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How Much Do We Know About the Importance of Play in Child Development?

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Why do children play? Play is not merely about fun; deeper meanings lie behind playful activities. Many classical theorists in the 19th and early 20th centuries studied the origins of play and tried to explain why it exists and the part it plays in human development (Saracho & Spodek, 1995). Herbert Spencer described play as the purposeless expenditure of buoyant strength (as cited in Peller, 1996; Saracho & Spodek, 1995). It also has been described as the product of superfluous energy left over when people's primary needs are met (Rubin, 1982). Because children's primary needs are met by parents, less of their energy is used for survival (Saracho & Spodek, 1995). According to this perspective, children love play because they have extra energy and look for ways to release it.

The most common explanation of the deeper purpose for play is the so-called practice or pre-exercise theory (Saracho & Spodek, 1995). As early as 1898, Groos thought of play as an essential need of childhood, because it can reinforce the instincts that allow children to prepare skills for the future (as cited in Rubin, 1982). Through play, children can learn much of what they will need to know to survive in the future. Play allows children to practice, elaborate on, and perfect skills before they become necessary for survival in adulthood (Rubin, 1982).

Although these theories may provide some insight into the origin and function of play in human society, they do not explore the true importance of play in children's daily lives, nor do they adequately explain how the quality of play influences children's development. Most classical theories are based on philosophical reflection and informal observation, rather than research (Saracho & Spodek, 1995).

Many modern psychological theorists provide different views of the role of play in children's development. Sigmund Freud (1856-1939) regarded play as cathartic. He believed that play could help children release negative feelings caused by traumatic events and substitute them with more positive ones (as cited in Saracho & Spodek, 1995). For example, a child who punishes a doll and then comforts it can work through and perhaps resolve negative feelings brought on by being punished by a parent. In other words, through play, children come to understand painful situations and find ways to substitute pleasurable feelings for unpleasant ones. Children master their covert thoughts and overt actions, and learn to interpret their experiences.

Psychoanalytic theory also teaches that infants and young children realize their helplessness and come to know they must rely on other people's goodwill to serve their needs. This realization of dependency often brings with it a fear of abandonment (Hughes, 1999). Play can help children reduce this fear and sense of vulnerability. For instance, children can play with miniature toys, reducing the overwhelming world of adults to a manageable size.

Psychoanalytic theorists, such as Erik Erikson (1902-1994), have discussed the development of play during a child's very early years. In the first year of life, children use their sensory and motor skills to explore their own bodies. In the second year, they progress to manipulating objects in the environment. These play activities can help children develop their self-esteem and sense of empowerment by allowing them mastery of objects. Gradually, as they play, children go beyond control of objects to mastery of social interactions with their peers (Hughes, 1999).

Piaget, a cognitive theorist, considered play to be a major tool for facilitating children's mental development (as cited in Hughes, 1999). In Piaget's stage theory, the changes in play through each stage parallel different levels of cognitive and emotional development (as cited in Saracho & Spodek, 1995). Piaget believed that people change their

ways of thinking and behaving in order to adapt to their environments and that such adaptation is important for physical survival and psychological/intellectual growth. For example, children who play over and over again with the same object, such as repeatedly pretending to drink from an empty cup, actually are practicing eye-hand coordination and developing sensory-motor skills. At the same time, children practice the behaviors that are acceptable to society so that they can act appropriately in different situations. Different kinds of play require different levels of cognitive sophistication, and that is why each different type of play is found at a specific stage of cognitive development (Diamond & Hestenes, 1997). As Hughes (1999) summarizes it, Piaget's theory of play focuses on play as a means of facilitating learning by exposing "a child to new experiences and new possibilities of physical and mental activities for dealing with the world" (p. 22).

Vygotsky, a socio-cultural theorist, believed that play serves as a tool of the mind to help children master their behaviors (as cited in Bodrova & Leong, 1996). The function of play, according to Vygotsky, is to help children develop self-regulation, expand the separation between thought and actions, and develop the skills needed to obtain a higher cognitive functioning (as cited in Hughes, 1999). In terms of the latter, when children build a boat with many blocks, they say, "Let's pretend . . ." This separation between thought and action prepares children to develop abstract thinking. Thinking and acting are no longer simultaneous; behaviors are no longer driven by objects, but rather by children's thinking. By exercising their minds through different play behaviors, children become capable of using high-level mental functions (i.e., abstract thinking) to manipulate and monitor thoughts and ideas without direct and immediate reference to the real world. Therefore, play can be an important educational strategy for facilitating children's development in cognitive, social/emotional, motor, and language areas (Bodrova & Leong, 1996).

Children play make-believe in order to develop roles, learn adult expectations for behaviors, and master social norms. Through sociodramatic play, children come to understand the meaning of the particular role they play, act out that role, and learn to maintain the associated script. Children learn to distinguish the differences between playing mommy and playing teacher by drawing on each role's different symbolic gestures and costumes. When children play, they behave according to the roles they assume. In order to play a particular role well, they need to unite their body, mind, and spirit.

In sum, the major theorists agree that play contributes to children's development. Play allows children to transform reality and develop symbolic representations of the world in order to meet psychological and physical needs. In addition, the qualitative differences in children's play reflect different levels of abilities (i.e., from sensorimotor activities to fantasy play). Play also can facilitate children's development from lower to higher functions and from understanding simple concepts to performing advanced mental activities. Play can help children master their behaviors, beginning with the exploration of their sensory and motor skills and proceeding through to the gradual acquisition of social skills with peers. Moreover, play helps children prepare for the future. Not to be forgotten, play is enjoyable.

Play and Intellectual Development

What, exactly, do empirical studies say about the influence of play on children's intellectual development? The notion that play can lead to development of problem-solving skills, creativity, divergent thinking, and language acquisition is profoundly influenced by Piaget's (1962) and Vygotsky's (1967) theories (as cited in Pepler, 1982; Rubin, 1982).

A relationship exists between divergent problem-solving ability, the ability to generalize from a starting point to consider various possible solutions, and the characteristics of play materials to which children have been exposed (Hughes, 1999). Children who have engaged in divergent object play seem to use a more flexible and original problem-solving approach (Dansky & Silverman, 1975). For children, "play creates a set, or attitude, to generate associations to a variety of objects whether or not these objects are encountered during play activity" (Dansky & Silverman, 1975, p. 104). Likewise, Dansky (1980) found that certain cognitive processes involved in make-believe play, such as free association and symbolic thinking, were similar to those involved in divergent thinking. In other words, the cognitive skills of transferring one's thinking from the concrete to the abstract during play appears to be similar to the skills required to generate various novel responses on a divergent thinking task (cited in Pepler, 1982).

Play and creativity appear to be synonymous (Caplan & Caplan, 1973). Singer and Rummo (1973) report that highly creative boys were more communicative, curious, humorous, playful, and expressive (as cited in Pepler, 1982). Hutt and Bhavnani (1976) also indicate that boys who explore novel toys and use them imaginatively are more creative, compared to their peers (as cited in Pepler, 1982). The researchers conclude that convergent play materials (e.g., those with only one purpose, such as puzzles) may encourage children to seek out the one

correct answer and to abandon alternative solutions, while divergent objects (e.g., open-ended materials, such as blocks) may guide children to numerous approaches, leading them to appreciate the fact that problems may have multiple solutions (Hughes, 1999).

Indeed, the relationships between play and cognition are complex and difficult to isolate (Dunn & Herwig, 1992). Such relationships do not prove that engaging in pretend play will result in children becoming more creative problem-solvers. It could be, however, that pretend play and divergent problem-solving skills share similar intellectual prerequisites (Hughes, 1999).

Pepler (1982) suggests that some of the factors related to play that may influence cognitive development include individual personal characteristics (e.g., playful attitudes), certain play activities (e.g., experiencing symbolic play), and factors of the play situations (e.g., use of unconstructed materials in play). Others (Saltz & Brodie, 1982) argue that the relationship between play and cognition appears sufficiently complex that it is unlikely any single variable produces all of the effects. Hughes (1999) asserts that "there has been virtually no genuine experimental research on the effects of specific types of play on later cognitive development. Most of the research is correlational, with the result that the direction of cause and effects is unclear" (p. 171).

One must also consider that children's intellectual functioning may be affected by the quality of the parent-child relationship, by peer interactions, and by the environment provided by parents and other caregivers for play (Pepler, 1982). Convincing evidence indicates that make-believe or dramatic play increases children's intellectual flexibility; such flexibility is considered a key element of the creative process (Hughes, 1999).

Play and Language

Play also provides a base for building language (Caplan & Caplan, 1973). A number of studies support strong correlations between symbolic play and language. Saltz and Brodie (1982) indicate that teaching young children to be involved in thematic pretend and socio-dramatic play can improve their vocabulary abilities. Indeed, McCune-Nicolich and Bruskin (1982) point out that language and play share joint functions at age 2. When children pretend play, they are also involved in the communicative function of sharing objects with others. Hence, play is closely associated with language use and communication (Dunn & Herwig, 1992; McCune-Nicolich & Bruskin, 1982). Furthermore, children's abilities to communicate about important aspects of pretend play is related to their language development (Brown & Prescott, 1999; McKimmey, 1993).

The link between play and language comprehension is complex and the mechanisms involved are not fully known. When children are regularly engaged in dramatic play, "they seem to improve over time in their ability to draw meaning from spoken language" (Hughes, 1999, p. 185). So, while play may not be necessary to understanding, sufficient evidence suggests that it serves a facilitative function.

The Social Benefits of Play

Play can build children's self-confidence and empower their potential (Caplan & Caplan, 1973; Trawick-Smith, 1994). The function of play is to "encourage children to make up the rules to govern their own interactions and stimulate them to focus on the meaning behind all human social interaction" (Hughes, 1999, p. 193). Two- to 7-year-old children typically are not able to utilize their logical thinking processes and skills well enough to cope with all of the demands of daily life. Therefore, they deliberately create a make-believe play world for themselves in which they can experience a sense of freedom, control, and mastery; they create a world in which they can manipulate reality and feel empowered (Caplan & Caplan, 1973).

In a study by Flannery and Watson (1993), 66 children between the ages of 4 and 8 were observed for the frequency of dramatic or pretend play and non-dramatic/pretend play during free-play time. Self-ratings and teacher ratings of friendship, social activities, and academic skills were investigated as well. Flannery reports that dramatic play is positively related to peer acceptance and social skills.

Children's various play behaviors also reflect differences in social acceptance. Social play (i.e., dramatic/pretend play) encourages children to focus on the play episode so as to build appropriate social relationships with peers. This type of play also facilitates children's integration into their peer group (Hughes, 1999).

The most popular children at school can be observed engaging in several positive behaviors at play. Typically, they play cooperatively, and are successful in social conversation. In terms of the latter, popular children often make relevant and appropriate comments to other children and offer constructive suggestions (Hughes, 1999). Popular children also are very good at sharing their play materials with peers. They tend to be initiators and leaders of play, at least in the beginning, but are willing to follow others as well. On the other hand, many studies (e.g., Dodge, 1983; Hazen & Black, 1989; Ladd, Price, & Hart, 1988, as cited in Hughes, 1999) show that very unpopular or disliked children demonstrate unsuitable social behaviors. These children have difficulty sharing play materials and often respond inappropriately to peers' comments.

In addition, popular children at school tend to be considered

friendly, are usually more intelligent, demonstrate high academic performance, and have strong self-esteem (Boivin & Begin, 1989, as cited in Hughes, 1999). They also know how to join and participate effectively in a play group that has already formed; they can adapt their own behaviors to the group flow. Children who lack such social skills are more likely to be rejected (Dodge, Coie, Brakke, 1982, as cited in Hughes, 1999).

School can be considered a microcosm of the society that children will join as adults. The play behaviors of children as they interact with peers at school are regarded as necessary preparation for the future. By observing children's play behaviors, teachers can detect those who may need to improve their social integration.

Conclusion

Play is involved in the development of personality. It encourages interpersonal relations, stimulates creativity, adds to the joy of living, and advances learning (Caplan & Caplan, 1973). A famous quote says that "I hear and I forget; I see and I remember; I do and I understand" (author unknown). Children need to gain firsthand experience to construct knowledge, develop abstract thinking, and generalize their knowledge to new situations. Play is a means by which a teacher may attract children's attention to new ideas and concepts. Educators often think of learning as accompanied by adult guidance and expectations. Play is voluntary activity that is dependent upon and respectful of individual children's learning pace, and children at play are intrinsically motivated to learn.

Play reveals not only what children know, but also what children are curious about. Being aware of children's pretend play makes it possible to build units of study that reflect their concerns and interests (Trawick-Smith, 1994).

Research studies show that dramatic play accounts for 10 to 17 percent of preschoolers' play and about 33 percent of kindergartners' play (Fein, 1992). Intentionally planning for and providing time for "good play" is important, given the violent content that children are exposed to through media. Schultz (1992) indicates that "premature exposure to symbols, clothing, activities, and expectations from the world of adults and older children is creating damaging stress for young children" (p. 150). Schultz (1992) found that "bad play" that has as a basis violent television programming results in reduced sensitivity to pain, a lack of empathy for the suffering of others, and heightened fearfulness.

Therefore, providing "good play" to counteract these negative societal influences is critical. Improving the quality of play is the responsibility of parents, caregivers, and early childhood professionals. To achieve this goal, early childhood educators can be prepared with the knowledge and skills necessary to provide children with rich and varied play experiences (Fein, 1992). Planning for play to be included in the early childhood curriculum is critical. Research demonstrates that encouraging children to learn through play facilitates healthy development in all areas, including cognition, language, social/emotional behavior, and problem-solving skills. So, why not allow children to play?

References

Bodrova, E., & Leong, D. (1996). *Tools of the mind: The Vygotskian approach to early childhood education.* Columbus, OH: Merrill.

Brown, P. M., & Prescott, S. J. (1999). Communication about pretend play: A comparison of the utterances of 4-year-old normally hearing and deaf or hard-of-hearing children in an integrated kindergarten. *Volta Review, 99*(1), 5-18.

Caplan, F., & Caplan, T. (1973). *The power of play.* New York: Doubleday.

Dansky, J. L., & Silverman, I. W. (1975). Play: A general facilitator of associative fluency. *Developmental Psychology, 11,* 104.

Diamond, K. E., & Hestenes, L. L. (1997). Relationships between enrollment in an inclusive class and preschool children's ideas about people with disabilities. *Topics in Early Childhood Special Education, 17*(4), 520-537.

Dunn, L., & Herwig, J. E. (1992). Play behaviors and convergent and divergent thinking skills of young children attending full-day preschool. *Child Study Journal, 22*(1), 23-38.

Fein, G. (1992). Play and development. In V. Dimidjian (Ed.), *Play's place in public education for young children* (pp. 27-36). Washington, DC: National Education Association.

Flannery, K. A., & Watson, M. W. (1993). Are individual differences in fantasy play related to peer acceptance levels? *Journal of Genetic Psychology, 154*(3), 407-417.

Hughes, F. P. (1999). *Children, play, and development* (3rd ed.). Boston: Allyn and Bacon.

Ivory, J. J., & McCollum, J. A. (1999). Effects of social and isolate toys on social play in an inclusive setting. *Journal of Special Education, 32*(4), 238-244.

McCune-Nicolich, L., & Bruskin, C. (1982). Combinatorial competency in symbolic play and language. In D. J. Pepler & K. H. Rubin (Eds.), *The play of children: Current theory and research* (Vol. 6, pp. 30-45). New York: Karger.

McKimmey, M. A. (1993). Child's play is serious business. *Children Today, 22*(2), 14-16.

Peller, L. E. (1996). Theories of play. *The NAMTA Journal, 21*(3), 24-40.

Pepler, D. J. (1982). Play and divergent thinking. In D. J. Pepler & K. H. Rubin (Eds.), *The play of children: Current theory and research* (Vol. 6, pp. 64-78). New York: Karger.

Rubin, K. H. (1982). Early play theories revisited: Contributions to contemporary research and theory. In D. J. Pepler & K. H. Rubin (Eds.), *The play of children: Current theory and research* (Vol. 6, pp. 4-14). New York: Karger.

Saltz, E., & Brodie, J. (1982). Pretend-play training in childhood: A review and critique. In D. J. Pepler & K. H. Rubin (Eds.), *The play of children: Current theory and research* (Vol. 6, pp. 97-113). New York: Karger.

Saracho, O. N., & Spodek, B. (1995). Children's play and early childhood education: Insights from history and theory. *Journal of Education, 177*(3), 129-149.

Schultz, T. (1992). Getting serious about play. In V. Dimidjian (Ed.), *Play's place in public education for young children* (pp. 145-154). Washington, DC: National Education Association.

Trawick-Smith, J. (1994). *Interactions in the classroom: Facilitating play in the early years.* New York: Macmillan.