Based upon the theories of Piaget and Vygotsky and informed by research from many disciplines including linguistics, anthropology, history and psychology, the knowledge about the nature of children's play and its relationship to literacy development has steadily increased. The play of young children is categorized as: (1) meaningful; (2) symbolic; (3) active; (4) pleasurable; (5) voluntary and intrinsically motivated; and (6) rule governed. Play provides a context within which the emergence of literacy can be manifested and explored. The literacy, in turn, enriches the play, helping the development and processing of scripts. In addition, children use similar representational mental processes in both play and literacy acts. In order to understand children's play and literacy acts researchers must see them in the context of children's cultural practice. Research can then accurately describe the play-literacy relationship as a "situated" cultural phenomenon. A sociocultural approach to play-literacy research should accompany the current research traditions of psychologically-oriented and culturally/sociolinguistically-oriented approaches. The sociocultural approach attempts to understand how children socially construct meanings of peer interactions, events (e.g. play and early literacy learning), and the larger social world in different contexts. Its research methodology is grounded in the inductive analysis of rich ethnographic materials. The sociocultural approach seems to hold the promise of providing insights into the life-worlds of children which in, in turn, enables educational practitioners to design developmentally-appropriate literacy instruction. Contains 45 references. (BGC)
PLAY-LITERACY CONNECTIONS:
A RESEARCH SYNTHESIS AND SUGGESTED DIRECTIONS

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INTRODUCTION

The relationships between play and literacy have, for several decades, attracted scholars from different disciplines. According to Fein (1979), the scholarly interest in the play-literacy connections dates back to works of Stern (1924), Buhler (1935), and Griffiths (1935). While those early scholars have, perhaps, contributed important insights, a more established basis for systematic inquiry did not appear until the publication of the work of Piaget (1962) and Vygotsky (1967, 1962) (Fein, 1979).

Learning from these works, and those of scholars coming after Piaget and Vygotsky, we have begun to know, in a relatively precise manner, the nature of children's play and its relationships to literacy development.

This article will (1) discuss play from different theoretical perspectives, (2) delineate the nature of children play and literacy development, (3) elaborate on current research on play-literacy connections, and (4) suggest future directions for research on play-literacy connections in order to generate more directly usable contributions to childhood education.
Play can be seen as both a verb and a noun. Rather than a category, property, or stage of behavior, play is a relative behavior (Fromberg, 1992), falling along a continuum from very playful to less playful (Rubin et al., cited in Pellegrini & Galda, 1993). Perhaps because of its relative nature, play has led scholars to see it from multiple lenses from different disciplines: linguistics, anthropology, history, psychology, to list only some. As a result of the use of those differing disciplinary lenses, play is defined in different ways.

For the purpose of this chapter, rather than elaborate on each of the definitions of play existing in the literature, suffice it here to adopt one version which seems to be representative in that the definition captures essential play features generally agreed upon by play researchers and educators (Fromberg, 1992). Fromberg proposes the following definition.

Young children play is:

Symbolic, in that it represents reality with an "as if" or "what if" attitude

Meaningful, in that it connects, or relates experiences

Active, in that children are doing things

Pleasurable, even when children are engaged
seriously in activity

Voluntary and intrinsically motivated, whether the motives are curiosity, mastery, affiliation, or others

Rule-governed, whether implicitly or explicitly expressed (Fromberg, 1992:43)

Based on his observational studies, Bruner (1983) contends that play is an inherent part of childhood life. Play, as Daiute (1989) argues, is a tool for children to make sense of and learning more about their world. Play is a form of thought which enables children to learn both their inner and outer worlds (Dyson, 1990)

Elsewhere Bruner (1972) speculated on the functions that play might serve its players. As he put it:

Play appears to serve several centrally important functions. First, it is a means of minimizing the consequences of one's actions and of learning, therefore, in a less risky situation....Second, play provides an excellent opportunity to try combinations of behavior that would, under functional pressure, never be tried (p.693).

While Bruner sees the function of play in a very general terms, other influential theorists have suggested
more specific values of play for development and learning. A good case in point here are Piaget and Vygotsky, whose theories are currently dominating the field (Fein, 1979; Pellegrini & Galda, 1993). For Piaget, play helps to consolidate past experiences, serving the egocentric-expressive needs of the child player. Consolidated related past experiences help establish action and event schemes to become scripts (French, Lucariello, Seidman, & Nelson, 1985). In contrast, Vygotsky sees play in different light: for him play enables tension reduction, serving the child’s social-conceptual needs for gratification. As the play is connected with children’s "unfulfilled wishes," the gap between the children’s actual reality and those they wish for can create zone of proximal development, which provides opportunity for children’s learning (Vygotsky, 1978).

Major Theoretical Perspectives and Research Foci

Despite scholarly differences regarding the study of play across disciplines, some distinguishable, albeit general, strands can be drawn among play theories. General agreements seem to exist about the categorization of play theories into two major camps: psychological perspective (and its variants) and cultural perspective (Fromberg, 1992; Sutton-Smith, 1980). These two major
theoretical orientations are best seen as located in a continuum rather than as a clear-cut mutual exclusion.

The psychological perspective camp generally perceives play as a psychological phenomenon, with a central concern about the psychological bases driving the play behavior and its functions relative to children development. This perspective has resulted in two lines of research: studies on play training, and analysis of play discourse (Guttman & Frederiksen, 1985). Among influential figures in this camp are Piaget, Vygotsky, Freud, and Bruner (Fromberg, 1992).

In contrast, the cultural perspective camp sees play as a form of social communication which reflects children's knowledge of cultural norms and values. Important to this perspective is a focus on the communicative strategies underlying children's appropriate use of language in social settings. Two lines of research have emerged from this camp: (a) naturalistic-observational studies on peer interactions and adult-child interactions in both laboratory and home settings; and (b) studies focusing on processes involved in the production of discourse in face-to-face interactions. This latter line of research can provide a framework for inquiring into the role of children's world knowledge in guiding their communicative efforts. Researchers in this camp include Garvey, Kirshenblatt-
Gimblett, Schwartzman (Fromberg, 1992; Guttman & Frederiksen, 1985) and, those researchers with peer-culture perspective: Corsaro, Fernie, Kantor, and others.

LITERACY ACQUISITION

Current literacy theories hold that children are active constructors of meaning. Children are "meaning-makers." This conception has gained considerable empirical support from research in emergent literacy—writing and reading behaviors which precede and later develop into conventional literacy (Sulzby & Teale, 1991). These authors suggest that the term literacy, in place of reading-and-writing, gains wide a currency because theories and research findings have shown that reading, writing, and oral language develop concurrently and interrelatedly in literate environments. For example, empirical studies of young children's reading of environmental print (e.g., Harste, Woodward, & Burke, 1984) have shown that children gain awareness of functionality of written symbols since approximately three years of age. Preschoolers' book-reading reenactment ("pretend reading") research by Pappas (1991, 1993) has indicated that the kindergartners have tacit knowledge of social uses of different textual forms. Research on young children's verbal rendering of a silent movie by Hicks (1990, 1993) has provided support to the
notion that children have knowledge, albeit implicitly, of the variability of narrative forms as a function of interactions in different contexts of role-relationships, and other situational factors.

While the studies cited above provide evidence of the active nature of children as literacy actors, Dyson's (1981, 1983, 1985, 1990, 1995) empirical research demonstrates children's simultaneous nature of symbol making and symbol using through dramatic play. Discussing her observational studies, Dyson (1990) concludes: Thus, play is a "canvas" in which young children can symbolize ideas and feelings through gestures and speech....Drawing combined with talk can quite literally become a canvas for children's shared dramas (p.54)

PLAY AND LITERACY DEVELOPMENT: RESEARCH EVIDENCE

Several theorists have suggested that play and language development reflect the young child's emerging ability to manipulate symbols (e.g., Piaget, 1962; Sinclair, 1970). According to Piaget (1962) and Warner & Kaplan (1963) as cited in Dyson (1990), between the age of 12 and 36 months, children's cognitive accomplishment is marked with a transition from sensorimotor to representational cognition. Two major themes characterize this shift: the decentration and differentiation of
meanings from sensorimotor actions involving the child’s body to abstract representations of meanings, and the integration of symbolic behaviors or meanings into sequences.

In order to show the relative parallel of the development of children’s play behaviors and linguistic as well as multiple-symbol using acts, general descriptions are presented below.

Play Development: A Case of Symbolic Play

During infancy (or prior to about 12 months of age), children’s activities are generally dominated by sensorimotor manipulation (Fein, 1980). At this stage of development, children often engage in sensorimotor "play," where things are banged, waved, pulled, pushed, or dropped according to perceivable qualities and immediate effects. From repeated physical actions on objects, the children acquire general knowledge of physical features of those objects, and about their own body movements (McCune-Nicolich, 1981).

At the age between 12 and 24 months, there surfaces a new play form: symbolic play. The emergence of this new form of play entails a shift in children’s focus. In its earliest form of symbolic -- "presymbolic" -- play, children engage in a familiar activity (e.g., drinking) with a practical object (e.g., a cup), but the activity is
detached from the actual contexts of situation and motive: the cups are empty, and the children are not thirsty. This indicates that the children have acquired "drinking scheme" (McCune-Nicolich, 1981:786). At this stage, that is to say, things are used as objects with socially defined and practical purposes-- but with their social and practical purpose being suspended.

Over the next few months, the children's symbolic play might change in form as well as frequency. For instance, unlike the earlier form where the pretense is confined to self, this time the children begin to feed a doll. Here, the use of a doll as a participant indicates that the children can now distance themselves from their own sensorimotor actions (McCune-Nicolich, 1981). This also indicates the children's understanding of social relationship between a giver and a recipient (Fein, 1980).

As decentering process allows the children to increase the repertoire of play schemes available by imitating others' action (McCune-Nicolich, 1981), it then becomes possible for the children to pretend to do something they do not usually do. At first, the play requires actions and objects similar to those actually performed and used in real life, but soon increasingly dissimilar events can be created and objects substituted. Eventually, the children begin to combine several action
schemes into sequences. While symbolic play is initially solitary, it becomes a collaborative, social effort when the children turn approximately three (Fein, 1980).

To sum up, children's symbolic play becomes progressively social, and its meanings increasingly detached from particular and immediate present situations, persons, and objects.

**Literacy Development: The Use of Oral Language and "Literate" Written Symbols**

Between 12 and 24 months, children's vocabulary develops very rapidly. At this age, more objects and events are nameable. Vocalizations change from utterances in which words are barely intelligible to well-formed sentences that can express various object-action relations. At first, children use words to refer to objects in the immediate environment and actions tightly related to their own bodies and needs. Later, however, gradually the words are to be used to refer to objects, actions, events which are remote in time and space.

Likewise, as part of children's way of knowing their world, children explore the symbolic materials available to them, including the graphic marks of drawing and painting, and environmental print surrounding them (Dyson, 1990). In a literate culture and print-rich environments, at early age children gain awareness of the
social uses of written text (e.g., Harste et al., 1984), and they approximate the written symbols in their own childlike ways to serve their own purposes, which are not necessarily the same as those serving adults. For example, in her ethnographic study of emergent writing, Dyson (1985) found some children "create a message," the case where the meaning of the message is not known to the children as indicated by their own question: "What does this [my writing] say?" (p. 72).

It has been well documented by now that children make lines and letter-like marks. They may read their own writing or ask others to read it (e.g., Clay, 1975). Initially, in their earliest writing, young children do not precisely encode meaning. Rather, as in their early drawing, it is the act itself-- the gesture and any accompanying talk-- which makes the writing meaningful (Dyson, 1983). Eventually, children can differentiate among all the symbol systems they use. As Dyson (1990) put it:

Learning to write is a process of gradually differentiating and consolidating the separate meanings of the two forms of graphic-- drawing and writing (p. 360).

As individual child writers develop, their texts become increasingly unambiguous or autonomous.
representations of meanings (Dyson, 1995).

To reiterate the discussion on the nature of the development of children's play and literacy acts, drawing a comparison and contrast might be useful. That is, while in play meanings are conveyed by actions; in language, meanings are conveyed by words. Over time, the actions of play become combined and organized into sequences as a script. Likewise, in language, children's words become combined and organized into sentences.

**PLAY-LITERACY CONNECTIONS**

This chapter will discuss the relationships of children's play and early literacy development. First, "overlapping" underlying processes involved in both play and literacy acts will be discussed. Next, discussion focuses on what happens when play and literacy acts co-occur in one event. Relevant empirical evidence is presented to substantiate the conclusions.

**What do play and literacy acts share?**

As suggested in the foregoing discussion, when engaged in symbolic play, children use scripts and generate story lines. In doing this they dissociate themselves from their immediate context. This detached, symbolic act, where the children divorce themselves from concrete, physical referents, is similar to the
underlying process of literacy acts such as reading and writing. When children plan, negotiate, and then enact social symbolic play, they integrate their knowledge of social world (Farver, 1992; Garvey, 1990), which have become "scripts." The same thing happens to readers and writers. When a reader reads, she uses her world knowledge to help construct meaning; when a writer writes, she uses world knowledge as a reference for her writing content.

In summary, children use similar representational mental processes in both play and literacy acts. When engaged in play and literacy acts, the players and literacy actors use world knowledge, which relies on the same source: their life experience as a member of social groups embedded in a certain culture.

What happens when play and literacy acts co-occur? Empirical studies of emergent writers and readers in play settings (e.g., Roskos, 1988; Roskos & Neuman, 1990; Schrader, 1989) have indicated that when surrounded by a wealth of literacy artifacts in a print-rich environment, children readily incorporated their literacy concepts and knowledge of literacy artifacts into their play activities. For example, in those studies, the children wrote for real-life purposes, read their writing, and discussed the meaning of their written language with
their peers.

Dyson’s (1995) recent work, which reported a study of authors’ theater, clearly indicated that during dramatic play, child authors used all personal as well as social resources available to them in order to stage what they have in mind.

In conclusion, play can provide an engaging, meaningful context for children’s literacy learning.

What specific dimensions of symbolic play help develop early literacy?

- **Symbolic play and oral language**

  Contributions of play to oral language development come from play training research. Smilansky’s (1968) study with low SES children in Israel, and its replication study in the United States by Lovinger (1974), pointed to one conclusion: sociodramatic-play training improve oral language skills. In those studies, children’s verbal communication becomes more varied, as marked with the use more parts of speech than the children did prior to training (Isenberg & Jacob, 1983).

- **Symbolic play and metalinguistic awareness**

  Play researchers (e.g., Garvey, 1990; Kuczaj, 1986)
have noted that children play with all aspects of language system: phonological, pragmatic, syntactic, and semantic. Cazden (1974) suggests that play with various aspects of language can promote metalinguistic awareness-- awareness of rules governing the language.

Play talk and reading comprehension

Williamson & Silverman (1991) reported three related experimental studies of thematic-fantasy play which involved a large number of children (N=505; N=845; N=120). In these studies, subjects were pre- and post-tested with story reenactment as a treatment and training being provided by the researchers and co-researchers. Results indicated that the subjects increased in their comprehension of "new" stories. The researchers attributed the comprehension improvement to "metaplay"-- the talk the subjects were engaged in as they jointly planned the reenactment of the stories.

Discussing the same report, Pellegrini & Galda (1993) commented approvingly:

Symbolic play may be important in early reading to the extent that it helps children go meta on their surroundings. By going meta, children are using language to reflect on language (p.171).
**Play and comprehension of picture/wordless story**

Dansky (1980) conducted a study which involved 36 preschoolers from lower SES families who were attending a day care in Toledo, Ohio. The purpose was to examine the influence of sociodramatic play on two broad spheres of cognitive functioning: (a) the ability to comprehend, recall, and produce meaningfully organized verbal information; and (b) the dimension of imaginativeness or creativity. Using an experimental design with three different contrasting treatments (i.e., free, exploratory, and sociodramatic play), the researcher found, among other things, that play training enhanced comprehension and production of sequentially organized information.

**Symbolic play and literate language**

In several empirical studies of pretend play, Pellegrini (1982, 1985, 1991) found that children use elaborate language. They define pronouns linguistically, modify nouns with adjectives, and use causal and temporal conjunctions in order to make their imaginative suggestions intelligible to their play partners. Engagements in social pretend play like this provides experiences for children to practice explicit, less context-bound language use--the kind of "literate" language they will be required to use in school-based
literacy activities (Pellegrini & Galda, 1993).

- **Play and writing**

  Daiute (1990) observed sixteen fourth- and fifth-graders' way of composing when they were engaged in collaborative writing using computer. She found that children used play (including play with language, concepts, reality, and the writing instruments) in over 30% of their utterances. The researcher characterized play as a composing strategy, as the play seems to serve the function of "elaboration, construction (or rule-making), and catharses" (Daiute, 1990:39).

  In conclusion, play and early literacy processes seem to have a great deal of similarities, and play seems to have facilitative effects on some aspects of literacy development. Hall (1991) has characterized play-literacy connections as mutually supportive. Substantiating his conclusion, Hall reasons:

  Play provides a context within which the emergence of literacy can be manifested and explored. The literacy, in turn, enriches the play, helping the development and processing of scripts (Hall, 1991:20)
LOOKING INWARD, LOOKING FORWARD: CONCERNS AND PROMISES

As indicated in the foregoing discussion, empirical evidence supporting the link between play and literacy comes from two distinct research traditions: psychologically-oriented and culturally/sociolinguistically oriented inquiries. The first tradition used systematic observation and correlational/experimental designs to explore relationship between play and a variety of cognitive performance measures, such as oral language production, use of "literate" language structures, aural story comprehension, etc. The sociolinguistically oriented studies, in contrast, have employed case study and observational study procedures to discover what children know/or learn about reading and writing prior to receiving formal literacy instruction. and to identify some factors which bring about children’s literacy acquisition.

While the studies coming from those two major traditions have shed some light on the nature of play, literacy acquisition and possible relationships between the two, a very few of the presently available research has looked at the play and literacy acts from children’s own perspectives. Also obvious in the existing literature is that play-literacy connections are mostly seen in terms of their product.
The tendency to see children as "miniature of adults"—as reflected in the way apriori hypotheses and predetermined categories are employed in the research—and the tendency to perceive play (and literacy) as a monolithic construct can limit the possibility of gaining insights into the complexities of social life of children and their peer culture (see, e.g., Corsaro, 1988; Fernie, 1988; Kantor, Miller & Fernie, 1992).

Similar concerns have been voiced by Pellegrini & Galda (1993) when they write,

We as researchers and teachers must come to realize that different types of children learn in different ways and the structural views of development and teaching, which minimize or ignore individual differences, are doomed to failure. In short, there are probably different routes to competence. While play offers one route to competence to many children, there probably are other, equally effective routes (p.173).

I am, therefore, suggesting that children's play and literacy be seen in their ecological context, that is, within the social dynamics of peer culture.
Sociocultural Perspective

In this section, sociocultural perspective will be briefly discussed with a specific reference to children as a collective by using play as an instance of their "life world." Elaboration on a form of research methodology and its promises, which emanates from the perspective will follow.

- **Play as a peer culture and literacy learning as a school culture**

According to Corsaro (1988), when children move from home to preschool setting, they undergo a dramatic change in the nature and range of their social experiences with adults and other children, which entails a change in social, interactive routines. This change in interactive routine, in turn, poses different societal demands.

In dealing with the new societal demands of preschool settings, and to make sense of adult's world and to resist it (Corsaro, 1992), children, who share various natural inclinations, establish their own culture among themselves: peer culture, which is defined by Corsaro (1992) as "a stable set of activities or routines, artifacts, values, and concerns that children produce and share in interaction with peers." (p. 162) Peer culture, that is to say, is established by children as a joint attempt to control over their own lives by
establishing a collective identity through shared and repeated peer social activities which are prominent in play.

Sociocultural perspective sees play as a social arena where children negotiate their collective identity as a distinctive cultural group. Consistent with the assumption that children share their own range of values and perceive differently from adults, sociocultural perspective sees children's play and classroom life in cultural terms. That is, classroom members (children and the teacher) are viewed as constructing a common culture through their everyday interactions (Fernie, 1988).

Perceived in this light, classroom life (e.g., in this case, literacy learning) and children's play are fused, interwoven in the complex fabric of social life between children and the teacher as cultural beings embedded in a cultural context of a classroom (Kantor, Miller & Fernie, 1992). Classroom as a cultural context is here perceived as having complex, interrelated realms of school culture and peer culture activity.

Research Methodology and Its Promises

As sociocultural perspective attempts to understand how children socially construct meanings of peer interactions, events (e.g., play and early literacy learning), and the larger social world in different
contexts, its research methodology is grounded in the careful, inductive analysis of rich ethnographic materials (Corsaro, 1992). Although play researchers did not adopt this approach until recently, the inductive data analysis used and insider's perspectives sought by this "new" research approach has yielded some important concepts, such as the notions of "oppositionality," "inclusion," "exclusion," and "protection of interactive space" which are useful in explaining social dynamics among children in a peer culture. What follows is an excerpt from a research report by Dyson (1995), being presented here as an empirical example:

In my efforts to understand the social and ideological dynamics of children's writing, I analyzed the content and interactional structure of the talk surrounding that writing. Through this inductive analysis, I constructed a category system to describe the children's social goals...and, also, the ways in which the written texts served those goals....At first, many children, including Sammy, used written texts primarily as props for (or, more accurately, as "tickets" to) the theater. Their texts were largely invisible: They stood up and pretended to read texts that were not actually written. The children relied
on oral language--and sometimes drawing in their writing books--to represent their ideas and to enter into the classroom social life. Over time, though, their texts became more important; they began to serve as representations of valued characters and actions, as reinforcing of their authority, their right to say how the world is, and as dialogic mediators between themselves and others, as ways of anticipating and responding to others’ reactions to their stories (p.22).

The point I am making here is that with a focus on the cultural meanings literacy holds for groups of individuals in classrooms, sociocultural researchers can reveal how those meanings are socially constructed in the course of everyday life. With such an orientation, very specific understanding can result from research like what Dyson (1995) has come up with:

The children, as individuals and as a collective, wrote many kind of stories with roots in experiences at home and at school. But it was the superhero story that allowed the most insight into the intersection of the children’s social and ideological worlds (p.22).
In conclusion, in order to understand children's play and literacy acts researchers must see them in the context of children's cultural practice. Or, in the words of Kantor, Miller & Fernie (1992), play-literacy connections must be "viewed as part of the social history of the group as practiced in the ways of the group" (p.186). In this way, research can accurately describe the play-literacy as a "situated" cultural phenomenon.

When research can accurately "capture" the phenomenon, it engenders a good theory, which, in turn, can contribute significantly to instructional practice. In the words of Pellegrini & Galda (1993): "(T)heory is relevant to classroom practice to the extent that it informs teachers as to what should be taught, the ways in which it should be taught, and ways to evaluate it" (p.167).

The sociocultural approach to play-literacy research seems to hold promise of providing insights into the "life-worlds" of children (Corsaro, 1984) which, in turn, enable educational practitioners to design a developmentally-appropriate literacy instruction.
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