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Play's Potential in Early Literacy Development

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Introduction

Play in the preschool years has the potential to provide young children with a highly engaging and meaningful context for learning essential early literacy concepts and skills. The potential exists because theoretically, pretend play and literacy share higher order, cognitive processes such as symbolic thinking, imaging, and problem solving.[1,2,3] Research interest in a play-literacy relationship appeared as early as 1974,[4] but surged during the 1990s – most likely inspired by new insights into the foundations of literacy before schooling.[5,6] Play, as a developmentally-appropriate activity, meshed perfectly with emergent literacy, a new insight on literacy development, and the play-literacy connection became one of the most heavily-researched areas of early literacy learning and instruction in the late 20th century.[7] Research momentum was lost early in the 21st century,[8] but soon re-energized in response to the standards movement which focused on early academics.[9] Play-based learning (guided play) and book-play connections became fruitful new areas of research.

Subject

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As in other areas of early childhood development, the “classic” theories of Piaget[10] and Vygotsky[11] provide strong theoretical frameworks for investigating play-literacy relationships. Observations derived from a Piagetian view emphasize the value of social pretend play for practicing and consolidating broad cognitive skills, such as symbolic representation, and emerging literacy skills, such as print awareness. This perspective also focuses on interactions between individuals and the objects in the physical environment, leading to the development of literacy-enriched play centers as an intervention strategy.[7,12] Vygotskian theory focuses attention on the role of adults and peers in acquiring social literacy practices during play. Arguing that literacy acquisition is a social, constructive process that begins early in life, this theory posits that children develop literacy concepts and skills through everyday experiences with others, including storybook reading and pretend play.[5,13] Although singularly these classic theories do not explain the dynamics of the play-literacy relationship, i.e., how play activity influences literacy development and learning, they do offer behavioural categories apparently shared by play and literacy, such as pretend transformations, narrative thinking, meta-play talk, and social interaction.[14]

Key Research Questions

Research on play’s role in early literacy development and learning centers on two fundamental questions:

1. Does socio-dramatic play activity (language, pretense, narrative) influence emerging literacy skills (phonological awareness, alphabetics, vocabulary, story comprehension)?
2. What are the effects of the play environment—both physical and social—on developing early literacy concepts and skills?

Research Results

Play Process. A critical cognitive connection between play and literacy is rooted in the theoretical premise that representational abilities acquired in pretend transformations (“this stands for that”) transfer to other symbolic forms, such as written language. Some research evidence supports this premise. Pellegrini,[2] for example, found that children’s level of pretend skill predicted their emergent writing status. In a related study Pellegrini and his associates found positive, significant relationships between three-year-old children’s symbolic play and their use of meta-linguistic verbs (i.e., verbs that deal with oral and written language activity such as talk, write, speak, read), which suggests transfer of abstract, socially defined language uses

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between play and literacy.[15] Guided play studies[16,17,18,19] show significant effects of book-play facilitation (pretend play; game play) on vocabulary learning.

Other researchers have pursued a narrative link between play process and literacy development. Thematic-fantasy play (TFP) research in particular reveals the isomorphism between pretend play talk and oral language narrative that undergirds story comprehension.[20] TFP training improves story comprehension, both the more specific understanding of the enacted story and a more generalized understanding of other stories. Williamson and Silvern,[21] for instance, probed the benefits of TFP on story comprehension and found that children who engaged in more meta-play talk to negotiate play comprehended the story line better than those less so engaged. Other researchers have found evidence of structural parallels between play narratives and more general narrative competence. For example, Eckler and Weininger[22] observed a structural correspondence between Rummelhart's[23] story grammar scheme (narrative stories have a predictable structure in which main characters set goals, encounter problems and attempt to overcome these obstacles and achieve their goals) and children's pretend play behaviours, leading them to infer that play narratives may help children develop the building blocks of story. Correlational and descriptive evidence also indicate a positive relationship between symbolic play talk and the literate language of books (e.g., syntactic awareness), not only through live, but also virtual play with electronic apps.[24,25]

Play Environment. A large body of research has focused on the literacy-enriched play center strategy in which play areas are stocked with theme-related reading and writing materials. For example, a pizza parlor play center might be equipped with wall signs ("Place Your Order Here"), menus, pizza boxes, employee name tags, discount coupons, a pencil and notepad for taking orders. Data indicate that this type of manipulation of the physical environment is effective in increasing the range and amount of literacy behaviours during play.[26,27] Evidence also indicates that literacy-enriched play settings can result in at least short-term gains in young children's knowledge about the functions of writing,[28] ability to recognize play-related print,[29] and use of comprehension strategies such as self-checking and self-correction.[12]

Research has also shown that the social environment has an impact on play-literacy connections. Several investigations have reported that teacher scaffolding increased the amount of literacy activity during play.[30] Other research has focused on the peer interaction in literacy-enriched play settings.[31,32] Results indicate that children use a variety of strategies such as negotiating and coaching, to help each other learn about literacy during play.

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Research Gaps

Play-literacy research continues to struggle with problems of definition, particularly in defining the salient characteristics of play influential in literacy learning.[3] For example, the linguistic features of play talk that matter in emergent literacy remain uncharted, i.e., what are the preparatory syntactic and semantic features that map to written language and bridge play and the early-reading stage? Per Vygotsky a “profound analysis” is needed to describe the intersect of decontextualized language in play and early reading. Non-linear growth models may offer more powerful lens for observing these intersections than traditional stage models.[33]

Research on play and literacy also faces serious methodological issues. The line of inquiry lacks longitudinal studies, newer theoretical frameworks, design studies, implementation research and mixed methods designs for observing the complexities of play-literacy relationships.[34] The difficult work of controlled experimental studies to test the value-added of play in preschool language and literacy curricula is yet to be undertaken, and limited progress has been made in investigating the play-literacy connection in communities and homes. Innovative, creative studies are also needed to examine links between play process and print concepts in multimodal, electronic texts. How app software and e-books, for example, tutor a play-literacy relationship remains largely unknown.

Conclusions

Research has provided some evidence that play processes (e.g., the language, symbolic representation, and narratives used in play) are related to early literacy skills. In addition, research on literacy-enriched play centers indicate play environments can be engineered and enriched to enhance the literacy experiences of young children. However, we still lack evidence on the “big” question: Does play directly contribute to literacy development and learning? This research gap persists perhaps because the science of play study has not kept pace with advances in developmental and implementation research paradigms. Most play-literacy research, for example, remains loyal to the classic theories of Piaget and Vygotsky, even though cognitive science has moved on to more dynamic and integrated perspectives.[34,35] In addition, researchers are also using well-worn data collection and analysis procedures. Pellegrini and Van Rizen[14] argue that the use of modern statistical techniques would be very helpful in teasing out causal relationships between play and learning. These new theoretical and methodological approaches have the potential to sustain momentum in play-literacy research.

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Implications

Credible evidence supports the claim that play can serve literacy by providing settings that promote literacy activity, skills, and strategies. Therefore, ample opportunities to engage in dramatic play and literacy-enriched play settings should be standard features in early childhood programs. However, firm evidence is lacking that play activities, with or without literacy-enrichment, make lasting contributions to literacy development. It follows that print-rich play centers should be just one component of the pre-K curriculum. Effective curriculums should also include age-appropriate direct instruction in core early literacy skills and teaching strategies, such as shared reading and shared writing, which provide rich opportunities for children to learn these skills in non-play settings. Evidence also suggests that teachers make direct connections between literacy-enriched play centers and the academic parts of the curriculum, rather than relying on play experiences as a “stand alone” activity. This play-based integration with curriculum increases the likelihood that play experiences offer opportunities for children to practice and perfect important literacy skills and concepts.[33] Lastly, we encourage more research on the play-literacy relationship in electronic media, especially with e-books.[36] A new generation of digital storybooks enriched with digital storytelling techniques may even be more profitable to young children’s literacy development than playful regular storybook reading.

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