

# RAISING THE WHOLE CHILD: ADDRESSING SOCIAL-EMOTIONAL DEVELOPMENT IN DEAF CHILDREN



Photo credit: Matthew Kohashi

## AUTHORS

Linda Risser Lytle, Ph.D.

Gina A. Oliva, Ph.D.



National Science Foundation  
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Science of Learning Center  
on Visual Language and  
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## KEY FINDINGS

- Social-emotional development promotes language skills, and language skills in turn support social-emotional development.
- Direct communication with numerous adults and peers is important to learning and social-emotional development.
- Deaf and hard of hearing children show gains in self-esteem and self-confidence when they have friends who are also deaf or hard-of-hearing.
- After-school, weekend, and summer programs with deaf and hard-of-hearing peers are excellent means for developing friendships and a feeling of belonging.
- Deaf and hard of hearing children are empowered when they are considered part of the overall diversity among students in a school.

# Raising the Whole Child: Addressing Social-Emotional Development in Deaf Children

Linda Risser Lytle, Ph.D., & Gina A. Oliva, Ph.D.

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## What is Social-Emotional Development?

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**E**arly social and emotional skill development provides a critical foundation for life success. From birth, and very likely before birth, parents are intrinsically involved in the social-emotional development of their children.

However, they are often unaware of how important social-emotional skills are, nor do they know how to support development of these skills. There are significant research findings that show social-emotional competence is a critical determiner of success in school and in life.<sup>1,2</sup> This is equally true for deaf and hard-of-hearing individuals.<sup>3,4</sup>

Several qualities and characteristics are thought to make up social-emotional development. Good communication skills top the list, and this is a particular concern for deaf and hard-of-hearing children. Other qualities include having good self-direction and self-control and being able to think independently, show empathy, and understand one's own feelings as well as those of others.

Some qualities are particularly important for functioning well in our multicultural world today: understanding the perspectives of others, knowing when dependence and interdependence on others is needed, and being able to understand and appreciate both one's own and others' cultures.

Age-appropriate social-emotional behavior supports self-esteem, self-confidence, healthy relationships, flexibility, and ability to attain socially approved goals.

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## Social-Emotional Development is Linked to Language Development

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Researchers are learning that social-emotional development is an important key to learning and language development in children, including deaf and hard-of-hearing children.<sup>5,6,7,8</sup>

Vygotsky<sup>9</sup> studied language development intensively and found that language is best learned through positive social

experiences. Deaf and hard-of-hearing children's language gains can be predicted based on their responsiveness within their relationships with caretakers.<sup>10</sup> Researchers who observed mothers of deaf infants found that a mother's ability to respond to her deaf infant was a powerful predictor of the child's ability to develop attentiveness, social skills,



and language.<sup>11</sup> Infants and toddlers thrive on close relationships with their caregivers. Through these experiences, they develop positive self-esteem and trust in others.<sup>12</sup>

Parents need to provide their deaf and hard of hearing infants and toddlers with slightly different experiences in order to develop the same levels of positive self-esteem and trust. Spencer and Koester<sup>8</sup> stress the importance of parents using tactile contact to help their deaf infants calm, soothe, and comfort themselves. Tactile contact also reinforces parent-child bonding.

Studies suggest that deaf parents use vision, movement, rhythm, pacing, mirroring, and following the child's lead differently, naturally, and more effectively than do hearing parents. However, these skills can be learned and are simple and easy to incorporate into daily interactions.<sup>8</sup>

Babies and toddlers need to experience

**“Babies and toddlers need to experience being part of a community, learn boundaries between self and others, develop reciprocity, and acquire initial social communication skills.”**

being part of a community, learn boundaries between self and others, develop reciprocity, and acquire initial social communication skills. These skills are basic building blocks for the important skill of turn taking, a requirement for the development of early communication, language development, and social connections. Early parent-child experiences that are reciprocal and responsive are key to developing these skills.



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## Language Development is Linked to Social-Emotional Development

Children learn social behaviors in the home through effective language-based and nonverbal communication. Parents often do not recognize the importance of communication at early ages.<sup>6</sup>

We know that exposing deaf children early to language has significant and positive impacts on their personality and emotional development.<sup>6,13,14</sup> For example, Allen & Letteri<sup>14</sup> analyzed the relationship between early language skill and social competence in school-age children and found that deaf preschoolers who demonstrated strong bilingual language skills (in ASL and English) were rated by their parents as being more willing to share toys and participate eagerly in school activities than those with lower levels of language skill.

Other research shows that deaf children with family members who sign well consistently have better self-esteem than those in homes where sign is not used, or is not used effectively. Deaf children whose families speak and sign have higher self-esteem than those with families that use only spoken language.<sup>15</sup>

Deaf children who lack effective communication skills have difficulty controlling their behavior and regulating their reactions to stressful situations, and they have less knowledge

### Tips for Parents: Birth-5 years old

- Learn about the critical importance of early language exposure and consider the benefits of using both signed and spoken languages with your child.
- Make time every day to enjoy your child; be spontaneous and playful.
- Comfort and soothe your baby with loving facial expressions, eye gaze, touch, mirroring, and rhythmic movement.
- Educate yourself about all aspects of raising a deaf child. Read books and visit websites, including those written or managed by deaf and hard of hearing professionals. We particularly recommend the ones listed in the resource tab of the VL2 Parents Package website at [vl2parentspackage.org](http://vl2parentspackage.org).
- Investigate and join social media sites for parents with deaf children that support both spoken and signed languages.
- Make regular and consistent efforts to develop and maintain friendships with other families with deaf and hard of hearing children, including those with deaf parents.
- Arrange regular play dates for your child with other deaf and hard of hearing children; include deaf children with deaf parents if possible.
- Learn about your rights related to the federally mandated Individual Family Service Plan (IFSP) for children from birth to age 3 and an Individualized Education Program (IEP) once your child turns 3. Advocate for your child to get any/all services needed, including services to facilitate social-emotional development.
- Insist on funding to support your child's social interaction with other deaf and hard of hearing children prior to beginning school.
- Insist on services from both speech and sign language specialists.





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about social rules. In addition, their self-esteem and independence are less well developed.<sup>3,6,16</sup>

In sum, current research has explored the interconnections among social-emotional development, language development, and cognitive development, including in deaf and hard-of-hearing children who use one, two, or more languages (and modalities). Thus, in a child's early life, effective strategies to support these developmental domains are critical for a child's learning and well-being.

This research brief discusses some of these strategies.

## The Key Role of Families

Families greatly influence social-emotional outcomes for deaf and hard-of-hearing children.<sup>3,17,18,19,20,21</sup> Families can support positive social-emotional health and thus influence future outcomes, including academic outcomes, for their children.<sup>17,18,22,23</sup>

Parents play a critical role as models during their child's growth by nurturing the development of social-emotional strengths. In order to be emotionally available to their children, parents must first take care of their own needs.

Findings show that strong parental support networks, both formal (such as early intervention programs) and informal, are effective in helping parents through the emotional process of accepting that they have a deaf child and navigating the many choices they face during their journey.<sup>11,24,25,26,27</sup>

Almost invariably, hearing parents quickly realize that their friends and families do not fully understand many of the issues involved in parenting a deaf or hard-of-hearing child. It becomes important that these parents find and sustain support networks that include individuals in the Deaf and hard-of-hearing community.<sup>3,28,29,30,31</sup>

Parents who have this early support become more comfortable and confident in their skills and thus more emotionally available to their child. This in turn helps the child develop in healthy ways.<sup>4,32</sup>

Parents' feelings and attitudes about their child's deafness also impact the child's social-emotional development and success in school.<sup>6</sup> Strong family-focused early

### Tips for Parents: K-12

- Learn about your legal rights within the school system. Valuable resources include [www.deafchildren.org](http://www.deafchildren.org) and [www.ceasd.org](http://www.ceasd.org).
- Bring a knowledgeable or professional advocate or supporter with you to every IEP meeting.
- Insist on support for your child's social-emotional development as well as academics.
- Be willing to invest time and money for your child to regularly participate in weekend and summer programs with other deaf and hard of hearing children throughout the year, including during high school.
- Insist that the school system pay for transportation to any after-school, weekend, or summer programs with other deaf/hard of hearing children.
- If there are insufficient weekend and/or summer programs in your geographical area, team up with others to start programs and push the district and/or state to provide funding for these services, including for staff, facilities, and transportation.
- Ensure weekend and summer programs include deaf and hard of hearing staff.
- Ensure weekend and summer programs provide opportunities for children to talk about their everyday experiences and discuss strategies to make their experience at school more positive and productive.
- Ensure weekend and summer programs provide opportunities for developing resilience.

intervention supports families in being able to deal with negative or confused feelings.

Once these feelings are positively resolved, stress often lessens significantly. The family members are then more emotionally available to their child and able to move in a positive direction.<sup>8,30,33</sup>

Research shows that deaf children can grow up to be as well adjusted as their hearing peers. However, like hearing children, deaf children need high quality parenting.<sup>3,6</sup> Quality parenting includes teaching children specific skills such as how to label, understand, and regulate their own emotions. These skills are vital to understanding one's self and getting along with others.

Furthermore, acquiring these skills requires language and communication skills. Children who have these skills are able to recognize when they feel happy, sad, or angry and



express these feelings in appropriate words and ways. Communication is the number one requirement for developing strong social-emotional skills<sup>3,6</sup>, and ease of communication with parents is a major predictor of self-esteem and social competence.<sup>34</sup>

## The Role of Schools in Social-Emotional Development

Early intervention programs, which are significant sources of information and support for most families, abruptly stop providing services when the child enters kindergarten. There is no comparable support structure to replicate the important services that early intervention programs provide to assist families as they navigate numerous challenges throughout the child's K-12 years.<sup>8,35</sup>

This systemic deficiency fails deaf and hard of hearing children and their families and means parents must work very hard to stay closely connected with their child's school and teachers from kindergarten through 12th grade.

Another concern for most deaf and hard of hearing children in general education settings is that teachers and administrators often are poorly prepared to welcome these children and their families into the school community. When a child feels like a visitor rather than a full member of the school community, this can result in low self-esteem, marginalization, and isolation. Full membership in school communities help meet students' needs and make them feel highly valued and accepted.<sup>3</sup>

In order to reduce the likelihood of isolation and maximize student growth, educators must ensure that deaf and hard of hearing students are viewed as full, participating members of a rich and culturally diverse community.<sup>3,35</sup>

Creating positive experiences within schools often involves a delicate balance between accommodating individuals' specific needs and treating all students the

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same. This requires a unique skill set for teachers, who ideally will take an interest in the experience of being deaf and in American Sign Language (ASL) and who are generally caring, sensitive people.

Teachers and peers who communicate comfortably, verbally and non-verbally — rather than who communicate awkwardly, avoid communication, or always go through an interpreter — make a positive difference.<sup>3,35,36</sup>

Middle school and high school are stressful for students in general, for academic and social reasons, and often more so for deaf students.

Deaf and hard of hearing students use significantly more effort and energy concentrating on and understanding lectures and discussions in general education classrooms, and they often spend hours studying independently in order to make up the work they miss in these classes.



This extra, and often excessive, energy expenditure happens regardless of the type of accommodations provided and leads to increased fatigue and stress.<sup>37</sup>

Children's ability to succeed academically requires social competence. However, social competence is a daily challenge for deaf and hard of hearing students in general education classrooms.

Deaf and hard of hearing students in these classes have very few social models.<sup>6,35</sup> Deaf students often are not included in the social structure of the classroom and often cannot participate effectively due to communication barriers.<sup>35,38,39,40</sup>

Researchers have found that placing

deaf students in classrooms with hearing children, with inadequate support, more often than not will lead to feelings of isolation. Evidence shows that having a large social group with like peers, such as residential schools often provide, leads to more "normal" social development and includes such social benefits as leadership opportunities, more accurate assessment of self-image, and greater self-esteem.<sup>6</sup>

Whether deaf and hard of hearing students are placed in mainstream classrooms or in residential schools, it is of paramount importance that social-emotional goals are established within the context of each student's Individualized Educational Plan (IEP).

### Tips for Educators

- Educate yourself about deaf and hard of hearing people from a cultural viewpoint.
- View the deaf or hard of hearing child as part of the rich diversity within your school and classroom.
- Consider new knowledge, skills, and awareness that will result from having this child in your class and school community and infuse these into your curriculum and/or classroom activities.
- Make a point to regularly communicate directly with deaf and hard of hearing students, whether through spoken language in conducive spaces (not noisy or visually distracting), sign language, or print media/text/notepads.
- Keep interactions positive so deaf and hard of hearing students can gain skills and confidence in their ability to interact with peers and adults.
- Be alert to the child's accessibility needs. Turn on captioning for TV, videos, and movies, each and every time. Consider how physical aspects of your classroom—noise levels, seating configurations—affect the deaf or hard of hearing child.
- If the student, on their own or through an interpreter, says something unclear, give the student a chance to express it again, including through different means.
- Be aware that confusion or lack of clarity may be due to an interpreter's inadequate skills.
- If there are two or more deaf and hard of hearing students in the school, create ways for these students to meet and interact in meaningful ways, even if they use different languages or modalities. What is important is that they meet others like themselves.
- Provide ASL classes and/or an ASL Club and empower the deaf child to lead this club. At the high school level, offer ASL for World Language credit.
- Engage the deaf student(s) in creating activities or course content to educate classmates about Deaf Culture, famous Deaf individuals (past and present), and contemporary Deaf adults who have successful careers in various fields.
- Engage the deaf student in creating activities or course content focused on the Deaf experience and signed languages in the visual and performing arts.



Photo credit: Christi Fields

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## Hearing Levels and Social-Emotional Development

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With so many children receiving cochlear implants in infancy, terminology to describe hearing levels has become ambiguous and confusing. Parents struggle to identify whether their child is deaf, hard of hearing, or partially hearing. Technology that allows a deaf child to hear some things (e. g. one-on-one conversations in quiet environments, conversations about known subject matter) frequently leads parents and school personnel to treat a child as “hard of hearing” or “partially hearing.”

Parents and teachers have difficulty discerning what children can and cannot hear, and they routinely overestimate the percentage of information the child is receiving and understanding.

Deaf students themselves may contribute to this confusion by pretending they understand verbal communication rather than ask for repetitions, particularly when they think the likelihood of understanding is low.<sup>37</sup> Hopper<sup>41</sup> found that even deaf individuals themselves underestimate the amount of information and conversation they miss.

This creates the risk that parents and teachers may in turn underestimate the level of support the deaf student needs in the classroom and during social and extracurricular activities.

Research has shown that the degree of hearing a child has does not relate to degree of social competence. Social skill development can present problems for hard of hearing as well as deaf children.<sup>42,43,44</sup>

Both groups of students are at risk of missing significant conversations and information, are often rejected by peers, and struggle academically.<sup>45</sup>

Yet students with mild and moderate hearing levels often are perceived, wrongly, as not needing services and connections with deaf and hard of hearing peers.<sup>46</sup> Parents and educators need to be aware that even with implants and hearing aids, deaf and hard of hearing children experience limited access to surrounding conversations in classroom discussions and in most informal settings.

Most people vastly underestimate how much conversation and incidental

information deaf and hard of hearing individuals miss. Many hearing people are unaware of how much they hear and absorb without any effort at all on a daily basis.

This kind of information is called incidental learning, and missing this information can adversely impact social-emotional and cognitive development from a very young age.<sup>8,35,41,47</sup>

Various studies tell us it is difficult to be the only girl in a classroom of boys<sup>48,49</sup> or the only black student in a classroom of white students.<sup>50</sup> Similarly, numerous studies show it is challenging to be the only deaf or hard of hearing student in a school.<sup>35,38,39,40,51,52,53,54</sup>

It is lonely being the only member of a socially disadvantaged group (e.g. disabled, minority race, female) within a larger majority group. This is potentially damaging to the individual's social-emotional development and academic achievement.

Furthermore, growing up in this setting challenges identity formation.

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## Identity Formation

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A major task of adolescents and young adults is to understand who they are, who they want to be, and where they fit into the world around them — this is the essence of how identity is formed.

Several important issues impact identity development for deaf and hard of hearing individuals. Researchers have found that how one feels about one's hearing status — being deaf or hard of hearing — is an important part of what shapes identity.

Identity research clearly shows that being bicultural, or being able to interact comfortably with deaf and hearing



Photo credit: Clare Cassidy



individuals, has a positive impact on identity. Individuals who can do this generally have high self-esteem.<sup>55,56,57</sup>

Isolation from others hinders or prevents children's identity formation. According to Erikson<sup>58</sup>, individuals base their identity partly on their own self-concept and partly by incorporating how others in their communities view them.

This concept, called psychosocial mutuality, tells us that it is vitally important for those who interact with a deaf or hard of hearing child to hold and demonstrate positive views of the child's abilities and characteristics. Both familial and societal acceptance is necessary for self-acceptance.<sup>58,59</sup> Without this affirmation, deaf and hard of hearing adolescents struggle to form a clear and positive identity.

A family that has no other deaf members may need strategies to help their deaf child arrive at a positive self-identity that incorporates both vertical and horizontal identities. Andrew Solomon<sup>59</sup> describes vertical identity as including important traits and values that families hand down to their children from generation to generation. Horizontal identity includes elements that children may need to discover outside of their families, from others who share a distinguishing characteristic not present in other family members.

The need for horizontal identities is not exclusive to deaf children but applies equally to other groups of individuals who differ in important ways from their families. Examples include adopted children — especially those from a different race — youths with disabilities, sexual minority youths, and those with psychiatric diagnoses. People benefit



Photo credit: Matthew Kohashi

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greatly from friendships with those who share a trait or characteristic with themselves; these connections make us feel whole.

For example, a deaf child may need support from their family to develop friendships with other deaf and hard of hearing children; these friendships are fulfilling in crucial ways that support identity development and self esteem.

One of the best and easiest ways deaf and hard of hearing youth can develop a healthy horizontal identity is by participating in programs and events that involve other deaf and hard of hearing children and adults.

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## Summer and Weekend Programs

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Close friendships are vitally important to life success.<sup>2,57</sup> Families of deaf and hard of hearing children must work hard to meet these children's needs for friendships.

Outside of school environments, deaf and hard of hearing teens often miss out on going to the mall, hanging out, and flirting, all of which may seem superficial but are very important.<sup>6,35,47,60</sup>

Since it is so challenging for these adolescents to fully engage with hearing peers, it becomes crucially important to ensure deaf and hard of hearing children have ample opportunities to develop friendships and social networks with each other.

Summer and weekend programs provide a structured, educational means for meeting deaf and hard of hearing peers and adults during the school years.

Attending these programs is one clearly identified way to meet the need for friendships — and consequently identity

development — that are not met in general education settings.<sup>35,47</sup>

These programs provide adolescents with opportunities for full acceptance by peers, full access to conversations, and full support for a strong and positive identity. They provide a broader view of the world — one in which the child is not the deaf child, but is allowed to simply be a child without consideration of hearing and/or speech ability.

Within these programs, children learn that friendships with other deaf and hard of hearing children are vitally important. These friendships and connections boost their self-concepts and support healthy identity development.

While friendships with hearing peers are also important, they do not and cannot offer what deaf peers provide — the normalcy of being just like everyone else.<sup>3,35,61</sup>

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## Conclusion

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In conclusion, parents and school personnel who focus on social-emotional competence in turn provide strong support for building cognitive, language, and academic competence.

Each area of competence supports the other. Frequent and sustained interactions with other deaf and hard of hearing children offer important social-emotional opportunities. Having social models and being a part of a large social group leads to greater “normal” social development, because it includes leadership opportunities, more accurate assessment of one's self-image, and greater self-esteem.<sup>6</sup>

In general education settings, focused attention is needed to supplement the social environment for each and every deaf, hard of hearing, or partially hearing student. Social-emotional development has a vital place in successful parenting and education.

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## Translating VL2 Research

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The National Science Foundation Science of Learning Center on Visual Language and Visual Learning (VL2) publishes research briefs as a resource for parents, educators, and others who work with deaf and hard of hearing children. These briefs review important research findings, summarize relevant scholarship, and present informed suggestions for parents, educators, and professionals. The information provided in this brief is intended to address social-emotional development in deaf and hard of hearing children.

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### VL2 Resources for Your Family and Your Classroom

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Scientific discoveries from the National Science Foundation Science of Learning Center on Visual Language and Visual Learning (VL2) at Gallaudet University have provided foundational knowledge that has been used to create important evidence-based translational resources. Key discoveries that contribute to VL2's translation of science span multiple VL2 laboratories and include the discovery that early exposure to a visual language provides

visual processing and higher cognitive processing advantages; early bilingual ASL and English exposure provides powerful dual language benefits; and visual sign phonology plays an important facilitative role in the young deaf child's early acquisition of reading English in the same way that sound phonology has a facilitative role in young hearing children's accessing of meaning from English print.

VL2 has created translational, educational, and ethical resources for educators, practitioners, policymakers, parents, researchers, and the greater public. For more information, see:

- [vl2.gallaudet.edu](http://vl2.gallaudet.edu)
- [www.vl2storybookapps.com](http://www.vl2storybookapps.com)
- [www.vl2parentspackage.org](http://www.vl2parentspackage.org)

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### Credits

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**Writers:** Linda Risser Lytle, Ph.D., & Gina A. Olivia, Ph.D.

**Editor:** Melissa Herzig, Ed.D., & Tara Congdon

**Consultant:** Diane Clark, Ph.D.

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### References

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1. Feuerstein, R. (1980). *Instrumental enrichment*. Baltimore, MD: University Park Press.
2. Goleman, D. (1995). *Emotional intelligence*. New York, NY: Bantam.
3. Antia, S. D. & Kreimeyer, K. H. (2015). *Social competence of deaf and hard of hearing children*. New York, NY: Oxford University Press.
4. Calderon, R. & Greenberg, M. (2011). Social and emotional development of deaf children: Family, school, and program effects. In M. Marschark & P. Spencer (Eds.), *The Oxford handbook of deaf studies, language, and education* (Vol. 1, 2nd ed., pp. 188 - 199). New York, NY: Oxford University Press.
5. Antia, S. D., Kreimeyer, K. H., Metz, K. K., & Spolsky, S. (2011). Peer interaction of deaf and hard of hearing children. In M. Marschark & P. Spencer (Eds.), *The Oxford handbook of deaf studies, language, and education* (Vol. 1, 2nd ed., pp. 173 -187). New York, NY: Oxford University Press.



6. Marschark, M. (2007). *Raising and educating a deaf child*. New York, NY: Oxford University Press.
7. Pipp-Siegel, S. & Biringen, Z. (2001). Assessing the quality of relationships between parents and children: The emotional availability scales. In Yoshinaga-Itano, C. & Sedey, A. L. (Eds.), *Language, speech, and social-emotional development of children who are deaf or hard of hearing: The early years*. The Volta Review, 100, 5, monograph.
8. Spencer, P. E. & Koester, L. S. (2015). *Nurturing language and learning development of deaf and hard-of-hearing infants and toddlers*. New York, NY: Oxford University Press.
9. Vygotsky, L. (1978). In M. Cole, V. John-Steiner, S. Scriver, & E. Souberman (Eds.), *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
10. Pressman, M. A., Pipp-Siegel, S. Yoshinaga-Itano, C., Kubyek, L. & Emde, R. N. (2001). A comparison of the links between emotional availability and language gain in young children with and without hearing loss. In Yoshinaga-Itano, C. & Sedey, A. L. (Eds.), *Language, speech, and social-emotional development of children who are deaf or hard of hearing: The early years*. The Volta Review, 100, 5, monograph.
11. Meadow-Orlans, K. P. Spencer, P. E., Koester, L. S. & Steinberg, A. G. (2004). Implications for interventions with infants and families. In K. P. Meadow-Orlans, P. E. Spencer & L. S. Koester (Eds.), *The world of deaf infants: A longitudinal study* (pp. 218 – 228). New York, NY: Oxford University Press.
12. Bowlby, J. (1988). *A secure base*. London, UK: Tavistock/Routledge.
13. Hoffman, M. F., Quittner, A. L., & Cajas, I. (2015). Comparison of social competence in young children with and without hearing loss: A dynamic systems framework. *Journal of Deaf Studies and Deaf Education*, 20, 115 – 128.
14. Allen, T. & Letteri (In Preparation). *The relationship between early language proficiency and social competence in young deaf children: A structural equation model*.
15. Desselle, D. D. (1994) Self-esteem, family climate and communication patterns in relation to deafness. *American Annals of the Deaf*, 139, 322–328.
16. Vaccari, C., & Marschark, M. (1997). Communication between parents and deaf children: Implications for social-emotional development. *Journal of Child Psychology and Psychiatry*, 38, 793 – 802.
17. Calderon, R. (2000). Parent involvement in deaf children's education programs as a predictor of child's language, reading, and social emotional development. *Journal of Deaf Studies and Deaf Education*, 5, 140 – 155.
18. Calderon, R. & Greenberg, M. (1993). Considerations in the adaptation of families with school-aged deaf children. In M. Marschark & M. D. Clark (Eds.), *Psychological perspectives on deafness* (pp. 27 - 48). Hillsdale, NJ: Lawrence Erlbaum Associates.
19. Calderon, R. & Greenberg, M. (1999). Stress and coping in hearing mothers with children with hearing loss: Factors affecting mother and child adjustment. *American Annals of the Deaf*, 144, 7 – 18.
20. Montanini-Manfredi, M. (1993). The emotional development of deaf children. In M. Marschark & M. D. Clark (Eds.), *Psychological perspectives on deafness* (pp. 49 – 63). Hillsdale, NJ: Lawrence Erlbaum Associates.
21. Stinson, M. S. & Foster, S. (2000). Socialization of deaf children and youths in school. In P. E. Spencer, C. J. Erting, & M. Marschark (Eds.), *The deaf child in the family and at school: Essays in honor of Kathryn P. Meadow-Orlans* (pp. 191 – 209). Hillsdale, NJ: Lawrence Erlbaum Associates.
22. Bodner-Johnson, B. (1986). The family environment and achievement of deaf students: A discriminant analysis. *Exceptional Children*, 52, 443 – 449.
23. Calderon, R., Greenberg, M., & Kusche, C. (1991). The influence of family coping on the cognitive and social skills of deaf children. In D. Martin (Ed.), *Advances in cognition, education, and deafness* (pp. 195 – 200). Washington, DC: Gallaudet University Press.
24. Greenberg, M. T., Lengua, L. J., & Calderone, R. (1997). The nexus of culture and sensory loss: Coping with deafness. In I. N. Sandler & S. A. Wolchik (Eds.), *Handbook of children's coping with common stressors: Linking theory, research, and interventions* (pp. 301 – 331). New York, NY: Plenum.
25. Meadow-Orlans, K. P. (1990). The impact of child hearing loss on the family. In D. F. Moores & K. P. Meadow-Orlans (Eds.), *Education and developmental aspects of deafness* (pp. 321 –338). Washington, DC: Gallaudet University Press.
26. Meadow-Orlans, K. P. (1994). Stress, support, and deafness: Perceptions of infants' mothers and fathers. *Journal of Early Intervention*, 18, 91 – 102.
27. Meadow-Orlans, K. P. & Steinberg, A. G. (1993). Effects of infant hearing loss and maternal support on mother-infant interactions at 18 months. *Journal of Applied Developmental Psychology*, 14, 407 – 426.
28. Hintermair, M. (2000). Hearing impairment, social networks and coping: The need for families with hearing impaired children to relate to other parents and to hearing impaired adults. *American Annals of the Deaf*, 145, 41 – 53.
29. Sass-Lehrer, M. (2011). Early intervention: Birth to three. In M. Marschark & P. Spencer (Eds.), *The Oxford handbook of deaf studies, language, and education*, (Vol. 1, 2nd ed., pp. 63 –81), New York, NY: Oxford University Press.
30. St. John, R., Lytle, L. R., Nussbaum, D. & Shoup, A. (2015). Getting Started: Hearing screening, evaluation and next steps. In M. Sass-Lehrer (Ed.), *Early intervention for deaf and hard-of-hearing infants, toddlers, and their families: Interdisciplinary perspectives* (pp. 169 – 197). New York, NY: Oxford University Press.
31. Pittman P., Benedict, B. S., Olson, S., & Sass-Lehrer, M. (2015). Collaboration with deaf and hard of hearing communities. In M. Sass-Lehrer (Ed.), *Early intervention for deaf and hard-of-hearing infants, toddlers, and their families: Interdisciplinary perspectives* (pp.135 - 166). New York, NY: Oxford University Press.
32. Greenberg, M. T. (1983). Family stress

and child competence: The effects of early intervention for families with deaf infants. *American Annals of the Deaf*, 128, 407 – 717.

33. Sass-Lehrer, M., Porter, A., & Wu, C. (2016). Families: Partnerships in practice. In M. Sass-Lehrer (Ed.), *Early intervention for deaf and hard-of-hearing infants, toddlers, and their families: Interdisciplinary perspectives* (pp. 65 - 103). New York, NY: Oxford University Press.

34. Leigh, I. W., Maxwell-McCaw, D., Bat-Chava, Y. & Christianson, J. B. (2009). Correlates of psychosocial adjustment in deaf adolescents with and without cochlear implants: A preliminary investigation. *Journal of Deaf Studies and Deaf Education*, 14, 244 – 289. doi:10.1093/deafed/enno38

35. Oliva, G. A., & Lytle, L.R. (2014). *Turning the tide: Making life better for deaf and hard-of-hearing schoolchildren*. Washington, DC: Gallaudet University Press.

36. Wolters, N., Knoors, H., Antonius, H. N., Cillessen, H. N., & Verhoven, L. (2012). Impact of peer and teacher relations on deaf early adolescents' well-being: Comparisons before and after a major school transition. *Journal of Deaf Studies and Deaf Education*, 17, 463 – 482. doi:10.1093/deafed/enso21

37. Dorminy, J. L. (2013). *The experiences of non-signing deaf and hard-of-hearing students and their academic and social integration into a primarily signing Deaf university environment*. (Doctoral dissertation). University of Maryland, College Park, MD.

38. Keating, E. & Mirus, G. (2003). Examining interactions across language modalities: Deaf children and hearing peers at school. *Anthropology & Education Quarterly*, 34(2), 115-135.

39. Oliva, G. A. (2004). *Alone in the mainstream: A deaf woman remembers public school*. Washington, DC: Gallaudet University Press.

40. Ramsey, C. (1997). *Deaf Children in Public Schools: Placement, Content, and Consequences*. Washington, DC: Gallaudet University Press.

41. Hopper, M. (2011). *Positioned as*

*bystanders: Deaf students' experiences and perceptions of informal learning phenomena*. (Doctoral dissertation). University of Rochester, Rochester, NY.

42. Davis, J. M., Elfenbeing, J., Schum, R., & Bentler, R. A. (1986). Effects of mild and moderate hearing impairments on language, education, and psychosocial behavior of children. *Journal of Speech and Hearing Disorders*, 51, 83-62.

43. Furstenberg, K. & Doyal, G. (1994). The relationship between emotional-behavioral functioning and personal characteristics on performance outcomes of hearing impaired students. *American Annals of the Deaf*, 139, 410-414.

44. Dammeyer, J. (2010). Psychosocial development in a Danish population of children with cochlear implants and deaf and hard of hearing children. *Journal of Deaf Studies and Deaf Education*, 15, 50-58. doi: 10.1093/deafed/enp024

45. Reed, S., Antia, S. D., & Kreimeyer, K. H. (2008). Academic status of deaf and hard-of-hearing students in public schools: Student, home and service facilitators and detractors. *Journal of Deaf Studies and Deaf Education*, 13, 485-502.

46. Moeller, M. P. (2007). Current state of knowledge: Psychosocial development in children with hearing impairment. *Ear and Hearing*, 28, 729-739. doi:10.1097/UD.1090b1013e318157f318033.

47. Oliva, G. A., Lytle, L. R., Hopper, M., & Ostrove, J. M. (2016). From social periphery to social centrality: Building social capital for deaf and hard of hearing students in the 21st century. In Marschark, M., Lampropoulou, V., & Skordilis, E. (Eds.), *Diversity in deaf education*. New York, NY: Oxford University Press.

48. Sekaquaptewa, D., & Thompson, M. (2002). The differential effects of solo status on members of high- and low-status groups. *Personality and Social Psychology Bulletin*, 28, 694-707.

49. Thompson, M., & Sekaquaptewa, D. (2002). When being different is detrimental: Solo status and the performance of women and racial minorities. *Analyses of Social Issues and Public Policy*, 2, 183-203.

50. Tatum, B. D. (1997). *"Why are all the black kids sitting together in the cafeteria?" And other conversations about race*. New York, NY: Basic Books.

51. Kluwin, T. & Stinson, M. (1993). *Deaf students in local public high schools*. Springfield, IL: Charles C. Thomas.

52. Ostrove, J. M., Oliva, G., & Katowitz, A. (2009). Reflections on the K-12 years in public schools: Relations with hearing teachers and peers from the perspective of deaf and hard-of-hearing adults. *Disability Studies Quarterly*, 29(3). Retrieved from <http://www.dsqsds.org/article/view/931/1107>

53. Stinson, M. S. & Whitmire, K. (1992). Students' views of their social relationships. In T. Kluwin, M. Gaustad, & D. Moores (Eds.), *Toward effective school programs for deaf students* (pp. 149 – 174). New York, NY: Teachers College Press.

54. Walters, L. & Knoors, H. (2008). Social integration of deaf children in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 13, 21-36.

55. Bat-Chava, Y. (1994). Group identification and self-esteem of deaf adults. *Personality and Social Psychology Bulletin*, 20, 494 – 502.

56. Bat-Chava, Y. (2000). Diversity of deaf identities. *American Annals of the Deaf*, 145, 420 – 428.

57. Leigh, I. (2009). *A lens on deaf identities*. New York, NY: Oxford University Press.

58. Erikson, E. (1968). *Identity: Youth and crisis*. New York, NY: Norton.

59. Solomon, A. (2012). *Far from the tree: Parents, children, and the search for identity*. New York, NY: Scribner.

60. Kleiber, D. (1999). *Leisure experience and human development: A dialectical interpretation*. New York, NY: Basic Books.

61. Lytle, L. R., Oliva, G. A., Ostrove, J. M., & Cassidy, C. (2011). Building resilience in adolescence: The influences of individual, family, school, and community perspectives and practices. In D. H. Zand & J. E. Pierce (Eds.), *Resilience in deaf children: Adaptation through emerging adulthood* (pp. 251 – 277). New York, NY: Springer.

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