ENCYCLOPEDIA on Early Childhood Development

The Role of Make-Believe Play in Development of Self-Regulation

Laura E. Berk, PhD

Illinois State University, USA

February 2018

Introduction and Subject

Early childhood is a landmark period for laying the foundations of self-regulation—an array of complex capacities that include impulse and emotion control, self-guidance of thought and behaviour, planning, self-reliance, and responsible behaviour.[1,2,3] Simultaneously, the years between 2 and 6 are the "high season" of imaginative play.[4,5] According to Russian developmental psychologist Lev Vygotsky, this synchrony between the flourishing of make-believe play and self-regulation is no coincidence. Imaginative play, Vygotsky6 proposed, is a "leading factor in development"—a unique, broadly influential zone of proximal development in which children experiment with a wide array of challenging skills and acquire culturally valued competencies. The most significant of these is a strengthened capacity for self-regulation.

In Vygotsky's[6] theory, two unique features of make-believe clarify its contributions to self-regulatory development. First, the creation of imaginary scenes using substitute objects aids young children in distinguishing internal ideas from concrete reality. When children use a cup for a hat or a block for a telephone, they change an object's usual meaning, thereby detaching

©2018-2026 ABILIO | PLAY-BASED LEARNING

mental symbols from the real objects and actions to which they refer. Through such playful substitutions, children are aided in relying on thought rather than impulse to guide their actions. Second, Vygotsky[7] noted that an inherent property of pretend scenarios is following social rules. In fantasy play, young children willingly place constraints on their own actions when, for example, they follow the rules of serving a meal, caring for a sick doll, or launching a spaceship.

According to Vygotsky, in separating mental symbols from reality, children augment their internal capacity to regulate their actions; in engaging in rule-based play, they respond to external pressures to act in socially desirable ways.[3] Vygotsky concluded that of all activities, pretense affords young children the greatest opportunity to become self-regulated and responsible.

Research Contexts and Key Research Questions

Findings of a small literature of correlational studies are consistent with a developmental association between make-believe play and self-regulation. Research has addressed several of Vygotsky's ideas about the mechanisms through which pretense might facilitate self-regulatory abilities.

To explore whether make-believe uniquely fosters use of thought to overcome impulses, investigators have examined the extent to which imaginary play, compared with other play types, promotes private, or self-directed, speech.[8] Task-relevant private speech has consistently been found to increase under conditions of cognitive challenge and to contribute to self-regulation and improved task performance.[9,10]

Several studies have focused on the link between pretense and executive function—a construct that encompasses working memory, inhibitory control, and flexible shifting of attention to suit task demands.[11,12,13] These basic cognitive operations, which improve rapidly between ages 2 and 6, underlie complex self-regulatory abilities that enable children to cooperate with peers and adults and to persist with demanding tasks.[14,15]

Finally, two investigations related the complexity of children's sociodramatic play with peers to subsequent socially responsible classroom behaviour. Whereas most self-regulation measures have been laboratory based, these studies used classroom naturalistic observations.[16,17]

Recent Research Results

Krafft and Berk[8] examined the association between make-believe play and private speech among 59 3- and 4-year-olds in two preschools: a Montessori program where activities were highly structured and pretense was discouraged, and a traditional program where sociodramatic play was encouraged. Observers coded for children's play behaviour, private and social speech, and level of adult and peer involvement. Results revealed that although peer involvement was equivalent in both settings, children in the traditional, play-based preschool engaged in more fantasy play, less constructive play, and more private speech. With verbal ability and age controlled, make-believe play and associative peer involvement were positively correlated with fantasy-related private speech and self-guiding private speech, suggesting that children used private speech to develop imaginary scenarios and guide their own behaviour during sociodramatic play.

Three investigations[11-13] provide preliminary support for an association between imaginary play and executive function, especially inhibitory control. Cemore and Herwig[11] assessed inhibitory control among 37 3- to 5-year-olds using a delay-of-gratification task. Length of delay was positively correlated with children's interview responses about their imaginary play behaviour at home. Videotaped observations of play behaviour at preschool and maternal and teacher reports of play, however, were not significantly associated with ability to delay. Kelly and Hammond[12] used a "conflict" inhibitory-control task that required children to give incongruent responses to pictures (saying "sun" to a picture of the moon and "moon" to a picture of the sun). Among 20 4- to 7-year-olds, scores on a standardized test of pretense skills and on laboratory observations of symbolic play were positively correlated with inhibitory control after adjusting for mental age. Using a substantially larger sample of 104 3- to 5-year-olds, Carlson, White, and Davis-Unger[13] found that performance on a task assessing skill at enacting pretend gestures was associated with scores on a battery of inhibitory control tasks, with stronger links emerging for delay-of-gratification than for conflict measures.

In a short-term longitudinal investigation of 51 middle-socioeconomic status (SES) 3- and 4-year-olds, Elias and Berk[16] examined the relationship of sociodramatic play to future self-regulation, indexed by several types of socially responsible behaviour. In early fall and again five months later, the children were observed during free play for quantity and complexity of sociodramatic play. Also recorded were cooperativeness and helpfulness during cleanup periods and attentiveness during circle times. Frequency and persistence of complex sociodramatic play in the fall predicted future cleanup behaviour after controlling for age, vocabulary, and baseline

cleanup behaviour. Additional analyses revealed that these results were strongest for children rated by parents as highly impulsive, nil for low-impulsive children. No effects of play on circle-time attentiveness emerged.

In subsequent research on 19 low-SES 4-year-olds, Harris and Berk[17] were unable to replicate Elias and Berk's[16] findings. The investigators speculated that the thematic content of play in their sample, which was heavily weighted with violence and conflict, might have been responsible.

Research Gaps

Investigation into the play–self-regulation relationship is nascent, with reliability, generalizability, and causal mechanisms yet to be established. Studies with larger, more diverse samples, and in a wider variety of early childhood educational contexts, would enable researchers to better examine interactions among play features and their effects on children varying in demographic characteristics and personal attributes. Furthermore, researchers must more effectively disentangle the role of make-believe play from related variables (such as language skills) known to be predictive of advances in self-regulatory capacities.

Investigators have begun to examine constructs, such as executive function, that offer concise approaches to assessing the contributions of make-believe play to self-regulation, but more work in this area is needed. At the same time, the links between pretense and manifestations of self-regulation in everyday contexts merit expanded attention.

Recent attention to guided play—in which adults scaffold children's play activities in the direction of learning goals while ensuring substantial play autonomy[18] —may be fruitful in clarifying the nature of the pretense–self-regulation relationship. Research designs demonstrating the efficacy of a guided-play approach for various aspects of young children's knowledge and problem solving offer models of viable experimental strategies for inquiry into the impact of pretense on self-regulation.

Conclusions

The evidence as a whole reveals a general pattern of association between children's pretense and self-regulatory competencies, with possible but not yet confirmed causal effects for self-guiding private speech, executive function, and socially responsible behaviour. Smith[19] proposed that contribution of pretense to development is likely one of "equifinality": one of multiple

pathways to favorable outcomes. In a subsequent review of research, Lillard et al.[20] designated an “epiphenomenon” hypothesis as most reasonable: make-believe as associated with factors that induce healthy development but not causal. For example, if parents who converse often with their children also happen to encourage make-believe play, then perhaps the factor that actually enhances self-regulation is not make-believe play but rather parental language stimulation.

It is unlikely, however, that make-believe play is merely epiphenomenal.[21] Young children’s complex pretense is goal-directed, rich in symbolic object substitutions and language in its own right, and a prime context in which children willingly subordinate their activity to social rules. In these ways, pretense seems inherently self-regulating.

A key challenge in capturing the causal role of make-believe is that the study of imaginative play does not transfer easily to the laboratory. Although play training studies have been touted as offering the strongest possible evidence, these manipulations may negate influential elements of children’s pretense, including intrinsic motivation, positive affect, and child control.[22]

Implications for Parents, Services and Policy

Theory and extant research, though incomplete, has vital practical implications for parents, early childhood education programs, and therapeutic interventions for children with self-regulation deficits. Increasing numbers of U.S. young children are being deprived of play in favour of narrowly focused academic training in their homes, preschools, and kindergartens.[23] At the same time, many children, especially those from low-SES families, enter kindergarten with self-regulation problems that pose long-term threats to academic success. A serious consequence of prematurely concluding that make-believe play is epiphenomenal is that development-enhancing play experiences will be further diminished in children’s lives.

Early childhood programs that elevate academic training at the expense of play have been found to dampen motivation to learn and diminish regulation of attention and behaviour, especially among low-SES children.[24,25,26,27] Until evidence indicates otherwise, returning play, including make-believe play, to center-stage in the curriculum is a crucial step toward restoring developmentally appropriate experiences to children’s classrooms and to their home lives, as parents look to educators for models and advice on development-enhancing learning activities.

References

1. Bronson MB. *Self-regulation in early childhood: Nature and nurture*. New York, NY: Guilford Press; 2000.

2. Blair C. School readiness: Integrating cognition and emotion in a neurobiological conceptualization of children's functioning at school entry. *The American Psychologist*. 2002;57(2),111-127.

3. Meyers AB, Berk LE. Make-believe play and self-regulation. In: Brooker L, Blaise M, Edwards S, eds. *Sage handbook of play and learning in early childhood*. London, UK: Sage; 2014:43-55.

4. Kavanaugh RD. Pretend play. In: Spodek B, Saracho ON, eds. *Handbook of research on the education of young children*. 2nd ed. Mahwah, NJ: Erlbaum; 2006:269-278.

5. Singer DG, Singer, JL. *The house of make-believe*. Cambridge, MA: Harvard University Press; 1990.

6. Vygotsky LS. Mind in society: The development of higher mental processes. Cambridge, MA: Harvard University Press; 1978. Original work published 1930, 1933, 1935.

7. Vygotsky LS. Play and its role in the mental development of the child. *Soviet Psychology*. 1967;5:6-17. Original work published 1933.

8. Krafft KC, Berk LE. Private speech in two preschools: Significance of open-ended activities and make-believe play for verbal self-regulation. *Early Childhood Research Quarterly*. 1998;13:637-658.

9. Berk LE. Children's private speech: An overview of theory and the status of research. In: Diaz RM, Berk LE, eds. *Private speech: From social interaction to self-regulation*. Mahwah, NJ: Erlbaum; 1992:17-53.

10. Winsler A, Still talking to ourselves after all these years: A review of current research on private speech. In: Winsler A, Fernyhough C, Montero I. *Private speech, executive functioning, and the development of verbal self-regulation*. New York: Cambridge; 2009:3-41.

11. Cemore JJ, Herwig JE. Delay of gratification and make-believe play of preschoolers. *Journal of Research in Early Childhood Education*. 2005;19:251-267.

12. Kelly R, Hammond S. The relationship between symbolic play and executive function in young children. *Australasian Journal of Early Childhood*. 2011;36:21-27.

13. Carlson SM, White RE, & Davis-Unger A. Evidence for a relation between executive function and pretense representation in preschool children. *Cognitive Development*. 2015;29:1-16.

14. Carlson SM, Zelazo PD, Faja S. Executive function. In: Zelazo PD, ed. *Oxford handbook of developmental psychology*, vol 1. New York: Oxford; 2013:706-743.

15. Müller U, Kerns K. The development of executive function. In: Liben LS, Müller U, eds. *Handbook of child psychology and developmental science*, vol. 2, 7th ed. Hoboken, NJ: Wiley; 2015:571-623.

16. Elias CL, Berk LE. Self-regulation in young children: Is there a role for sociodramatic play? *Early Childhood Research Quarterly*. 2002;17:1-17.

17. Harris SK, Berk LE. Relationship of make-believe play to self-regulation: A short-term longitudinal study of Head Start children. Paper presented at the biennial meeting of the Society for Research in Child Development, Tampa, FL; 2003.

18. Weisberg DS, Hirsh-Pasek K, Golinkoff RM, Kittredge AK, Klahr D. Guided play: Principles and practices. *Psychological Science*. 2016;25:177-182.

19. Smith PK. Children and play: Understanding children's worlds. Oxford, UK: Wiley-Blackwell; 2009.

20. Lillard AS, Lerner MD, Hopkins EJ, Dore RA, Smith ED, Palmquist CM. The impact of pretend play on children's development: A review of the evidence. *Psychological Bulletin*. 2013;139:1-34.

21. Berk LE, Meyers AB. The role of make-believe play in the development of executive function: Status of research and future directions. *American Journal of Play*. 2013;6(1):98-110.

22. Bergen D. Does pretend play matter? Searching for evidence: Comment on Lillard et al. *Psychological Bulletin*. 2013;139:45-48.

©2018-2026 ABILIO | PLAY-BASED LEARNING

23. Bassok D, Latham S, Rorem, A. Is kindergarten the new first grade? *AERA Open*. 2016;1:1-13.

24. Burts DC, Hart CH, Charlesworth R, Fleege PO, Mosely J, Thomasson RH. Observed activities and stress behaviors of children in developmentally appropriate and inappropriate kindergarten classrooms. *Early Childhood Research Quarterly*. 1992;7:297-318.

25. Stipek DJ, Feiler R, Daniels D, Milburn S. Effects of different instructional approaches on young children's achievement and motivation. *Child Development*. 1995;66:209-223.

26. Stipek D. Teaching practices in kindergarten and first grade: Different strokes for different folks. *Early Childhood Research Quarterly*. 2004;19:548-568.

27. Stipek D. Classroom practices and children's motivation to learn. In: Zigler E, Gilliam WS, Barnett WS, eds. *The pre-K debates: Current controversies and issues*. Baltimore, MD: Paul H. Brookes; 2011:98-103.

©2018-2026 ABILIO | PLAY-BASED LEARNING