Exploring the Importance of Emotional Competence in Children With Complex Communication Needs

2 authors:

Sarah Blackstone
11 PUBLICATIONS   100 CITATIONS

SEE PROFILE

David P Wilkins
Australian National University
41 PUBLICATIONS   1,599 CITATIONS

SEE PROFILE

Exploring the Importance of Emotional Competence in Children With Complex Communication Needs

Sarah W. Blackstone
Augmentative Communication, Inc.
Monterey, CA

David P. Wilkins
Language and Linguistics Consulting
Sydney, NSW, Australia

Abstract

Research has shown that children with significant language impairments lag behind their typically developing peers in communicative and emotional competence. This article explores the importance of emotional competence in children with complex communication needs (CCN) and provides tools and strategies for individuals working with children with CCN.

We in AAC have much to learn from the research of Bonnie Brinton and others who seek to explore the relationships between communicative competence and emotional competence in children (Brinton, 2009; Brinton, Spackman, Fujiki, & Ricks, 2007; Brinton, Fujiki, Spencer, & Robinson 1997; Salovey, Mayer, Caruso, & Yoo, 2009; Saarni, 1999; & Denham, 1998). Their research confirms that children with significant language impairments often lag behind their typically peers in communicative and emotional competence. Carol Westby (2008) has also discussed the disruption of social-emotional development in children with a range of developmental disabilities, citing research with children who have language disorders, as well as those who suffer from blindness, deafness, attention deficit/hyperactivity and autism spectrum disorders. Because children with complex communication needs (CCN) often face a combination of these developmental challenges, they too are most certainly at risk for failing to develop competencies in these areas.

The AAC literature contains little evidence of, or even discussion about, how the development of emotional competence and related factors might affect the communication outcomes of children with CCN. AAC researchers have conducted many attitude studies. While important and interesting, attitude studies address how others perceive people who use AAC. They do not enlighten us about the impact these perceptions might have on children or adults with CCN nor do they tell us about the emotional development or emotional competencies of individuals who use AAC. However, a broader literature search reveals that emotional competence is intricately related to social communication, as well as to a child's intrinsic feelings of self-worth and esteem and the child's ability to learn, access knowledge, develop relationships, and achieve competence and independence within a community (Brinton, 2009; Salovey et al., 2009; Nelson, Benner, & Cheney, 2005; Gallagher, 1999; Saarni, 1999; & Denham, 1998).

We know that individuals with disabilities, especially those with CCN, may face complicated emotional problems and experience a high rate of abuse. They are more likely to be victims of crimes, remain unemployed and undereducated, have health problems, have limited social networks, and be economically disadvantaged (Bryen, Carey, & Frantz, 2003; Collier, McGhie-Richmond,Odette, & Pyne 2006). Their personal stories and creative expressions reveal emotional journeys that are often difficult and expose the unique pain of being unable to speak (Fried-Oken & Bersani, 2000: Williams & Krezman, 2000). The poem below, by Carole Janow, is a good example. Individuals who use AAC are in the best position to help us understand the role of emotional competence in their lives, as well as to suggest ways we might better support its development in children and adults.

Is there a life after speech?

Is there a life after speech?
Sometimes late at night
In the silence of my room
I think not

The world is made up of words
Words I cannot utter
Words that no one understands
Conversations only to myself

How can I live without them
It's like being sentenced to die
Every day is a struggle no one knows
A loneliness only I can feel
For without speech I am disconnected and apart.

Carole Janow (2000)

Communication is not an end in itself, but rather a means to many ends in all aspects of life. Thus, desired outcomes in AAC are not achieved through the learning of symbols, the production of utterances or the use of a speech generating device (SGD). Instead, AAC interventions are only successful to the degree to which individuals can productively use AAC strategies, techniques, and technologies to participate actively in family and community life, develop and maintain friendships, garner self-esteem, achieve personal goals, gain employment, learn to read and write, get an education, take on adult roles, become productive members of their families, contribute to their communities and self-actualize (Beukelman & Mirenda, 2005; Blackstone, Williams, & Wilkins, 2007; & Williams, Krezman, & McNaughton, 2008). This article seeks to encourage speech-language pathologists, teachers, and other practitioners who work with children and adults with CCN to consider, adapt, and apply available research in ways that benefit both the emotional development and the development of emotional competence of individuals who have CCN. Bonnie Brinton and others (Brinto et al., 2007) have already demonstrated that interventions can address these areas and make a difference.

Emotional Competence

Emotions are mental states, experienced as feelings, which originate from within a person, and are often accompanied by physiologic changes in the body. They are expressed in many different ways, reflecting a person's social and cultural context.

Emotional competence reflects a developmental process wherein individuals learn to recognize, interpret, use, and respond to their own and others' emotions. Because our "emotional response is contextually anchored in social meaning" (Saarni, 1999, 3-25), it is clear

that emotional competence emerges within a social and cultural framework of experiences (Griffiths & Scarantino, 2009).

Emotions are intrinsic to a person, meaning they emerge from within and initially get expressed (without intention), using nonverbal behaviors such as crying, pushing away, curling up, smiling, cuddling, cooing). Emotions do not occur in isolation, but in response to some internal and/or external stimuli/events. Often, but not always, they emerge within a social context. From the child's birth, caregivers interpret his/her behaviors as signals and label their feelings (e.g., "Oh, you're cranky, sad, happy, angry, etc.). While emotions are not directly observable, parents talk about what they think a child feels by monitoring their child's facial expressions, eye movements, body posture, and vocalizations.

Parents (and others) typically talk about feelings as they are occurring (or soon after) and do so within a shared context. As a result, children gradually map language onto their own feelings and become aware of other's feelings, gradually associating facial expressions, eye movements, gestures, body posture, and vocalizations, as well as words, with an ever expanding range of emotional experiences. As they grow, children discover they can express their feelings using a range of other modalities (speech, gestures, playing, writing, painting, acting, drawing, music, mime). Maturity brings an ability to modulate complex and competing emotions using self-talk and engaging in "interior dialogue," as well as through an increasingly nuanced use of overt forms of expression (Blackstone, 2004).

Emotional competencies emerge over time and within a framework of social and cultural experiences; they are influenced by both internal and external factors. Carolyn Saarni (1999) proposes an eight-step process [with a "Western bias"] to describe the development of emotional competence: (a) awareness of one's emotions, (b) ability to discern and understand others emotions, (c) ability to use the vocabulary of emotion and expression, (d) capacity for empathic involvement, (e) ability to differentiate internal subjective emotional experience from external emotional expression, (f) capacity for adaptive coping with aversive emotions, and distressing circumstances, (g) awareness of emotional communication within relationships and (h) emotional self-efficacy in accord with one's moral sense. These are briefly described below, with an emphasis on earlier developing skill areas.

Awareness of Emotions

Emotional awareness involves registering and attending to and deciphering emotional messages as they are expressed through facial expressions, voice tone, body posture, gesture, and language and cultural artifacts (Salovey et al., 2009). Children become aware of their own emotions because other people interpret and label their behaviors. Caregivers say what they think a child is feeling. Also, children get feedback from caregivers about nonverbal behaviors (e.g., "Don't pout!" "What a happy smile"). Finally, children observe how others express and/or talk about their feelings in everyday contexts. In short, awareness materializes from the day-to-day interactions and experiences children have over time.

Due to their particular motor, sensory, and cognitive difficulties, children with CCN may produce signals that are ambiguous. As a result, caregivers, siblings, teachers, and friends may misperceive and misinterpret their feelings or not interpret them at all. In addition, the amount of "emotion talk" that children with CCN hear is probably limited, both quantitatively and qualitatively. Caregivers probably talk less often about feelings. For example, early research on pragmatics reveals that adults often use language that is directive rather than descriptive and ask mostly "yes/no" questions during interactions with children who rely on AAC. In turn, children with CCN communicate less often, rarely initiate, rely on nonverbal methods (even when they have access to displays and devices), take fewer turns, and so on (Light, Collier, & Parnes, 1985a, 1985b). In short, children with CCN probably get less input about their own and other's emotions, so their understanding of emotions may be delayed and they may understand fewer emotion words.

The Vocabulary of Emotion and Expression

Expressing one's feelings (overtly or to oneself) is an important component of the development of emotional competence and is observed early in preschooler's self-talk (Manfra & Winsler, 2006) and children's daily interactions with others. It is critical to realize, however, that there is no one-to-one correspondence between emotional experiences and emotion words, and that emotion words (like *shy, embarrassed, ashamed, afraid, jealous, envious*) often also encode social and cultural information and distinct pragmatic perspectives (Sabini & Silver, 2005; Shiota & Keltner, 2005). Unfortunately, children with CCN have limited ways to express their feelings and emotional perspectives for a number of reasons

- Their body-based modes are difficult to interpret.

- They have limited access to symbols/words throughout the day and across contexts.

- Their "emotion" vocabularies are limited, often superficial and lacking in nuance. Note: Researchers in the U.K. studied 221 primary and secondary students in the United Kingdom and found they used a mean of 97 (S.D. = +/-35) different words to describe the emotional states of "happiness," "sad feelings" and "scary things". Even the youngest children used at least 62 different emotion-related words; some middle and high school students used as many as 142 different words (Neshat Doost, Moradi, Taghavi, Yule & Dalgleish, 1999). One wonders how these results might compare to the vocabulary lists children with CCN might use.

- Speech generating devices lack features of speech that carry important emotional meaning, such as inflection, pitch and volume controls, etc. and thus restrict expressions of excitement, sadness, sarcasm, etc. (Portnuff, 2006). Children are unable to use the cadence, modulation, loudness variations and rhythm of human speech so important to pragmatics and social interactions.

- They are over-dependent on others. Children with CCN may depend on other people (often their moms) to express and/or interpret their feelings for them to others. This dependence does not support healthy emotional development or the development of communicative and emotional competencies.

Without a way to express emotions, children with CCN lack ongoing feedback about their feelings and can gain neither insight nor reassurance from others. What child, for example, hasn't wakened from a bad dream and been comforted to realize that he was "scared," but is now "safe"? To express feelings and talk about their emotions with others, children with CCN need continuous access to a broad range of symbols, signs, body-based behaviors, and speech-generating devices (SGDs), and they need partners willing to support their growth in this area. When this need remains unaddressed over time, these children become further disadvantaged in their development of emotional competence and social communication skills.

Empathy, Self-Regulation/Modulation, Self-Efficacy

The development of emotional competence is a cumulative and continuous process (Saarni, 1999). An important component of continued development is a realization that other people have feelings and that different people can (and do) feel differently about the same thing/event/idea. As emotional competence builds, it requires a degree of cognitive development, including the development of a theory of mind (TofM), that begins to emerge in preschool, but doesn't develop fully until later in childhood (and beyond; Astington & Baird, 2005; Schneider, Lockl, & Fernandez, 2005). Over time, and with maturity, children use TofM to construct the type of inner world and inner communication that enables them to work through tough emotional situations and to develop emotional stability and coping mechanisms. "Interior dialogue," the ability to communicate with oneself, a further area of communicative competence (Beukelman & Mirenda, 2005, p. 9), helps people negotiate relationships, organize their activities and thoughts, reduce stress, learn, create, and self-actualize (Blackstone, 2004;

Wilkins, 2004). For example, one individual who uses AAC wrote, "When I am in highly stressful situations, I say the most socially inappropriate things to myself to relieve tension. It works and no one is the wiser" (Rackensperger, 2004, p. 8).

As Salovey et al. (2009, p. 240) point out, "Controlling emotions is not the optimal level of emotional regulation," and there is a difference between suppressing emotions and harnessing them in ways that enable individuals to behave "appropriately." An ability to manage one's emotions presupposes that emotional competencies at earlier levels are achieved. Learning empathy, mixed emotions, and hiding one's feelings often underlie the capacity to cope with situations a child finds difficult. Typically developing children get ongoing feedback from family and community about what is "appropriate and acceptable" and how to express and manage their feelings. By interacting with family and friends, and while gaining insight through characters in books, television shows, and movies, children gradually learn to consider the feelings of other people, reflect on their own emotions, and discover mixed and more complex emotions in themselves and others. Emotional and communicative competencies help children cope with aversive situations and difficult circumstances, as well as communicate effectively within their relationships.

Children with CCN face many challenges in reaching higher levels of emotional competence. Many have cognitive delays that make it difficult for them to develop many aspects of TofM and higher-level thinking skills. Also, many have limited life experiences and limited access to books, movies, and other media that can help deepen their understanding of other people's emotions, build empathy, and expand their knowledge of ways to cope with difficult situations. Finally, most lack opportunities to explore their feelings about life communication experiences and their impairment or to problem solve ways to deal with their day-to-day experiences using effective communication strategies (overt and covert). People who use AAC report that many of their communication partners do not engage them in honest and authentic interactions. For example, partners may (a) pretend to understand them when they do not, (b) avoid interacting beyond a simple greeting and small talk, (c) finish their utterances without asking permission, (d) fail to confirm the accuracy of the messages exchanged, (e) use "baby talk" when interacting with an older child or adult, (f) shout because they assume someone who doesn't speak must be hearing impaired, (g) ignore nonverbal modes of communication, insisting the child "use his board or device" and so on.

The development of emotional competencies in individuals who use AAC is intricately embedded in the successful use of pragmatics and social-communication skills. Children with CCN need to be able to express their feelings across environments and engage in "interior dialogues" using a broad range of AAC tools, strategies, and technologies.

Emotional Competence and Maslow's Hierarchy of Needs

Maslow's (1970) well known hierarchy of human needs addresses motivation and personal development as they relate to (a) safety needs, (b) belonging, (c) esteem, and (d) self-other/actualization. Maslow's work can be seen as an attempt to present a universal framework for describing key aspects of healthy emotional development. While there is not a one-to-one correspondence between Maslow's universal hierarchy of needs and the development of emotional competence, both constructs are useful in helping us think about children with CCN and our AAC interventions. Healthy emotional development and the successful development of emotional competence are both strongly intertwined with the development of communicative competence.

In Maslow's hierarchy of human needs http://two.not2.org/psychosynthesis/articles/maslow.gif physiological needs are basic and the strongest of all the needs. When a person is hungry, thirsty, cold, or tired, their consciousness is filled with the desire to eat, drink, sleep, or find shelter; all other needs recede into the background. However, when physiological needs are satisfied, higher needs arise.

Safety and security needs play major roles in a child's development. Caregivers and the community help children understand how the world functions and reduce their fears of the unknown. Children have a need for order, structure, rituals, and borders because it helps them feel secure. Adults, on the other hand, may seek security in having a regular income, savings account, home, and insurance. Of note, religion, science, and philosophy also serve as important security measures for some adults.

When Security is properly gratified, the need for receiving and giving Love and belonging emerges. Maslow warned that, although the urbanization and individualization features of some cultures may tend to underestimate the need for community, children are often painfully aware when they lack friends and adults can suffer when they do not have a family, friends, lovers, a spouse, colleagues, or children.

The need for Individuality and Esteem arises as love and belonging needs are sufficiently gratified. Maslow specified lower and higher versions of Esteem needs. At the lower end, there is a need for respect from others (e.g., status, recognition, fame, prestige, and attention). At a higher level, the need for self-esteem, strength, competence, mastery, self-confidence, independence, and freedom is won through personal experiences and the development of specific competencies, not through external recognition. Deprivation at this level may cause an inferiority complex, weakness and helplessness.

The highest need on the hierarchy is the need for Self-Actualization. Maslow wrote, "Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop… A musician must make music, an artist must paint, a poet must write, if he is to be ultimately at peace with himself. What a man can be, he must be. He must be true to his own nature" (Maslow, 1970, p. 48)

Maslow's hierarchy of needs applies directly to individuals with CCN. Without an ability to communicate effectively, they are unlikely to get even their basic physiological and safety needs met. As parents and professionals address their basic needs, however, they want something more for these children. This is why AAC interventions goals cannot be implemented with, or narrowly construed as having, a communication-only focus. Instead, successful outcomes are defined through the results that communication brings: participation, academic success, friendships, self-esteem, employment and a person taking on preferred social roles using appropriate AAC tools, techniques, strategies, and technologies.

Maslow's hierarchy provides a frame to consider factors that affect outcomes for people who use AAC technologies and strategies. Lacking friends and fulfilling the need for love and belonging may be thwarted by societal attitudes toward disability and may also interfere with satisfying self-esteem and self-actualization needs. Despite these obstacles, many individuals who use AAC have found a way to meet these needs, and we can look to them for guidance.

Implications for the AAC Community

People with CCN require strategies, tools, and technologies that enable them to (a) communicate their feelings and sense of self in ways that are satisfactory to them, (b) explore emotions with others (and themselves) and (c) understand emotions. A future direction for AAC is to provide children who use AAC with access to emotion-related communication tools that cover a full range of communicative functions, supplying both overt expression, as well as the type of "inner world" and "inner communication" that gives individuals the "mental tools" to work through tough emotional situations, and develop emotional stability and coping mechanisms, as well as negotiate with others. While labeling emotions is an important step, it is not sufficient for all the different kinds of emotion work individuals need to undertake. In fact, each of the recognized functions of communication (not just the descriptive function) is needed in order to express, manage, regulate, and take a perspective on emotional life. Some examples follow in Table 1.

Table 1

Functions	Example(with characteristic forms and resources)
Expressive	A gut-wrenching howl; "ouch!"wow!" "Damn!" "Shit!" "Boohoo."
Descriptive	"I feel terrible." "He seems sad." "I'm astonished." "I'm so down today."
Social/interpersonal	"I'm there if you need me." "Is there anything I can do?" "Oh, how terrible, I'm sorry." "What should I do?"
Directive	"Can you just leave me alone for a moment?" "Let's just cuddle." "I think I need a hug."
Self-regulatory	(talk to self) "Now just calm down" "Deep breath: in-out, in-out." or Keeping a diary of one's thoughts feelings; self-affirmations...
Creative	dancing; singing; screaming; writing; animating; drawing; jokes to break tension; fake mocking of speech (blah, blah, blah, blah). Exemplified, for instance, in *Beneath the Surface: Creative Expressions of Augmented Communicators*.
Projective	"If I were in your shoes, I'd ...", "If I do this, then I know all hell is going to break loose."; making a list of pros and cons to think through difficult situation
Metacommunicative / Metalinguistic	"What do you mean by 'LOVE'"; "He's afraid of the C-word – commitment"; "That's not what a 'platonic-kiss' looks like"

Current AAC-related interventions tend to focus on reducing disruptions in the classroom, home, or community, rather than supporting the development of emotional as well as communicative competencies. Current AAC strategies support children with "behavioral challenges" to regulate or manage their behaviors in more socially appropriate ways (e.g., a "finished box," "tangible or picture schedule," "break symbol," "quiet corner," and so on). They also aim to decrease disruptive, inappropriate, or aggressive behaviors, using visual supports— words/graphic symbols/signs—that reflect feelings and functional communication strategies to replace outbursts, aggressive behaviors, and make transitions easier.

If we highlighted the development of emotional competencies, focusing in early childhood on emotional awareness and expression in natural contexts, we might prevent later behavior problems. Strategies include

- Labeling emotions (as they are happening) using words/symbols/signs. [This is very different from learning symbols in a group lesson, asking a child to "show me" happy, scared, tired, etc. or pointing to emotions on an emotion wheel, etc.]

- Identifying situations that cause an emotional response and then talking about their feelings in advance. "It's time for swimming. I'm telling you now so you'll feel ready." "Can you tell me how you feel? (Accept any body-based expression...facial expression, gesture, etc. or use listener-assisted scanning..."Are you worried, happy, scared, something else?" or point to symbols on a display or device, etc.).

- Talking to a child about his/her emotions using symbols/signs/words by pointing to symbols on a display or device. "You seem bored today? Are you bored or just tired?"

- Talking to a child about another person's emotions, while pointing to symbols/using signs. "Do you think Mr. X is really angry or just pretending to be angry?" "I think he's not really angry because he just winked at you. Did you see him do that?"

- Helping a child learn how his/her emotions might be the same or different from a friend. Pointing to symbols or using signs. "I can see that you're feeling disappointed. Look at Joe, he's really excited. I guess you and Joe feel differently about that."

- Talking about mixed emotions while modeling the use of symbols/words. "Hmmm...your face tells me you may not be sure HOW you feel about that. I know I have mixed emotions about it. I am happy because we get to go to the park, but disappointed because I wanted to finish our book. How do you feel?"

- Talking about hiding ones emotions. Using symbols/signs, say "I think you are a little disappointed, but didn't let that show. Am I right? Instead you smiled like you were happy and made Katie feel good. Sometimes it's a good idea for us to hide our feelings."

Looking Ahead

Emotions play a key role in all aspects of development. While we do not yet know much about the development of emotional competence in children with CCN, we do know that many children with CCN have difficulty expressing their emotions and that AAC strategies, tools, and technologies often do not support the development of emotional competence. The AAC community needs to begin addressing this area. We need strategies and technologies that enable children and adults to express, explore, negotiate, and channel their emotions. We need to begin asking and answering relevant questions about the development of emotional competencies in children with CCN. For example,

- Do parents of young children with CCN talk to them about their emotions? If so, how? When?

- How does this compare to how parents talk to typical children at similar ages/developmental levels?

- Do children with CCN recognize and label their own emotions accurately? Can they recognize and label the emotions of others?

- What communication modes do children and adults who use AAC technologies and strategies rely on to express their emotions? Does these vary across settings and partners?

- Do children/youth/adults who use AAC report that their expressions of emotions are recognized by others? What problems do they encounter?

- What emotions can young children express that others (familiar/unfamiliar partners) recognize?

- How does this compare to typical children at similar developmental levels?

- Do children and adults with CCN understand their own emotions? Do they understand the emotions of others? How does this reflect their development of TofM? How do they use emotional competencies to solve problems, negotiate with others, and build self-esteem?

In terms of tools/strategies and technologies, we need to ascertain which communication modes are most effective in expressing which emotions. For example,

- What strategies can family members/teachers use to support a child's emotional development from early childhood and throughout the school years?

- What features of technologies express emotion most effectively? What emotion features do individuals who currently use SGDs want on their devices? How would AAC users prioritize these features? (Portnuff, 2006)

- Can peers/classroom aides/etc. learn to be more honest during interactions with children who use AAC?

- What strategies can teachers (from preschool through high school) use to help children with CCN to express their emotions effectively?
- What strategies can children with CCN employ during their interactions to improve the experience for themselves and others?

Summary

An ability to perceive, use, and manage emotion is essential to the fulfillment of universal human needs. This process begins in infancy and continues throughout life. Emotional competencies are intricately related to pragmatics, social communication, and communication with one's self. Young children with CCN need to hear others talk about their (i.e., the child's) feelings. They also need to learn to use signs, pictures, symbols, and writing in socially and culturally appropriate ways across natural settings. To do so, they need access to the kinds of AAC tools, techniques, strategies, and technologies that enable them to express their emotions during interactions with others, as well as construct their own internal dialogues. AAC interventions that address emotional competencies need to be environmentally based and begin when children with CCN are very young. They need to involve parents, siblings, teachers, and peers. Teaching children about their feelings, encouraging them to express their emotions, and expecting them to manage their own and others emotions cannot be accomplished as part of some "special teaching unit" or by providing a child with graphic symbols or through the use of an emotion "wheel." It's the day-by-day awareness of caregivers, professionals, and friends, the life experiences of the child, and his/her access to key information and useful tools that interlace to support their development of emotional competence.

References

Astington, J. W., & Baird, J. A. (2005). *Why language matters for theory of mind.* New York: Oxford University Press.

Beukelman, D., & Mirenda, P. (2005). Augmentative & alternative communication: Supporting children & adults with complex communication needs (3ʳᵈ ed.). Baltimore: Paul H. Brookes.

Blackstone, S. (2004). Interior dialogue and AAC. *Augmentative Communication News, 16*(4), 1-5.

Blackstone, S., Williams, & M. Wilkins, D. P. (2007). Key principles underlying research and practice in AAC. *Augmentative and Alternative Communication, 23*(3), 191-203.

Brinton, B. (2009, February). *Meet me more than half way: Emotional competence in conversation using AAC.* Paper presented at Tenth Annual Conference on Augmentative and Alternative Communication: Pragmatically Speaking. Gaithersburg, MD.

Brinton, B., Spackman, M. P., Fujiki, M., & Ricks, J. (2007). What should Chris say? The ability of children with specific language impairment to recognize the need to dissemble emotions in social situations. *Journal of Speech, Language, and Hearing Research, 50,* 798-811.

Brinton, B., Fujiki, M., Spencer, J. C., & Robinson, L. A. (1997). The ability of children with specific language impairment to access and participate in an ongoing interaction. *Journal of Speech, Language, and Hearing Research, 40,* 1011-1025.

Bryen, D. N., Carey, A., & Frantz, B. (2003). Ending the silence: Adults who use augmentative communication and their experiences as victims of crimes. *Augmentative and Alternative Communication, 19*(2), 125–134.

Collier, B., McGhie-Richmond, D., Odette, F., Pyne, J. (2006). Reducing the risk of sexual abuse for people who use augmentative and alternative communication. *Augmentative and Alternative Communication, 22*(1), 62–75.

Denham, S. (1998). *Emotional development in young children.* New York: Guilford.

Fried-Oken, M., & Bersani, H. (2000). *Speaking up and spelling it out.* Baltimore: Paul H. Brookes.

Gallagher, T. M. (1999). Interrelationships among children's language, behavior, and emotional problems. *Topics in Language Disorders, 19*(2), 1–15

Griffiths, P., & Scarantino, A. (2009). Emotions in the wild: The situated perspective on emotion. In P. Robbins & M. Aydede (Eds.), *The Cambridge handbook of situated cognition* (pp. 437-453). Cambridge, England: Cambridge University Press.

Janow, C. (2000). Is there a life after speech? In M. B. Williams & C. J. Krezman (Eds.), *Beneath the surface: Creative expressions of augmented communicators* (p. 78). Toronto, Onario, Canada: ISAAC Press.

Jerome, A. C., Fujiki, M., Brinton, B., & James, S. (2002). Self-esteem in children with specific language impairment. *Journal of Speech-Language-Hearing Research. 45*, 700-714.

Light, J., Collier, B., & Parnes, P. (1985a). Communicative interaction between young nonspeaking physically disabled children and their primary caregivers: Part I—Discourse patterns. *Augmentative and Alternative Communication, 1,* 74-83.

Light, J., Collier, B., & Parnes, P. (1985b). Communicative interaction between young nonspeaking physically disabled children and their primary caregivers: Part II—Communicative function. *Augmentative and Alternative Communication, 1*, 98-133.

Manfra, L., & Winsler, A. (2006). Preschool children's awareness of private speech. *International Journal of Behavioral Development, 30,* 537-549.

Maslow, A. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.

Nelson, J. R., Benner, G. J., & Cheney, D. (2005). An Investigation of the language skills of students with emotional disturbance served in public school settings. *The Journal of Special Education, 39*(2), 97-105.

Neshat Doost, H., Moradi, A., Taghavi, M., Yule, W., & Dalgleish, T. (1999). The development of a corpus of emotional words produced by children and adolescents. *Personality and Individual Differences, 27*(3), 433-451.

Portnuff, C. (October, 2006). *AAC: A user's perspective.* Webcast available as part of the AAC-RERC Webcast Series. http://aac-rerc.psu.edu/index-8121.php.html

Rackensperger, T. (2004). Reflection #4. *Augmentative Communication News, 16*(4), 8.

Saarni, C. (1999). *The development of emotional competence.* New York: Guilford.

Sabini, J. & Silver, M. (2005) Why emotion names and experiences don't neatly pair. *Psychological Inquiry, 16*(1), 1-10.

Salovey, P., Mayer, J., Caruso, D., & Yoo, S. H. (2009). The positive psychology of emotional intelligence. In C. R. Snyder & J. Shane (Eds.), In *Oxford handbook of positive psychology* (2nd ed., pp. 237-248). New York: Oxford University Press.

Schneider, W., Lockl, K., & Fernandez, O. (2005). Interrelationships among theory of mind, executive control, language development, and working memory in young children: A longitudinal analysis. In W. Schneider, R. Schumann-Hengsteler, & B. Sodian (Eds.), *Young children's cognitive development* (pp. 259-284). Mahwah, NJ: Lawrence Erlbaum.

Shiota, M. N., & Keltner, D. (2005). What do emotion words represent? *Psychological Inquiry, 16*(1), 32-37.

Wesby, C. (2008). *Language impairments and social-emotional communicative competence.* Retrieved June 1, 2009, from http://www.speechpathology.com/Articles/article_detail.asp?article_id=345

Wilkins, D. (2004). Inner language: One linguist's perspective. *Augmentative Communication News, 16*(4), 1-5.

Williams, M. B., & Krezman, C. J. (Eds.). (2000). *Beneath the surface: Creative expressions of augmented communicators.* Toronto, Ontario, Canada: ISAAC Press.

Williams, M. B., Krezman, C., & McNaughton, D. (2008). 'Reach for the stars": Five principles for the next 25 years of AAC. *Augmentative and Alternative Communication, 24*(3), 194-206.