that 80% of these parents are unable to effectively communicate with their deaf children (Ridgeway, 1993). While some of these parents may have developed a method for communicating with their adolescent, whether through sign language or lipreading, the vast majority cannot communicate meaningful concepts with their children. Without the ability to go beyond receiving instructions and answering basic questions, deaf adolescents may be unable to share their experiences and emotions with their parents (Ridgeway, 1993). In addition, even if the deaf child develops sign communication skills, if their parents have not they will not have strong two-way communication, which can lead to problems. What's more, often parents become frustrated when they cannot communicate with their deaf child, and the child may internalize this frustration, leading to lowered self esteem (Desselle & Pearlmutter, 1997).

Finally, even where there is two-way communication occurring, there is still likely to be miscommunication resulting from misunderstanding each other (Terwogt & Rieffe, 2004). This poor communication within the family means that family members may not get to know their child as well; parents and siblings might not know what the deaf child is like, including the child's feelings, thoughts, interests, etc. (Bodner-Johnson & Sass-Lehrer, 2003). In addition, this lack of communication at home may result in limited social skill development by the child. Children who have developed strong communicative and social skills within the family will have more success developing relationships outside the family. Interactions with family members are even more important for deaf children since a higher proportion of their social interactions are

within the house. Additionally, family members have a high responsibility to be strong role models for the deaf child; poor communication can place barriers on this area of development (Marschark, 2007).

Conversations that take place in the home are one illustration of how poor communication may impair family relationships. No matter the communication mode chosen for use by the family, the deaf adolescent is likely to feel they are missing out on conversation. Furthermore, this feeling of being "left out" is usually not limited to one conversation; rather it often leads to a general feeling of being disconnected from the rest of the family. Any time there is conversation occurring between family members — whether while watching television or talking at the dinner table, for example, the deaf child is likely to feel left out, making him/her feel very frustrated. Mealtimes in particular tend to be a very trying time for deaf children; there is often conversation going on around the child that he/she may not be a part of. Often, if the child asks what is being said, families will give a quick synopsis, such as "we were talking about school" but fail to supply the child with details. This results in many deaf children despising meal times because their disconnection from the rest of the family is felt the strongest during these occasions.

The same idea can be applied to Holiday gatherings; these are often a very frustrating time for deaf adolescents. On these occasions there are often even more family members around that cannot communicate with the child; thus, at a time when there is often a sense of belonging for hearing children, the deaf child only feels more estranged. Adolescents tend to escape from the group during these events, which appears

to family members as "typical" adolescent behavior. However, rather than withdrawing from the family, the deaf adolescent may actually be feeling pushed away from the family with whom they cannot communicate. This is often difficult for hearing family members to understand, because they can hear the conversations going on around them and fail to realize the isolation the deaf child feels without their sense of hearing (Bodner-Johnson & Sass-Lehrer, 2003).

The chasm between hearing parents and adolescents results not only from missed conversations, but also by the parental attitude towards the deaf adolescent. While many parents underestimate the influence they have on their child's self esteem, the way they react to the adolescent's deafness actually has a large impact on his/her self esteem and psychological development. Additionally, this influence on the child's self esteem does not begin in adolescence, but rather in childhood (Bodner-Johnson & Sass-Lehrer, 2003; Desselle & Pearlmutter, 1997).

According to Desselle and Pearlmutter (2002), the atmosphere in which the child grows up is a strong indicator of the child's self esteem. In regards to the deaf child, this atmosphere can be one of either acceptance or rejection. According to English (1997), no matter how capable parents feel in dealing with the deafness, all parents have to adjust to the disability, and most hearing parents have a hard time coping at first. In addition, many hearing parents who discover their child is deaf go through an initial period of denial and bewilderment. Once this period has passed, the parents may either decide to accept the fact that the child is deaf and make the deafness a part of their family, or may (however unknowingly) reject the deafness. Rejecting the child's Deaf identity may

manifest itself in a variety of ways, including persistently viewing the deafness as a disability, as a malfunction in the child, by denying the child's right or desire to participate in the Deaf community, by denying them the opportunity to learn a visual form of communication (i.e., ASL), or, similarly, by forcing them to communicate using oral skills (Bodner-Johnson & Sass-Lehrer, 2003).

Treating the child as if they have a disorder will cause the child to think they are less of a person; for this reason many professionals argue that visual, signed communication is more beneficial for the child and their self esteem. This form of communication comes much more naturally to the deaf child, resulting in less frustration. When a deaf child is taught to communicate using oral-only methods as opposed to sign language, they are receiving the message that they must learn to function as a defective hearing person with a disability (Desselle & Pearlmutter, 1997). Additionally, when hearing parents deny ASL as an actual language, they deny the legitimacy of the Deaf community. Hearing parents often cannot understand their child's experiences with the Deaf community or the child's desire to fit into such a community without becoming involved in the community themselves. Deaf children have noted that they want their parents to know what it means to be Deaf (Bodner-Johnson & Sass-Lehrer, 2003), demonstrating their desire for familial support.

As opposed to children forced to use an oral-only method of communication, a child who is taught to embrace their deafness and even become integrated into the Deaf community will learn that they simply have a different way of communicating, one that is no worse than audible communication. It is for this reason that parental attitude towards

deafness has been shown to be such a strong indicator of self esteem in deaf children (Desselle & Pearlmutter, 1997); the way a parent responds to the child's deafness communicates a message to the child about their value as a person.

The deaf child is not the only member of the family who is affected by the presence of deafness. According to family systems theory, any event that affects one member in a family will affect each of the other members as well. Thus, according to this theory, both the parents and the siblings of the deaf adolescent will also be affected (English, 2002). This theory has held true in many studies surrounding parents and siblings of deaf children. For example, according to research by Marschark (2007), hearing siblings of deaf children may react negatively to the deaf child in one of many ways, including resentment at having to act as a baby-sitter for the deaf child or frustration by the lack of communication they can have with their sibling. In addition, they may become jealous of the attention the deaf child receives, or may tire of having to explain to others outside of the family that the child is deaf. Furthermore, hearing siblings may experience a form of survivor's guilt, and try to compensate for the deaf child's disability by performing well in school and at home. These efforts may not be recognized by the parents however, who may be consumed by trying to provide special care for the deaf child, leading to frustration on the part of the hearing child (English, 2002).

On the other hand, the hearing child and deaf child may develop a strong relationship. When this occurs, the positive relationship between siblings provides the deaf child with social support that can help them deal with problems outside the home.

In these situations, siblings can have a strong, positive impact on the deaf child's social and personality development; siblings can help each other monitor their behavior and assist with the development of social skills. In fact, research shows that deaf children who have hearing siblings generally demonstrate stronger social skills than deaf children without any hearing siblings (Marschark, 2007). Parents can also have a role in facilitating these relationships between hearing and deaf siblings; when parents show acceptance for their deaf child, the siblings are more likely to accept the deaf child as well (Marschark, 2007).

As mentioned above, not all parents are able to accept their child's deafness right away. For many parents, the presence of a disability in one of their children leads to heightened stress (Hagborg, 1989). Particularly for parents of deaf children, increased stress may occur as a result of impaired communication or other factors (Desselle & Pearlmutter, 1997). According to research by Hagborg, fathers' stress increased as his own educational attainment increased; this may reveal that his educational expectations for his child are higher and he experiences stress in realizing that his expectations may not be met by his deaf child.

For the roughly 12% of deaf children who are born to deaf parents, a very different situation generally occurs. For this minute population of deaf children, their "natural" language (sign language/visual communication) is the first one they develop (Ridgeway, 1993). They begin to develop language right away, rather than experiencing a delay, as their parents communicate with them from birth using sign language (Desselle & Pearlmutter, 1997). Thus, their situation is more similar to hearing children of hearing

parents; they do not have any trouble communicating with their parents. These children have been shown to have better social and emotional adjustment than deaf children born to hearing parents (Mitchell & Quittner, 1996), and feel more accepted in their family as well (Desselle & Pearlmutter, 1997).

Finally, for families with more than one deaf child, it is likely that there are other deaf people in the family, as the cause of deafness is likely to be genetic. In this case, the families are more likely to be accepting of deafness and of signed communication (regardless of the hearing ability of the parents). These families are more likely to resemble a normal, balanced situation as opposed to a family whose one deaf child receives a disproportionate amount of attention. Research completed so far demonstrates that relationships among deaf siblings encourage more normal and healthy cognitive and social development (Marschark, 2007).

As described, the home environment is very important for the psychological development of the deaf child. Language development begins with the family; these communication skills are then used to build relationships outside the family.

Additionally, the attitude parents hold towards deafness reflects on the child and can affect the child's self-concept and self esteem. However, the home is not the only environment that has a strong effect on the child; school also plays a large role in his/her development. This area of influence will be given attention next, as will an explanation of the different educational options for the deaf child.

The Impact of School

There are two main options for educating a deaf/hard-of-hearing child. First, students may attend a separate residential or day school solely for deaf students. The second option would be to attend a public school, commonly referred to as being "mainstreamed" (Spencer et al., 2000). Schools that serve only deaf students have existed since the late 1700s, when the first school for the deaf was created by the Abbe de l'Epee; however, at this time deaf children were commonly regarded as basically unteachable. However, this attitude changed over time and there was a sudden growth in deaf education in the 1870s (Arnold, 1993).

Schools for the deaf generally provide a wide range of special services for deaf children and families, including but not limited to counselors, psychologists, and audiologists. In addition, these schools often have a variety of activities available for students, such as sports and other social organizations. These schools are typically small (150-200 students), however there is often a wide diversity of students in attendance. Students include both those who attended the school since they were very young, as well as those who have transferred over from mainstream schools (Spencer et al., 2000).

Communication at these schools is likely to be through sign language, both formally in the classroom and informally among students. While most schools use simultaneous communication (teachers speak and sign in English word order at the same time), a more recent experimental movement involves first teaching students ASL, then using ASL to teach English. Teachers at separate schools are more likely to be deaf, although the majority are still hearing, and are likely to be fluent in sign language and

have more experience teaching deaf children. Profoundly deaf students may find this setting more beneficial to their education, as they likely depend more heavily upon visual communication. Additionally, students at these schools often have more access to students and adults with whom they can easily communicate, and have the benefit of being integrated into the Deaf community. An additional benefit of this type of education includes "informal learning", meaning that students may learn more common knowledge through "overhearing" adult conversations, etc. Finally, an abundance of extracurricular activities often provide deaf students more opportunities to take on leadership positions than in mainstream schools (Spencer et al., 2000). These activities allow students to build friendships, self-esteem, self-confidence and social competence. Students who have attended such schools report that one of the greatest benefits of attending a school for the deaf was the lifelong friendships they were able to make (Marschark, 2007; Spencer et al., 2000).

On the other hand, deaf students who reside at these schools have also noted that they feel disconnected from the rest of [hearing] society. They communicate remorse that they are not able to come home from school everyday like other kids and spend time with family. Such students explain their regret even though they acknowledge that communication with family would be difficult and frustrating. Additionally, deaf students who have been placed in a special school after having previously been mainstreamed may feel a sense of failure for not "making it" in the public environment. Research by Spencer et al. (2000) revealed a sense of accomplishment in students who completed a mainstream education, as demonstrated by this student's remark: "I was [at

the school for the deaf] for 3 months, and they realized I was too advanced, so they moved me to a small program for deaf students at a hearing school" (Spencer et al., 2000, p. 200).

Separate schools such as the ones just described used to be the norm for deaf students. Prior to the 1970s, it was generally felt that handicapped students were best taught at separate schools. However, in the 70s educational philosophies began to change, leading to the passage of Public Law 94-192, the Education for All Handicapped Children Act. This act recommended that all students be taught in the "Least Restrictive Environment" (LRE) possible. It was assumed that the LRE for deaf students would be a public school environment, and although this law did not mandate the education of deaf students in mainstream schools, the law was generally interpreted that deaf students be educated in such schools unless or until they failed out and were placed instead in a separate school (Spencer et al., 2000). This interpretation of the law is a likely cause of the pride mentioned above by deaf students who successfully complete public school.

Following the passage of this act, there was a steady shift of deaf students to mainstream schools. Statistics from the annual survey of deaf and hard-of-hearing children revealed that now only 22% of deaf students attend residential schools, with an additional 8% attending local separate day schools (Spencer et al., 2000). The remaining 70% of students are now being "mainstreamed" (Spencer et al., 2000). This shift in educational approach has raised many questions; while the law was passed in an attempt to create a more inclusive environment for deaf children, some professionals are now questioning whether the change has brought instead isolation for these children.

Communication, the same problem discussed above in family situations, also plays a large role in social interaction at school. Deaf students often have trouble communicating with hearing peers and thus experience difficulty forming friendships with other students. While an interpreter is generally provided in the classroom, the adolescent often does not have an interpreter when the class ends and most social interaction typically begins. Additionally, while interpreters may be provided for extracurricular activities, the adolescent may still have trouble building relationships with peers (Spencer et al., 2000). Research in this area has demonstrated that deaf children in mainstream programs report feeling more isolated than students in deaf schools, and these same children are also reported by hearing peers to be less likeable and are less desired to be chosen as friends by peers (Marschark, 2007). Further, although it has not been concluded that being mainstreamed causes the adolescent to have lower self-esteem, the problems he/she experiences with communication and isolation may lead to lower satisfaction and comfort in the school (Marschark, 2007; Spencer et al., 2000). Finally, in addition to communication barriers, the deaf adolescent will undoubtedly feel a sense of difference between himself/herself and other students, an unpleasant feeling for any adolescent (Marschark, 2007).

While there is a striking contrast between these two different educational options for deaf children, such children are often not placed in one situation permanently. In fact, many children (especially those born to hearing parents) are placed in public schools when younger, but are transferred to residential schools as they reach adolescence. To demonstrate this shift, consider that only 20% of mainstreamed deaf students are in high

school, as opposed to 45% of residential school students being in high school (Spencer et al., 2000). Furthermore, many of these adolescents stay in the dorms as they become older, and only see their parents on weekends. This is important when considering the impact of parents on their deaf adolescents, as many such parents mistakenly believe their children's peers have more of an influence on them than they do. In reality, however, the parents' role is extremely influential on their deaf child, as previously discussed (Desselle & Pearlmutter, 1997). Schools for the deaf, while often providing a rich environment for the deaf child, cannot replace the position of the family in the adolescent's life, especially in the area of social development (Marschark, 2007).

As shown, there are many advantages and disadvantages to either situation, whether in the mainstream environment or the separate deaf school. When choosing the situation that will be more beneficial for their deaf child, parents must consider how the educational environment will affect their adolescent not only academically, but psychologically and socially as well. It may also be important for the parents to take into consideration how the school they choose will affect their communication with their adolescent. Research demonstrates that parents of mainstreamed children generally do not know sign language, and sign language is rarely used with the child (Desselle & Pearlmutter, 1997). Leading from this, studies have also showed that students whose parents sign with them tend to have higher self-esteem than those whose parents do not sign (Spencer et al., 2000). Thus, while parents always have the choice of whether or not to use sign language with their adolescent, they are less likely to communicate in sign if their child is mainstreamed, and this may affect the child's well-being.

It has been established that both the family and the school environment have a significant impact on the deaf adolescent's psychological and social adjustment. The following section will examine how this adjustment manifests itself in terms of the adolescent's identity and social skill development. The family and school will continue to serve as the two main contexts in which these areas of development are considered.

Identity Formation

Adolescence is generally regarded as a time during which identity of the self is formed. This formation takes place as individuals mature, and occurs within social contexts. The family is one major social context in which identity formation occurs (Bodner-Johnson & Sass-Lehrer, 2003). Additionally, this formation can only develop through social interaction, whether the interaction is with other deaf or hearing persons (Schirmer, 2001). For the deaf adolescent, this period of development is particularly complex. They are often caught between the hearing and the deaf world, especially if raised in a hearing family, and may experience conflict in trying to negotiate these two distinct domains (Bodner-Johnson & Sass-Lehrer, 2003). Additionally, the social interaction necessary for identity formation always involves communication, which can lead to problems both within the family and at school (Schirmer, 2001).

Issues at home affecting the deaf adolescent's identity involve not only communication barriers, but also differences of attitude regarding deafness. The adolescent must choose whether to identify with the Deaf community, as described earlier, or with the larger hearing culture. While it is possible to identify with both

worlds, this will require constant shifting back and forth (Bodner-Johson & Sass-Lehrer, 2003). Often the line that divides the two worlds of the deaf adolescent is the home.

For the 90% of deaf children born to hearing parents, integration into the Deaf community often does not occur until adolescence, when the child is more likely to either attend a deaf school or at least come into contact with other deaf people (Spencer et al., 2000). Until this point, the child may develop their "hearing identity" at home, and it is not until they come into contact with the Deaf community that the child's eyes are opened to the possibility of a second "Deaf identity" (Marschark, 2007). Those who do identify themselves as being Deaf say they came into contact with other Deaf people at some point in their lives, usually outside their family, and report having fallen in love with the Deaf community. Many express finding their identity with Deaf people, while losing the desire to be with hearing people. However, most Deaf people still talk about their love for their hearing families, which consequently leads to inner conflict between their two different worlds. There individuals develop certain behaviors from interacting with other Deaf people, such as stomping their feet or pounding on the table to get someone's attention or eating loudly, and have to consciously regulate these behaviors when entering back into the hearing world (i.e., their family). Often they describe this as being difficult, as their family and hearing friends cannot understand what it is like to be Deaf, nor understand the reasons behind these behaviors (Bodner-Johnson & Sass-Lehrer, 2003).

Establishing identity is especially difficult for deaf adolescents who have been mainstreamed. There is often exaggerated conflict between relating with their families

and neighbors, who are often hearing, and their deaf friends, who are usually easier to communicate with. For students who have been trained orally and later discover the Deaf community, internal conflict is felt as they attempt to re-establish their self-identity. In order for them to feel comfortable with themselves and their identities, these students need to try and somehow integrate their two separate worlds (Spencer et al., 2000).

The results of one study by Schirmer (2001) reveal interesting implications of the identity decision faced by deaf adolescents. This study, completed at a school for the deaf, asked students whether they identified themselves as "hearing," "Deaf," or "both." Students who identified themselves more with hearing individuals had the lowest academic achievement and poorest social interactions, adjustment and perceived acceptance by their family (Schirmer, 2001). Children who identified themselves as Deaf had higher scores on all of these measures, and those who assumed a dual identity had the highest scores of all (Schirmer, 2001). While it is important to note that these relationships between identity and adjustment/achievement were correlational, not causal, the researchers in this study suggest that deaf children should interact with both deaf and hearing individuals in order to best facilitate their identity formation (Schirmer, 2001).

Identity formation, however complex, is only one of many psychological aspects that the deaf adolescent must deal with. Three important components of identity and two additional psychological aspects that may be uniquely challenging for deaf adolescents include personality development, self-concept, self-esteem, and emotional intelligence and depression. All of these factors are closely related and tend to overlap in the deaf adolescent's life, as will be shown.

Personality Development.

Personality development, a major component of the adolescent's psyche, is unique for the deaf adolescent due to its dependence on language development.

According to Marschark (2007), early language development has been shown to have a strong impact on the child's development of their personality, regardless of whether the child is deaf or hearing. Furthermore, the most important factor in this language development is whether or not the communication is two-way (both the child and the parent communicating); this is true whether the communication that takes place is oral or signed. Extending from this idea that personality development is dependent upon language/communication, Portner (1977) also stresses that speech plays a large role in developing personality. Due to the language delay experienced by many deaf children (Desselle & Pearlmutter, 1997), complications in personality development may arise.

Self-concept.

Personality development is closely related to the development of an adolescent's self-concept. English (2002) describes self-concept as something that develops from the way we perceive others' appraisals of us, rather than beginning with our thoughts about ourselves. Once we begin to form our self-concept based on these perceptions, we can then use our already-formed self-concept to evaluate others' appraisals. This cycle of continuously taking in other's opinions and checking them with our pre-existing notions continues throughout life and is known as the "cyclical effect of self-concept" (English, 2002). The first appraisals we observe are those of our family members; this is important

for deaf children as it has already been established that parental attitudes have a significant impact on the child. If the parents feel capable of adjusting to the disability, for example, the child will feel more valued (English, 2002). If, on the other hand, the parent feels incapable, the child may bring that into their self-concept and develop a negative view of himself/herself, thinking he/she is a burden or less valuable (English, 2002).

Studies reveal that many deaf children tend to perceive themselves as having lower status than hearing children, often leading to compromised self-esteem (English, 2002; Ridgeway, 1993). This is often a result of communication impairment combined with feelings of embarrassment from wearing hearing aids (English, 2002). The child's poor appraisal of himself/herself begins developing in early childhood, when he/she enters school and comes into contact with hearing children. At this point the deaf child begins to realize they are different from other children. This concept of "different" later develops into the idea that hearing children are "better" than they are. The deaf child, then, begins to place himself/herself as lower than hearing children. Acceptance, or lack thereof, further impacts this image (Ridgeway, 1993), and research also shows that deaf children are sensitive to others' reactions to them (Dessel1le & Pearlmutter, 1997). Although an adolescent can later change their self-concept, this is not an easy task (English, 2002).

A phenomenon known as the "Hearing Aid Effect" illustrates how a deaf adolescent's self-concept may be influenced by the stigmatization of the hearings aids they are made to wear (English, 2002). This model, which has been replicated over

several studies and several age groups, demonstrates the reaction of hearing people to the presence of hearing aids (English, 2002). In each of these studies, hearing people were shown slides of individuals without hearing aids, and then the same people with hearing aids evident. They were told to rate those individuals in terms of character, appearance etc.; without fail, the subjects in these studies consistently rated those shown with hearing aids more negatively (English, 2002). This held true for every age group except for preschoolers, leading researchers to believe that negative stereotypes against those with hearing aids do not begin until early elementary school (English, 2002). A similar study was performed with older hearing women, who were given hearing aids to wear and told to interact with strangers from their own age group. The strangers later rated those with hearing aids more negatively, even though they reported not having noticed the hearing aids. The researchers from this study concluded that in this case it was actually the women wearing the hearing aids who caused the negative reaction, by presenting themselves more self-consciously (English, 2002). This notion of self-consciousness has also be found in deaf adolescents, who, according to researchers, demonstrate poorer selfconcepts than hearing peers, even though these peers rate the deaf students normally (Schirmer, 2001).

The results from these experiments are significant to the study of self-concept in deaf adolescents; they seem to mirror the cyclical effect of self-concept defined earlier. It appears as though deaf children are initially looked down upon by hearing people and internalize this negative appraisal, developing the concept that they are lower in status than hearing children. Later, when they are able to process their own conceptions of

themselves, they continue to align others' perceptions with their already-established, generally negative self-image. Further, they may act more self-consciously as a result of this self-image and further perpetuate the cycle of perceiving themselves as lesser than hearing adolescents. This notion of self-concept is closely related to a second, distinct component of identity, self-esteem. To illustrate the difference between these two concepts, while self-concept here demonstrates what a deaf child might see when they look into a mirror, the following discussion of self-esteem reflects what the child might do with that appraisal, or how positively or negatively they view themselves.

Self-esteem.

Overall, deaf children tend to have lower self-esteem than hearing children. In one study, children with hearing loss reported lower self-esteem than hearing children and children with visual impairments. These children reported being too shy, less likeable, isolated and having trouble making friends. The students' teachers echoed these sentiments, claiming the children to be shyer and having trouble making friends. In the same study, while hearing children reported enjoying being with friends or at home, deaf children said they preferred to play by themselves. Finally, these children described feelings of unimportance in their families and of being a disappointment to their parents (English, 2002). The results of this study show evidence of lower self-esteem in deaf children; however, there are factors within the realm of deafness that may contribute to higher or lower self esteem in such children.

For example, children whose parents use sign language with them have been shown to have higher self-esteem than those whose parents stress oral communication (Marschark, 2007). One study also revealed that deaf children whose parents had stronger sign skills demonstrated higher self-esteem than those whose sign skills were weaker. Research in this area advocates that communication in the family is a strong predictor of self-esteem in deaf children (Desselle & Pearlmutter, 1997). This may be explained by the fact that children's self-esteem is heightened when they feel like they are part of a group. If the adolescent is not able to effectively communicate with family members, the one situation which generally provides the most social support (the home) may be lacking, leading to lower self-esteem. In relation to the school environment, it is ironic to note that school placement (mainstream vs. a separate school) has not been shown to be a strong determinant of the child's self-esteem. Further, hearing status (that is, the degree of hearing loss) does not predict self-esteem either (Marschark, 2007). In one study of 1200 children with just mild hearing loss, lower self-esteem was demonstrated across the board, revealing that even mild hearing loss can have an effect (English, 2002).

Depression

Lower self-esteem in deaf adolescents may also lead to a higher incidence of depression. According to Marschark (2007), deaf college students are more likely than hearing students to experience mild forms of depression. This depression may be related to the students' mothers being overprotective when the child was growing up as well as

having experienced depression once they hit adolescence (Marschark, 2007). Additionally, according to researchers, the depression experienced by these students may have been related to being mainstreamed and experiencing isolation/loneliness as adolescents (Marschark, 2007). Garber (2006) validates this claim by explaining that perceived rejection by peers and family increases the risk of depression in adolescents. Moreover, when deaf adolescents who are not integrated into the Deaf community experience a stressful event, such as the loss of a friend, they are more likely to experience post-traumatic stress disorders. Finally, in addition to integrating their children into the Deaf community, parents may help alleviate the chances of this depression occurring by working to increase communication with their child, as this increased communication is directly related to decreased depression in young adults (Marschark, 2007). Horsley (2006) echoed this claim while studying the effects of communication in dealing with a family member's death. Their studies demonstrated that open communication with family members allows an adolescent to move on from a stressful event and deal with everyday life (Horsley, 2006). This illustrates the importance of parents establishing strong communication with their deaf child.

Emotional Intelligence

An additional explanation for depression in deaf adolescents may be a decreased opportunity for developing emotional intelligence. Terwogt & Rieffe (2004) hold that deaf children tend to have lower emotional intelligence due to not being able to talk about emotions with their parents and others. For example, research has shown that deaf

children have trouble using affective words to describe their emotions to others (English, 2002). As an illustration, a girl who has a fight with her friend may only be able to tell her mother, "I'm mad," without being able to provide further explanation. This inability to verbalize their emotions can lead to problems not only interacting with others, but also being able to voice their concerns and understand their own emotions. The feeling that their emotions are pent up inside with no way to communicate them to anyone, especially their family, could be very frustrating for an adolescent already experiencing a wealth of emotions and fluctuating hormone levels. This frustration may lead to depression or impulsiveness (English, 2002). Marschark (2007) further asserts that deaf children may struggle with emotional intelligence due to a lack of explanations in certain situations; for example, during a stressful time at home the child may not receive an explanation of what is going on or how they should be reacting.

In addition to not fully understanding their own emotions, deaf children may also have trouble assessing other's emotions (English, 2002). A direct result of lacking strong communication skills, deaf children often have trouble taking on the perspective of another person. Without having other people's behaviors explicitly explained to them, they often cannot understand the reasons behind others' actions; this miscommunication leads to problems in peer interaction (Marschark, 2007). This phenomenon is further explained in the next section, which explores the social development of deaf adolescents and the challenges they may face in developing social skills.

Social Development

In order to behave in socially appropriate ways, children have to learn to take on the perspective of others. However, as deaf children have been shown to struggle in this domain, they may appear to be more egocentric, selfish, lacking in empathy for others and being generally insensitive towards others. In addition, they are also more prone to misread other people's facial expressions and misjudge others' reactions to them. Both of these tasks are very much based on linguistic skills, which may be lagging behind in deaf children. While deaf children can name different facial expressions, they tend to have trouble connecting them with the right contexts. It appears they may lack the proper skills to tie together linguistic concepts with facial expression. Finally, an additional result of poor communication skills is the lack of knowledge many deaf children have of social rules and norms. Not only do they miss out on verbal explanations of behavior, but they also lack social role models that they can communicate with and identify with. This may result in lack of social skills, further leading to lower self-esteem and lower independence (Marschark, 2007).

It goes without being said, then, that deaf children's communication skills are strong indicators of their later success socially. It also comes with no surprise that deaf adolescents who use oral communication interact more with hearing peers, while those who sign more often report more interaction with other deaf students (Marschark, 2007). It is also known that deaf children tend to have lower social competence, another result of communication deficits (English, 2002). Unfortunately, however, even deaf students who attempt to communicate with hearing peers may not be met with success. According

to research, it is actually more likely that the young hearing child will ignore the deaf child's attempts to communicate or to interact than the chance that the deaf child will ignore the hearing child (Marschark, 2007).

This rejection by the hearing child may lead to self-consciousness on the part of the deaf child, further complicating social interaction. According to Schirmer (2001), if the deaf child sees himself/herself as socially inadequate, he/she is less likely to interact with others. The results of one study showed that deaf students rated themselves as having poor verbal skills, despite the fact that their test scores demonstrated normal language abilities. A separate study by English (2002) found similar results; teachers in this study rated their deaf students as having average communication skills, while the children themselves reported being more verbally aggressive and less emotionally verbal. In addition, these same children reported themselves as having even lower social status than their peers rated them. Thus, relating back to the cyclical effect of self-concept, these students may experience rejection early on and proceed to think of themselves as "lower" than hearing children, leading to poor interaction in school.

This anxiety over experiencing rejection was demonstrated by English (2002) in a study of friendship formation by deaf children. In this study, 50% of deaf children showed anxiety about making friends, as opposed to only 12% of hearing children. Supporting the "hearing aid effect" theory mentioned earlier, most children said they would not want to show their hearing aids for fear of being made fun of by other children. This fear appears to have grounds in reality; according to another study of 8 to 12 year-old deaf children, 59% reported having been made fun of because of their hearing aids.

Social isolation is not only a problem for deaf children, but for deaf adolescents as well. Mothers in a research study described their deaf teenagers as being less bonded emotionally with their friends, and described these friendships as being more aggressive. English (2002) argues that spending time with other deaf teenagers is important for the social development of the adolescent; even mainstreamed teenagers report spending most of their time with other deaf teens, and assert these friendships to be more fulfilling. Moreover, deaf and hearing adolescents alike are more likely to choose friends that are like them (hearing-hearing and deaf-deaf). This may also be due in part to the fact that interaction styles tend to differ between hearing and deaf adolescents. When interacting with other children, for example, deaf children often require an answer from their peer, whether by explicitly asking for information or an action; hearing children, on the other hand, do not have this demand for an answer but their interactions are more of an "invite" to interact. Without the ability to resolve such differences through a shared form of communication, it may simply be easier for deaf children to stick to themselves or to interact with other deaf children than to make the effort to interact with hearing children. Whether by interacting with deaf or hearing children, however, the crucial matter is that children need to have interactions with peers in order to develop social skills and to learn how to maintain relationships (Marschark, 2007).

Extracurricular activities may provide opportunities for deaf adolescents to develop these social skills, both with hearing and deaf teens. An activity known as "deaf sport" is common at deaf schools; it is equivalent to sports organizations at mainstream schools, except that sign language is generally used as the method of communication

(Schirmer, 2001; Ladd, 2003). The rules for these games are the same as in hearing sports, but communication is easier for the adolescents who participate. In addition, deaf sport is just as much a socialization activity for spectators as it is for the athletes (Schirmer, 2001). Activities such as deaf sport demonstrate the potential for deaf adolescents to develop strong social skills, given the right environment and support from family members. Thus, it is important to remember that although deaf adolescents have the odds against them, there is nothing inherently stopping them from becoming socially mature (Marschark, 2007). Deaf adolescents may simply have to work harder in order to overcome barriers in the realm of peer interaction.

Behavioral Problems

In addition to facing challenges in social development, research has well-documented the struggle many deaf children have in adopting appropriate behavior. Several studies support the claim that deaf children display more behavior problems (Edwards, Khan, Broxholme, & Langdon, 2006; Mitchell & Quittner, 1996; Terwogt & Rieffe, 2004). According to Mitchell & Quittner, while behavior problems among hearing children have a prevalence of only 2%, the rate among deaf children ranges from 19.6% to 22.6%. The most commonly reported problems are attention-related and include distraction, impulsiveness and having a short attention span; furthermore, these behaviors are observed both at home and at school. While several explanations are given for this higher incidence of problems, language impairment is consistently labeled as the root cause.

Behavioral control has been linked to language development, especially the ability for deaf adolescents to communicate with themselves and others. It is through speech that children learn to self-direct; this becomes a problem when considering that language development is often delayed in deaf children. Moreover, the absence of effective communication with parents means the child may not learn to regulate their own behavior. This theory is supported by research showing deaf children born to deaf parents to react less impulsively than deaf children born to hearing parents – the former cohort is able to develop communication earlier and can learn to model their parents' behavioral control (Mitchell & Quittner, 1996).

Communication difficulties with hearing parents may also have other significant effects on behavior. These parents, for instance, tend not to explain their actions to their deaf children. They relate only outcomes of decisions, rather than including the causal factors and thought processes that went into making the decision (i.e. telling the child, "We're not going to Grandma's," rather than explaining that it is snowing outside and therefore it would be dangerous to drive). While leaving out that small part of the conversation may seem trivial, it can actually lead to an apparent stubbornness in deaf children; they model their parents' behavior and learn to communicate only their desire outcomes, without being able to provide an explanation. Thus, when trying to negotiate with parents and other adults, a common behavior in children, they can only restate their desires over and over again, making them appear stubborn (Terwogt & Rieffe, 2004).

A lack of explanation from parents, or a misunderstanding of what a child is asking may also lead to impulsive behavior in deaf children. Marschark (2007) explains

that parents tend to give in to their deaf child's demands more often than to hearing children's requests in order to avoid a temper tantrum. One study showed mothers of deaf children giving in to such demands 6 times more often than mothers of hearing children (Marschark, 2007). Thus, without realizing it, parents may be training their children that repetitive demanding will eventually get them what they want, leading to impulsive behavior.

Terwogt & Rieffe (2004) also assert that behavior problems may be a result of "theory of mind delay." Theory of mind development implies two things: first, it requires acknowledging that people do not react to the world, but instead to their perception of the world. Second, it means recognizing that other people may hold different beliefs than you (Terwogt & Rieffe, 2004). Researchers supporting this theory hold that the deaf adolescent's lack of communication skills lead to them to fall behind in developing these thought processes, resulting in social and behavioral problems (Terwogt & Rieffe, 2004).

The idea that language development delay places deaf adolescents more at risk for behavior problems is supported by studies performed with deaf children and cochlear implants. Cochlear implants are devices that may significantly increase the deaf child's ability to hear, thus bringing language development to a more normal level. In a study by Edwards et al. (1996), children who received cochlear implants experienced a reduction in behavioral problems three years down the road. Parents reported fewer temper tantrums, more cooperativeness, and less demanding by their children; the incidence of these problems was actually cut in half from 20% pre-implant to 10% post-implant.

In addition to language impairment, a lack of hearing may also affect the adolescent's ability to maintain attention. Attention is affected by multisensory integration; therefore the lapse in this integration can have detrimental effect on children trying to maintain concentration. For example, because deaf adolescents are dependent on visual stimulation for receiving information, they may be more easily distracted by irrelevant visual stimulation, resulting in attention deficits (Mitchell & Quittner, 1996).

Here it is imperative to emphasize the fact that behavioral problems are not a direct result of deafness; rather they stem from communication difficulties and other secondary issues experienced by deaf adolescents. This is an important note to make, as it was common for researchers prior to the 60s to assume that behavior problems were inherent in deaf children. However, several recent studies have contradicted these original claims, as demonstrated in this section (Schirmer, 2001).

Risk of Abuse

A final issue surrounding deaf adolescents that will be examined is the risk of abuse. While abuse in deaf adolescents is not nearly as prevalent as the psychological, social and behavioral problems that have been covered up until this point, it is nonetheless important to be aware of the possible forms of abuse such children may encounter.

Research indicates that deaf children are at a significantly higher risk for being abused than are hearing children, and in many cases, are also at a higher risk than children with other disabilities. The most prevalent forms of abuse against deaf children,

from highest to lowest incidence, are: neglect, physical abuse, sexual abuse, and emotional abuse (Sullivan & Knutson, 1998). Most of the time, however, abused deaf children experience multiple, co-occurring forms of abuse (Sullivan & Knutson, 1998).

Neglect, the most prevalent form of abuse among deaf children, occurs 1.4 times more often in deaf children than in hearing children. Neglect is most often carried out by the children's parents, especially the mothers. Physical abuse is also committed most often by parents, although this occurs just as often with fathers as it does mothers. This form of abuse is more prevailing in deaf children than in children with other disabilities, including learning disabilities and speech and language disorders. Additionally, parents of deaf children are more likely to use physical punishment with their deaf children than are parents of hearing children. Finally, deaf children are also at a significantly higher risk of sexual abuse than both hearing children and children with other disabilities. It is interesting to note that of all children who are sexually abused, deaf children, according to Sullivan & Knutson (1998), are more likely than hearing children to be abused by family members.

Experts in the field offer many explanations for the heightened risk of abuse in deaf adolescents. To start, perpetrators may think the deaf child will not be able to report the abuse (they are often correct, as we will soon see); they may also think that deaf people have lower social status and thus society will allow the abuse to occur.

Additionally, perpetrators may sometimes be attracted by the mannerisms/communication styles of deaf children (Ridgeway, 1993).

Some situational factors may also place certain deaf adolescents at a higher risk for abuse. These factors include lack of early language development, no exposure to other deaf people, conflict in the family over educational approach/communication method for the child, low self-esteem, social isolation, lack of deaf peer group, lack of deaf awareness, lack of parental involvement, inappropriate expectations by the parent for the child, low expectations by the child for himself/herself, not being allowed to associate with or learn about the Deaf community, and finally, parents rejecting the Deaf community (Ridgeway, 1993). Factors which normally put hearing children at a higher risk of abuse, but that are more likely to occur among deaf children include having a poor relationship with their mother, low income, having a stepfather, having a parent who was abused as a child, having low self-esteem, social isolation and having unrealistic expectations for the child (Ridgeway, 1993). Additionally, being mainstreamed may put the deaf adolescent at a higher risk by increasing the chances of them being socially isolated (Ridgeway, 1993). On the other hand, attending a residential school also increases the likelihood that a child will be abused, especially sexually (Sullivan & Knutson, 1998). Many states have had to conduct major investigations in such schools in regards to abuse claims; this abuse has been known to take place in the dormitories of residential students. The main perpetrators of this abuse are houseparents, older students and peers (Sullivan & Knutson, 1998). Finally, deaf children may have a lack of access to information regarding abuse because it is not generally presented in their native language (ASL), making them more vulnerable to abuse (Ridgeway, 1993).

The effects of abuse on deaf children are far-reaching. These children may experience a number of problems, from internalizing behaviors, being withdrawn, depression, anxiety, aggression, post-traumatic stress disorder, social problems, attention problems, and thought problems. Alcohol and drug dependency in adolescents may further complicate dealing with the abuse; of all deaf adolescents, abused teens using drugs or alcohol display the highest incidence of behavior problems. In addition, deaf boys attending residential schools who are victims of sexual and physical abuse are more likely to be become dependent on alcohol/drugs later and to become sexual abusers themselves. Finally, while being a victim of abuse does not always lead to behavior problems, some make the claim that greater prevalence of behavior problems in deaf adolescents can be explained by the higher incidence of abuse experienced by such children (Sullivan & Knutson, 1998). To further exacerbate this problem, there is a lack of professionals dealing with abuse victims that are trained to work with the deaf; this means many abused deaf adolescents become adults before they are ever able to communicate their abuse to anyone and begin deal with the emotional after-effects (Ridgeway, 1993).

Conclusion

This thesis has covered many different areas of the deaf adolescent's life, from family life and school to psychological, social and behavioral problems and, finally, risk of abuse. While the purpose of this paper is to inform others of the unique problems deaf teenagers may face, it is also important to know what to do with this knowledge.

Drawing upon the research summarized in this paper, there are several steps that can be taken to help alleviate the problems faced by deaf adolescents.

First, as communication was emphasized again and again as having a significant effect on the adolescent's well-being, helping the child learn to communicate effectively with others may help to increase social interaction and encourage more positive psychological development. This is especially important for the family of the deaf child; we have seen how establishing open communication between the parents and child can lead to a stronger relationship at home. Having this open relationship with parents may reduce the chances that the adolescent will take part in risky behaviors and also encourages them to have higher self-esteem. In addition, learning sign language along with the child appears to have a significant effect on the child's self-esteem and will allow for more effective communication between the adolescent and the parent.

Second, as parental attitude was shown to have such a significant influence on the adolescent's self-concept, it is important for the parents to evaluate how their reaction to the child's deafness may be affecting his/her self-concept. In order to give the child a more positive self-concept and have the confidence to build healthy relationships with others, it is important for the child to accept his/her own deafness. This acceptance is more likely to take place after the parents themselves have decided to accept the deafness. Moreover, allowing for involvement in the Deaf community, as well as showing interest in the culture, may give the child a stronger support network, both inside and outside the home.

Finally, in regards to abuse, it is imperative that the deaf adolescent be made aware of the risk of abuse and how to avoid becoming a victim. Both parents and the school should make sure to explain all forms of abuse to deaf children in the language they best understand, most likely ASL. In addition, having established open communication between the parents and the deaf adolescent increases the chances that the deaf child will be able to seek help if abused.

In conclusion, while deaf adolescents are more prone to experiencing psychological, social and behavioral problems as well as being at a higher risk for abuse, they are not necessarily destined to struggle in these areas. Parents of deaf children have the opportunity to not only cushion the effects of deafness on the child, but can help the adolescent to embrace their deafness. The family, essentially, holds the choice and responsibility to either allow the adolescent to live as an impaired individual or as one who celebrates the fact that they simply see the world through a different set of eyes.

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