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The role of emotional perception abilities in developing friendships between young children with hearing loss and their peers with typical hearing

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**The Role of Emotional Perception Abilities in Developing Friendships
Between Young Children with Hearing Loss and Their Peers with Typical
Hearing**

By

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**An Independent Study submitted in partial fulfillment of the requirements for
the degree of:**

Master of Science in Deaf Education

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Approved by:

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This paper will discuss the importance of emotional perception skills among children with hearing loss and those with typical hearing. It will also investigate the role that emotional perception plays in the formation of friendships.

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The Role of Emotional Perception Abilities in Developing Friendships Between Young Children with Hearing Loss and Their Peers with Typical Hearing

Introduction

Many adults are able to reflect back on what it felt like to be young students on the first day of school and remember the mixed feelings of excitement and nervousness about encountering new people, making new friends and navigating a new environment. The experiences of attending a new school and meeting new peers are positive for some and daunting for others. Though individuals react differently in new environments and situations, eventually, most will adapt and build friendships. Each day then brings with it the anticipation of seeing their friends. For some, the experiences associated with thriving friendships make the idea of going to school each morning a pleasant one. These children are eager to interact and socialize throughout the school day, play with friends at recess and even make plans to interact outside of school. These new friendships enable young students to navigate the school environment and feel more comfortable in their surroundings (Gifford-Smith & Brownell, 2002).

As a result of positive relationships with peers, children often feel accepted. As part of a peer group a child begins to benefit from his new relationships and gain self-esteem. Generally speaking, children that are accepted into peer groups adjust to their environment quicker, and will begin to attempt new experiences independently (Gifford-Smith & Brownell, 2002), which is essential as they get older and move on to more complicated experiences in school, social circles and family. Children may not explicitly understand the effects that friendships have on them, but as adults, they can look back and reflect on how friendships built over their formative years have shaped them.

For children with hearing loss, the formation of meaningful peer relationships is more complicated. Children with hearing loss who use spoken language are likely to have a language gap when compared to their same-aged peers with typical hearing. A language gap is explained as a gap, or lack of language skills that a child has compared to peers with typical hearing of the same chronological age. Professionals in the field of deaf education aim to close this gap for the child with hearing loss utilizing specific techniques. One reason for this gap in language has been attributed to the inability to overhear in the environment, which is just one important avenue that children take to acquire the typical language of their peers. Children as young as two-years-old have the ability to learn both nouns and verbs just as well by overhearing as being explicitly taught (Akhtar, Jipson & Callanan, 2001). In a 2007 study, Nicholas and Geers, found that kindergarteners with cochlear implants acquired at least 262 fewer words than their peers with typical hearing. Individual words are needed to build the foundation of language, which in turn will facilitate interactions among peers.

In addition to language delay, children with hearing loss aren't readily able to recognize emotions of those around them, which inherently affect relationships (Ziv, Most & Cohen, 2013). A key component when interacting with others is emotional perception. Recognizing emotions of those with whom one interacts with shapes the overall interaction by leading to appropriate discourse. Not only does language delay create a challenge in developing peer relationships for children with hearing loss, relationships are also negatively affected by a child's inability to recognize and appropriately respond to peers' emotions.

This literature review will investigate and compare the emotional perception abilities among children with typical hearing and those with hearing loss. I will explore the role of emotional perception in children who are typically-developing and consider what particular

emotional perception skills are most useful and influential in building friendships. This paper will discuss the importance of emotional perception skills and what occurs when emotions are misinterpreted. I will suggest techniques for parents, caregivers and professionals that encourage the development of emotional perception abilities in children with hearing loss thereby helping them develop and maintain lasting friendships.

Defining Emotional Perception

Emotional perception is one's ability to recognize and distinguish differences between emotions in others (Most & Michaelis, 2012). Several skills are required for a well-developed sense of emotional perception. The components that comprise a well-developed sense of emotional perception consist of whole-body expression (non-verbal signals including body language and facial expressions), auditory information and social experience. Once whole-body expression, and auditory information have been perceived, one must then evaluate the information found within those elements, and determine how to react to the situation. Lastly, social experiences will be considered, both past and present.

Individual components of whole-body expression correlate with the perception of emotion. While listening to others, individuals may not be aware of the plethora of non-verbal cues contained in the speaker's message. Facial expressions contain ample amounts of information needed in order to understand the intended meaning contained in the message. The ability to recognize and distinguish between facial expressions is innate and develops over the first two years of life (Meltzoff, 1996; Meltzoff, Gopnick & Repacholi 1999). The six universal facial expressions – anger, happiness, surprise, disgust, fear and sadness – can be conveyed with facial expression. After realizing how conversation may incorporate these six emotions, one can

understand their importance. Non-verbal forms of communication further improve the recognition of emotion. Those who can accurately interpret them will achieve better social communication skills (Most & Aviner, 2009).

Body language must also be considered. As one speaks to one another, he or she very rarely remains motionless. Whole-body expression is a term used to describe the use of one's entire body to convey emotion. In a study by Van den Stock, Righart and de Gelder, it was found that the existence of whole-body expression led to clearer understanding of emotion. When the use of whole-body expression was not utilized, it led to a lower incidence of emotional perception by recognition of facial expression and auditory information alone (Van den Stock et al, 2007).

The ability to identify emotions auditorily by intonation develops between 4 and 10 years of age and then continues developing until adulthood (Morton & Trehub, 2011). Detecting emotion auditorily is an intricate and involved process. One reason for this is the inclusion of three components of auditory information that aid in the detection of vocal emotion: prosody, the patterns of sound or rhythm, voice quality, and vowel articulation (Fu, Chinchilla, & Galvin, 2004). An experienced listener is well-tuned to these cues and will successfully be able to identify the emotions the speaker is conveying in conversation.

In addition to whole-body expression and use of auditory information, a person develops a strong sense of emotional perception when exposed to varying emotions in their environment via social experiences. In a study conducted by Pollak and Kistler (2002), it was found that social signals such as those conveyed by the face have been noted to be an important signal from the environment that necessitates immediate and definite recognition. In addition, data suggests experience affects the formation of perceptual representation of emotion. This data is supported

by the notion that humans rely considerably on facial expressions when communicating emotional conditions to those around them (Pollak & Kistler, 2002). Children are exposed to bountiful, mosaics of experiences that start at birth. One particular social experience to note is that of maltreated children—parents of these children exhibit less positive emotion. Maltreating parents also tend to segregate themselves and their children from others, which allows their children fewer opportunities to witness alternate models of emotional communication (Pollak & Sinha, 2002).

The Role of Emotional Perception in Children Who are Typically-Developing

Emotional perception plays a major role in a child's life. One can argue that the most important role is how vital emotional perception is when building friendships. Research has found that children's friendships are thought to be templates for future relationships (Gottman, Gonso & Rassmussen, 1975). It has also been found that making meaningful friendships can be an important precursor to school readiness and academic success (Webster-Stratton & Reid, 2004). As a child embarks on his first experiences in school, he will inevitably attempt building friendships. Since young children are in an experimental phase with social skills, they will need to learn how to interact in their social world. They will begin learning the skills necessary for interacting with others in the home, often modeled by parents and siblings (Denham, Zoller, & Couchoud, 1994). They will continue to utilize these skills in the classroom as well as acquire new skills through peer modeling—information transferred by imitation (Hartup & Moore, 1990).

The ability to understand and imply emotions of others is a crucial skill in a child's social development. The understanding of emotions is imperative because children regularly rely on

this understanding to direct their behavior in social interactions. (Laible & Thompson, 1998). Emotional perception will also contribute to a child's ability to achieve key developmental milestones of communication and improved sense of self (Webster-Stratton, 2006). A higher self-esteem will allow these children to feel more confident in their social skills. Throughout the preschool years children will make giant strides in their comprehension of emotion (their own as well as others'). It is during this time that they will become even more capable of using emotions in play as well as correctly evaluating emotions in others (Eisenberg et al., 1988). Experts have noted how integral play is for young children, and for preschool children, sociodramatic play is an important context in which perspective taking, social participation, group cooperation and intimacy skills develop (Webster-Stratton, 2006).

As a result of well-formed emotional perception, a child is on the way to achieving meaningful relationships, and becoming successful in school. Therefore, parents and professionals must work to foster the skills necessary for building and strengthening a child's emotional perception.

Conveying Emotion through Language

Most young children spend the majority of their day in a classroom. A five-year-old who is typically-developing can converse with his peers often during this time. As a child plays and talks with a peer in the classroom, he will receive both linguistic and non-verbal information. Additionally, lexical information will attribute to the clarity of the message. Accompanying lexical information are indexical aspects of the speech. These include the characteristics of the speaker (gender and age) as well as emotions contained within the speech (Borrie, McAuliffe, Liss, O'Beime & Anderson, 2013). Both linguistic and non-verbal information are vital to the

understanding of social interactions (Most & Avinar, 2009). When aided by indexical information, the meaning of the language in the interaction is made even clearer.

Linguistic information can be described as the grammatical structure of a sentence—the basic building blocks of language which are constructed from both clauses and phrases. In addition, the importance of word order, or syntax is also necessary in conveying appropriate meaning to the listener (Pinker, 1991). Non-verbal information is comprised of both facial expression and body language, and helps to completely express the intended information and emotion contained within language (Most & Aviner, 2009). In addition, indexical information also attributes to the clarity of the message. The term *linguistic information* refers to the vocabulary and semantic information, syntactic qualities, and individual clauses and phrases used by a speaker. Linguistic information tends to be especially difficult for children with hearing loss to process and interpret. In order for the listener to make sense of the linguistic information he must be able to separate each component (vocabulary, sentence structure, etc.) contained within the language. A child with hearing loss may have difficulty with this process due to slow processing or unfamiliar vocabulary (Svirsky, Robbins, Kirk, Pisoni & Miyamoto, 2000). These children often put forth a significant amount of effort to grasp the meaning of the language, thereby missing the visual cues and auditory information necessary to perceive the emotion of the speaker (Wiefferink, Rieffe, Ketelaar, Raeve & Frijns, 2013).

Misinterpretation of Speaker Emotion

It is not uncommon for children who are typically-developing to misunderstand speaker emotion. According to Denham and colleagues (1997), a misinterpretation, or misunderstanding occurs when a communication attempt is unsuccessful because what the speaker *intends* to

express differs from what the listener *believes* to have been expressed. This is often the result of misread visual cues (as previously mentioned) or a lack of proficiency of the linguistic information, including poor vocabulary skills. When a listener experiences a misinterpretation of emotion, the listener may indicate to the speaker that he should improve the utterance by using a common demonstration of misunderstanding such as (White, 2014):

- Giving a confused or puzzled expression
- Using a standard verbal prompt for repeating or clarifying such as, “What?”
- Physically or verbally responding in a way that conflicts with the initial utterance

Repair strategies could include asking the speaker to repeat what he said, providing background information or adding details to the utterance. An example of adding details to repair a misinterpretation of emotion is as follows:

Initial Utterance: The speaker says, “I am mad.

Misinterpretation of Emotion: The listener laughs.

Repaired Utterance: The speaker says, “I am mad because you knocked over my blocks.”

Adding details, including the reason behind the emotion, provides the listener with more information for understanding. When children utilize these repair strategies, the misinterpretation of emotion is clarified and repaired (Most, Shina-August & Meilijson, 2010).

For children with hearing loss learning to listen and talk, the misinterpretation or misunderstanding of speaker emotion occurs as a result of misread visual cues, lack of proficiency with linguistic information and poor vocabulary skills (Borrie et al, 2013). Although these happen to children with typical hearing, they occur more often to children with hearing loss (Borrie et al, 2013). The aforementioned components—misread visual cues, poor vocabulary

skills, and lack of proficiency with linguistic information—are in line with a child with typical hearing. However, there is one last component that cannot be overlooked—auditory information. Incorrect or missing auditory information leads to misinterpretation of emotion by children with hearing loss (Ziv et al, 2013). As previously stated in this paper, lexical information and indexical aspects of the speaker are vital and contain the emotion piece to the message the speaker is trying to convey to the listener. If the listener does not receive these bits of information, misinterpretation is bound to occur. Reasons that these components may not be adequately interpreted is the lack of properly fitting or appropriate devices for the child with hearing loss, or as a result of grossly underdeveloped listening skills (even with appropriate hearing devices that are properly fit) due to reduced quantity and quality of auditory input, and due to the fact that they might miss slight changes to a speaker's prosody, or rhythm of spoken language such as the patterns of sound, voice quality and vowel articulation (Most et al, 2010).

In order for children with hearing loss learning to listen and talk to correctly interpret speaker emotion, they must first have properly-fit and appropriate hearing devices. When a child is learning to listen and talk with appropriate devices, he must be explicitly taught *how* to repair conversation that he misunderstands. These techniques are identical to the repair strategies that children with typical hearing utilize.

When children with hearing loss misinterpret the emotions of peers, they are likely to face negative reactions. These reactions are most often exclusion from a group or rejection by a peer. Peers who are misinterpreted multiple times eventually give up and/or harbor negative feeling as a result of the unsatisfying interaction (Gifford-Smith & Brownell, 2003). It is easy to see that this greatly affects the development of friendships between a child with hearing loss and his peer with typical hearing. Lastly, these breakdowns, or misinterpretations of emotion, are

likely to occur during play. Considering the importance of play in a child's life, these breakdowns can be extremely detrimental to the overall socialization of the child both in the classroom and while attempting to build and maintain friendships in social situations.

Improving Emotional Perception Abilities

The following are suggestions for parents, caregivers and professionals to utilize in order to assist in improving the development of emotional perception abilities in children with hearing loss learning to listen and talk. It is intended that these suggestions and techniques will help children develop and maintain lasting, meaningful relationships.

- Ensure the child has properly-fit, appropriate devices.

In order to be certain that the child is benefitting from his device(s) and has access to sound.

- Provide the child with exposure to rich social experiences and language.

To attach meaning to the emotions experienced as well as the language used at these times.

- Model proper emotional responses with the intention of explicitly guiding the child to the appropriate response.

Modeling the appropriate response provides a guideline for the child. The child will practice reproducing the appropriate response.

- Collaborate with others to model conversations about emotions in real-life situations.

Involving other family members, teachers or friends will provide many examples of appropriate, real-life emotional reactions the child may encounter.

- Explicitly teach emotion-related vocabulary (often referred to as mental-state vocabulary).

Providing the child with specific words and their meanings will help tie the emotion felt to the word.

- Take advantage of naturally-occurring instances when the child doesn't perceive or understand the emotions of another person.

Children are constantly learning! Helping a child learn in the moment is valuable.

Explain that he misinterpreted an emotion (or didn't pick up on the cues) and inform him of the correct way to respond to the emotion or how he can look for the cues next time.

Conclusion

Emotional perception abilities in children with hearing loss play a significant role in the formation of meaningful relationships among peers with typical hearing. Well-developed emotional perception skills enable the listener to pick up on the emotion contained within the language, thereby clearly understanding the speaker. Children with hearing loss who are learning to listen and talk can learn to form relationships with peers if they can first learn to employ repair strategies, which will likely have to be explicitly taught to them. These children must be taught to understand and recognize visual cues, in addition to auditory cues their peers use during conversations. Not only will a child with hearing loss benefit from improved social skills, he will also have the capability for improved self-esteem and greater success in school.

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