



EITI Newsletter

Early Intervention Training Institute
Rose F. Kennedy Center ■ University Affiliated Program

Summer 1996

JOINT ATTENTION

Joint attention is the sharing of attention to objects with another person. It is such a common event that its significance in a child's development may be overlooked. Yet recent studies highlight its importance in facilitating early childhood development and guiding intervention planning.

Jerome Bruner, a professor of psychology at New York University Law School, is credited with coining the term. He writes that without joint attention "we cannot construct the shared social realities that comprise everyday life." Lauren Adamson, a professor of psychology at Georgia State University, adds that joint attention "provides a setting for rich communication and joyful sharing in all its dimensions." Barbara Rogoff, who teaches psychology at the University of California at Santa Cruz, points out that joint attention is the basis for all communication. "For people to be communicating, they need to share attention to the same event." Since communication is the basis for a large part of a parent's guidance and instruction, by extension, joint attention exerts a powerful influence on child rearing.

When joint attention goes well, it is a prototype which contains all the essential ingredients of excellent teaching. An experienced teacher follows the student's lead and gauges his level of understanding and interest. Sensitive caregivers are natural teachers. They not only monitor their infant's focus of attention, but will expand its scope. The net result: both parent and child enjoy the interaction and the child is motivated to learn.

Let's take an example. An infant fixes her eyes on a fascinating object: a piece of cellophane wrap. As she does so, her caregiver highlights its various fascinating features and labels them. In these moments, the caregiver conveys to her child several things. One, that her daughter's interest in and attention to this piece of cellophane wrap is important. Second, she uses words to help her child experience, comprehend, and retain this experience. And third, that her child's interest and joy can be shared with another person.

Joint attention goes beyond such child care activities as feeding, hugging, and rocking a baby, all of which are necessary and desirable. It does not require food or touch and yet is essential to the emotional and intellectual nurturing of a child. Put another way, joint attention involves a sharing of minds and a sharing of hearts. For joint attention to happen, you need to be with your child - not just physically, but emotionally as well. When two people are fully engaged in a joint attention activity they both

like, the good time they are having is the magnet that draws them together.

Joint Attention Development

The process of joint attention begins early in infancy when babies and their mothers and fathers look at and into each others' faces. Through these intimate looks, sounds, and smiles, parent and child get to know one another. Attention in these early communications is centered on sharing feelings: infant coos, mother croons; infant smiles, mother vocalizes with delight. All the while, she finely tunes her facial expressions to captivate her child's attention.

By six months of age, the baby's exclusive love affair with her parent wanes and her zest for exploring objects increases. Emergence of fine-motor skills and eye-hand coordination permit exploration with a repertoire of behaviors: banging, dropping, mouthing, fingering, and transferring an object from one hand to the other. Combining the information she gets from seeing and manipulating objects, the infant learns much about an object's properties. Since attention to objects is mentally taxing, however, babies are not yet skilled at including their caregivers in toy play and exploration.

Even during infancy, babies exert some control over joint attention. They demonstrate clear preferences related to both their developmental stage and individual taste. For example, Rogoff describes from her research a 6½ month old baby playing with a plastic ring, while an adult tries to take the ring to start a game of give-and-take. The baby starts to pout and resists, apparently not interested in any such game. As babies mature and become more articulate in voicing their preferences, they become more active participants in joint attention interactions.

By the end of the first year, the infant is ready to advance to the essential component of joint attention: sharing attention to objects with another person. Coordinating attention to mother and toy is now less mentally taxing. What's more, the infant wants to learn more about her world and the objects that fill it, and to share that interest with another person. And what better person than a caring adult who is enthusiastic about teaching her infant about toy play.

Early on, it is primarily the parent's responsibility to establish and maintain joint attention. As a mother dangles a set of keys in front of her baby to attract his attention, the baby will reach for and finger the keys, paying little attention to his mother. A few months later, however, the same child will show a more sophisticated form of joint attention by visibly acknowledging his mother, saying "keys" with a smile and glancing back and forth between the keys and

mother. This more mature form of “coordinated joint attention” will become increasingly evident over the second year of the child’s life.

By age two, attempts to share attention with a parent around an object are accomplished with more finesse. The older infant is more adept at using gestures and language to gain her parent’s attention and direct it to an object of interest. Indeed, it is these new skills that assist her in becoming more of an equal partner in initiating and regulating joint attention activities. In fact, an essential feature of joint attention is that it is an egalitarian venture. It cannot be imposed by the adult without repercussions. The adult needs to respect the infant’s signals of “more” or “I need a break” to keep the interaction going and the child interested.

Beyond its role in communicative exchanges between parent and child, joint attention plays a central role in the transmission of culture, according to Rogoff, who highlights the importance of those moments when a parent shares with her child the stories of her own life. In her book, Apprenticeship in Thinking, she writes: “Children’s cognitive development is an apprenticeship-it occurs through guided participation in social activity with companions who support and stretch children’s understanding of and skill in using the tools of culture.” Parents begin to teach values even earlier, simply by paying attention to some objects, events, and behaviors, while ignoring others. As a child becomes more skilled at engaging a parent in joint attention, she also learns to recognize which activities and behaviors are more likely to elicit the parent’s attention, in other words, which ones are important and valued. Moreover, children’s thinking and development is stretched further by the arrangement of their activities. Rogoff defines this as “where they spend their time, what objects we provide them with to explore, and what we allow them to do.”

Supporting Your Child’s Efforts

Related to joint attention is the concept of scaffolding. This refers to support an adult provides to the child to extend her skill or knowledge and thus permit her to climb the next step on the developmental ladder. Scaffolding takes place during many parent-child routines. For instance, scaffolding occurs when an infant attempts to string a set of beads and his caregiver supports the string to facilitate the stringing.

Effective scaffolding by a parent is likened to a gentle nudging of the child so that he can perform something he ordinarily would have some difficulty with on his own. While infants learn much during independent play, learning that occurs in an interpersonal context is enriched by the feedback, reinforcement, and expansion provided by an older, wiser partner.

Joint Attention and Language Development

Joint attention experiences also bolster language skills, according to research psychologists. Tomasello and Farrar (1986) found a direct association between the parent’s use of words to refer to a child’s current activity and the ease with which the child learned new words as well as the child’s vocabulary size six months later. These associations, however, were not

found when the parent’s words referred to objects unrelated to the child’s current activity.

Among older preschoolers, more avid conversationalists, the joint attention process is more complex. Language now provides a vehicle to establish and maintain joint attention. The older child uses words, gestures and other nonverbal cues to communicate interest and intent to another person. We are all familiar with the universal invitation to joint attention, “Mommy, Daddy, look!”, which one probably never outgrows, though its expression becomes more sophisticated. Importantly, more complex language skills make it possible for young children to expand the focus of their joint attention with a parent from the objects they are currently playing with, to things they have played with in the past, or to an event either one of them has experienced. Now the child begins to share experiences with others, and to listen to the experiences of others.

Clinical Applications

Observing joint attention interactions provides a wealth of information about the developing parent-infant relationship. Research conducted by one of the authors (Wiener-Margulies) using analyses of videotaped interactions among parent-infant pairs showed richer joint attention interactions when mothers showed greater awareness of, and sensitivity to the child’s interests, joined the child in a current activity, and viewed the child as a person in her own right. In consequence, the children of these mothers looked at their parent more, smiled more freely, and made more attempts to engage their parent in play. In contrast, joint attention interactions were more often likely to go awry when mothers constantly redirected their child’s attentional focus and imposed their own agenda on the child. These caregivers’ children appeared more apathetic and less apt to try to gain their mother’s attention. Such interactions often involved a struggle over what toy the child should play with and what the child should do with the toy.

Both parent and child play central and reciprocal roles in the day-to-day exchanges that take place. While the parent exerts considerable influence on joint attention interactions, the child’s innate characteristics and temperament have been shown to affect the mother’s style of dealing with the child.

The literature shows that joint attention is a critical mechanism for parental guidance and education of their infants. It requires sensitivity on the part of the parent, and the ability to focus on objects and interact with people on the part of the infant. If either the child or the parent has significant risk factors or disabilities, these may interfere with their ability to participate in joint attention with each other. Early intervention goals should include helping parents and children develop comfortable and satisfying joint attention experiences. Such efforts will go a long way in strengthening the parent-child relationship and enhancing the infant’s development.

By Marian Wiener-Margulies, Ph.D. and Ruth Kaminer, M.D.

Quotations are from personal communications with the first author.