
Vygotskian and Post-Vygotskian Views on Children's Play



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The authors argue that childhood played a special role in the cultural-historical theory of human culture and biosocial development made famous by Soviet psychologist Lev S. Vygotsky and his circle. They discuss how this school of thought has, in turn, influenced contemporary play studies. Vygotsky used early childhood to test and refine his basic principles. He considered the make-believe play of preschoolers and kindergartners the means by which they overcame the impulsiveness of toddlers to develop the intentional behavior essential to higher mental functions. The authors explore the theory of play developed by Vygotsky's colleague Daniel Elkonin based on these basic principles, as well as the implications for play in the work of such Vygotskians as Alexei Leontiev, Alexander Luria, and others, and how their work has been extended by more recent research. The authors also discuss the role of play in creating the Vygotsky school's "zone of proximal development." Like these researchers, old and new, the authors point to the need to teach young children how to play, but they caution teachers to allow play to remain a childhood activity instead of making it a lesson plan. **Key words:** childhood development; cultural-historical psychology; Lev S. Vygotsky; preschool play; zone of proximal development

A WELL-KNOWN, OFTEN-QUOTED PASSAGE from Russian psychiatrist Lev S. Vygotsky states: "In play a child is always above his average age, above his daily behavior; in play it is as though he were a head taller than himself. As in the focus of a magnifying glass, play contains all developmental tendencies in a condensed form; in play it is as though the child were trying to jump above the level of his normal behavior" (1967, 16).

These lines, which come from a 1933 lecture on play, have recently regained the attention of scholars and practitioners. Interestingly, the interpretations of this paragraph can differ dramatically depending on the philosophical orientation of the interpreter. For example, some present it as an injunction for adults not to interfere in children's play, because—more than any other activity—play seems to allow a young child to "jump above the level of his normal behavior."

Others find in these very same words from Vygotsky a call to use play as an efficient vehicle to deliver academic concepts and skills to preschoolers and kindergartners. Both interpretations, however, are inconsistent with the way Vygotsky and his students regard play, which is known as the cultural-historical approach. Our purpose in this article is to help the reader understand when and how Vygotsky's theory of play was developed and later built upon by his students and what this theory may mean for the contemporary study of play.

Vygotsky on Play: The Blueprint of a Theory

To understand fully Vygotsky's views on play, we need to place them in the larger context of Vygotsky's theory of human development and learning as well as in the broader cultural and historical context in which he and his students developed their approach to play. Vygotsky's scientific biography covers a short span of ten years from 1924 to 1934, during which he produced a number of works now considered definitive in fields ranging from special education to art studies to psycholinguistics. The field of child development, however, occupies a special place in Vygotsky's scientific legacy. It was in the context of child development that Vygotsky discussed many of his well-known ideas, such as the zone of proximal development (the law of the development of higher mental functions) and the notion of instruction preceding and shaping development. Indeed, his theory of children's play cannot be separated from these broader theoretical constructs.

Vygotsky's interest in play appeared evident from his early works published in the 1920s, such as *The Psychology of Art* (1971) and "The Prehistory of the Development of Written Language" (1997b), but he expressed his main ideas about play in the 1933 lecture from which we have already quoted, "Play and Its Role in the Mental Development of the Child" (1967). This lecture that can rightly be considered the blueprint for the theories of play developed in the cultural-historical tradition.

At its core, Vygotsky's cultural-historical theory considers the history of human development to be a complex interplay between the processes of natural, biologically determined development and the cultural development created by the interaction of a growing individual with other people. The result of these interactions proves more than the simple acquisition of the values, expectations, and competencies promoted by a specific culture. Rather, the entire system of naturally determined ("lower") mental functions, such as involuntary attention,

rote memory, and sensory-motor thought, becomes restructured to produce what Vygotsky described as higher mental functions: "When the child enters into culture, he not only takes something from culture, assimilates something, takes something from outside, but culture itself profoundly refines the natural state of behavior of the child and alters completely anew the whole course of his development" (1997a, 223).

Vygotsky defined higher mental functions as behaviors that are sign-mediated, intentional, and internalized, and he described their development as a gradual process involving the transition from interindividual ("intermental") or shared to individual ("intramental"). For young children, most of the higher mental functions still exist only in their interindividual form as they share these functions with adults or with other children: "Every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between people as an 'inter' mental category, then within the child as 'intra' mental category. This pertains equally to voluntary attention, to logical memory, to the formation of concepts, and to the development of will" (1997b, 106).

Vygotsky's views on the development of higher mental functions reflect his attempt to resolve what he described as the "crisis in psychology" (1997a). Vygotsky believed that psychology was a discipline torn between those who advocated objective methods equally applicable to lower mental functions in both humans and animals and those who focused exclusively on uniquely human higher mental functions accessible only through introspection.

Subscribing to neither of these two schools of thought, Vygotsky suggested a new approach that focused on the origins and development of higher mental functions both in phylogeny and in ontogeny. Although the phylogenetic processes (species development) can only be inferred based on cultural artifacts produced at different stages of the evolution of humankind, the ontogenesis (individual development) of higher mental functions can be accessible to direct observation as well as to empirical investigation.

Thus, for Vygotsky, child development and learning means more than a source of practical examples for his cultural-historical theory. Instead, they were the subjects he and his students could use to test and refine the basic principles of this theory. Early childhood for Vygotsky was the period during which the restructuring of lower mental functions goes through its initial stages as children for the first time in their lives used cultural tools to transform their cognitive processes such as perception, attention, memory, and thinking. Social-emotional

capacities are similarly transformed, allowing children to make a transition from being “slaves to the environment” to becoming “masters of their own behavior.”

In Vygotsky’s view, it is one of the accomplishments of the preschool years that children overcome their impulsive, reactive behavior (i.e., their “knee-jerk” response to the environment) and thus become capable of intentional behavior, an accomplishment critical for the development of higher mental functions. The other accomplishment of the early years involves children’s growing ability to use a variety of signs and symbol systems—from gestures and words to drawing and written marks—that prepares them for the increasingly complex symbol systems they will learn in school. Vygotsky’s theory of higher mental functions and their development, therefore, provides the context for his views on play.

To avoid possible misunderstandings (partially due to the variations in translations of Vygotsky’s writings), we need to make clear that when writing about play, Vygotsky meant only one kind of play, namely, the sociodramatic or make-believe play typical for preschoolers and children of primary-school age. Thus, Vygotsky’s definition of play does not include many kinds of other activities, such as physical activities, games, object manipulations, and explorations that most people, educators included, still call “play.”

Sociodramatic or make-believe play, according to Vygotsky, has three features: children create an imaginary situation, take on and act out roles, and follow a set of rules determined by those specific roles. Each of these features plays an important function in the development of higher mental functions. Vygotsky associated the creating of an imaginary situation and the acting out of roles with children’s emerging ability to carry on two types of actions, external and internal, internal actions being a defining characteristic of higher mental functions. In play, these internal actions—“operations on the meanings” in Vygotsky’s words—remain dependent on the external operations on the objects. However, the very emergence of the internal actions signals the beginning of a child’s transition from earlier forms of thought processes—sensory motor and visual representational—to more advanced symbolic thought. At first more stimulus bound, preschoolers gradually learn to transcend ostensive reality.

Play is instrumental in achieving mastery of the object and furthering symbolic ability. Vygotsky notes, “Play is a transitional stage in this direction. At that critical moment when a stick—i.e., an object—becomes a pivot for severing the meaning of horse from a real horse, one of the basic psychological structures determining the child’s relationship to reality is radically altered” (1967, 12).

Thus, Vygotsky sees play as a transitional stage from a child’s thinking

constrained by the properties of a current situation to thinking totally free from these constraints. At this stage, a child cannot yet assign a new meaning to a play prop arbitrarily; this prop has to have some properties that allow the child to use it in a way similar to the way he or she would use the real object. It is less important that the prop resemble the object it is intended to represent than that the child be able to perform a similar action or a gesture using the prop as he or she would use the object. For example, a child can retell a story “written down” with the help of everyday objects representing people and things in this story. However, only things that can be rolled (e.g., a pencil) were considered by children to be acceptable substitutes for a carriage or a train (Elkonin 1976). Vygotsky emphasizes that at this stage, the child is not yet capable of the use of symbols but, rather, is mastering the prerequisites of symbolic thinking.

Vygotsky also sees play as a “transitional stage” in the development of imagination, opposing a commonly held belief that imagination precedes play and is necessary for its emergence. He elaborates: “Imagination is a new formation that is not present in the consciousness of the very young child, is totally absent in animals, and represents a specifically human form of conscious activity. Like all functions of consciousness, it originally arises from action. The old adage that children’s play is imagination in action can be reversed: we can say that imagination in adolescents and schoolchildren is play without action” (1967, 8).

Another way make-believe play contributes to the development of higher mental functions is by promoting intentional behavior. It becomes possible because of the inherent relationship that exists between the roles children play and the rules they need to follow when playing these roles.

Although imaginary situations and roles are often considered defining features of make-believe play, the very idea that play is not totally spontaneous but is instead contingent on players abiding by a set of rules may sound completely counterintuitive. However, “the role the child plays, and her relationship to the object if the object has changed its meaning, will always stem from the rules, i.e., the imaginary situation will always contain rules. In play the child is free. But this is an illusory freedom” (1967, 10).

For preschoolers, play becomes the first activity in which they are driven not by their need for instant gratification, prevalent at this age, but instead by the need to suppress their immediate impulses: “Play continually creates demands on the child to act against immediate impulse, i.e., to act according to the line of greatest resistance. I want to run off at once—this is perfectly clear—but the rules of the game order me to wait. Why does the child not do what he wants,

spontaneously and at once? Because to observe the rules of the play structure promises much greater pleasure from the game than the gratification of an immediate impulse” (1967, 14).

Finally, in play, the first signs of generalized emotions appear, which means that the emotions are now associated with a broad category of people and situations rather than with one specific event. For example, when a child cries playing “patient,” he does it because he knows that all children do it when they are given a shot. For Vygotsky, generalization of emotions is yet another developmental accomplishment of the early-childhood years.

Summarizing the role of play in child development, Vygotsky concludes that the play is “the leading source of development in preschool years.” He explains that the

play-development relationship can be compared to the instruction-development relationship, but play provides a background for changes in needs and in consciousness of a much wider nature. Play is the source of development and creates the zone of proximal development. Action in the imaginative sphere, in an imaginary situation, the creation of voluntary intentions, and the formation of real-life plans and volitional motives—all appear in play and make it the highest level of preschool development (1967, 16).

The concept of the zone of proximal development (ZPD) as the distance between the level of independent performance and the level of assisted performance is probably the most famous Vygotskian concepts. However, Vygotsky’s words about a child being assisted by an adult or a more knowledgeable peer have often been taken literally, limiting the application of the ZPD to one-on-one situations of teaching or tutoring. Adding play as a specific means of assistance not only expands the practical applications of ZPD but also makes us rethink the very meaning of this concept to include assistance provided by a group of peers. In such a case, this group may collectively act as a “more knowledgeable other” even if individual children do not differ in their knowledge levels.

Vygotsky’s ideas of play creating the ZPD of a child and play being the leading activity for children of preschool and kindergarten age laid the foundation for the theories of play developed by his students and generations of post-Vygotskian scholars. All share the emphasis on play not as a reflection of past experiences but as an activity essential for the development of a “future child.”

On the Shoulders of a Giant: Elkonin's Theory of Play

Daniel Elkonin was a colleague of Vygotsky who continued his work on play and developed a comprehensive theory that, in turn, gave rise to an entire school of thought in Soviet psychology and education. Elkonin's theory provided a framework for the studies of play in children with various cognitive, speech, and emotional deficits, studies of specific mental functions as they are manifested in play, and studies of social development. Elkonin's theory also became a basis for the teaching strategies used in many preschool and kindergarten classrooms with typically developing children and with children with special needs (Korepanova 2012).

Consistent with the founding principles of the cultural-historical theory, Elkonin (2005b) views play in a broader social-cultural context, concluding that make-believe play, as we know it, is a relatively late development in the history of humankind. Based on numerous accounts of anthropologists, Elkonin concludes that in the nonliterate societies of hunters and gatherers, play existed as preparation for grown-up activities as children practiced with scaled-down versions of grown-up tools.

In modern postindustrial societies, however, play cannot serve this pragmatic function, because grown-up activities and the tools they require are sometimes too complex for young children and may change significantly by the time children grow up—thus making practice useless. Instead, according to Elkonin, play helps today's children develop general competencies that will enable them to master any tools of the future—even those not yet invented. Extending the idea of play as preparation for future tool use beyond physical tools and the competencies associated with their use (such as fine motor skills or hand-eye coordination), Elkonin (1978) viewed play as the leading activity, the activity in which children master a variety of mental tools necessary for them to function successfully in a modern society.

To understand Elkonin's theory of play, we need to look at the work of Soviet developmental psychiatrist Alexei Leontiev and the changes he made in the concept of "leading activity." Although Vygotsky himself used the term "leading activity" in describing make-believe play in preschool children, he used this term in a metaphorical way and did not discuss leading activities for children of other ages. The Vygotskian idea that a leading activity may be used as an indicator of a specific "psychological age" or a developmental stage was later extended and refined by Leontiev, who along with Alexander Luria, was a member of the

famous Vygotsky troika—the collective minds behind cultural-historical theory.

In his foundational paper “The Psychological Principles of Preschool Play” (2009), Leontiev applied the major constructs of his activity theory—motive, action, and operation—to the analysis of children’s play. Analyzing the motive of play, Leontiev concluded that it lies in the very process of play. He also discussed play actions and play operations as well as the relationship between these two. Building on Vygotsky’s idea of the imaginary situation being an essential characteristic of play, Leontiev suggested that the imaginary situation itself is an outgrowth of the discrepancy between the action the child wishes to engage in and the operations she uses with a play prop. For example, although the action in which a child wishes to engage may be driving a car, no child does so in real life. The imaginary situation arises, say, when a child turns a chair into a pretend car and engages in the pretend action of driving; however, while “driving” the pretend car, this child uses hand movements (operations) suited to the shape of the back of the chair (and not the steering wheel).

Leontiev also identified play as the leading activity of preschool age. He defined leading activity as an activity that both provides the optimal conditions for the mental functions developing at the current stage and at the same time prepares the foundation for the mental functions that will develop during the stage that follows. Leading activity is most important for psychological development at a particular stage; hence, although social role play is not necessarily the most commonly occurring activity for preschoolers, it is the most significant for mental or psychological development.

Elkonin, who worked closely with Leontiev, further developed and extended this idea of play as a leading activity. In his “Toward the Problem of Stages in the Mental Development of the Child” (1972), he identified leading activities throughout childhood and described their role in bringing about the main developmental accomplishments of each period. In Elkonin’s theory of stages in child development, he places play on the continuum of leading activities following object-oriented activity of toddlers and followed by learning activity of primary-grade children.

In his monograph *The Psychology of Play*, Elkonin (1978) identified essential characteristics that make play the leading activity of preschoolers, emphasizing the importance of play for cognitive development and for the development of self-regulation. According to Elkonin, the role that a child acts out lies at the center of make-believe play. Since children act out not the exact actions of their role models but rather the synopses of these actions, these synopses, in

fact, generate a model of reality—something that requires symbolic generalization. Elkonin concludes that in make-believe play, children learn to use symbols in two different ways: They use objects in their symbolic function, and they act out a symbolic representation of relationships that exist between their role models. In both instances, the symbols they support with toys and props they later communicate to play partners with words and gestures. Elkonin sees this evolution of play as a reflection of the universal path of cognitive development: from object-oriented actions accompanied by private speech to thinking aloud with no objects involved to mental actions proper.

Elkonin attributed the power of play to support the development of intentional, self-regulatory behaviors not only to the rules children need to follow when playing but also to the fact that the roles children play are mostly the roles of adults (doctors, drivers, chefs, and others) engaged in socially desirable behaviors. By imitating these behaviors in play, children learn to adjust their actions to meet the norms associated with the behaviors of role models, thus practicing planning, self-monitoring, and reflection essential for intentional behaviors (Elkonin 1978).

Elkonin, therefore, enriched Vygotsky's idea that play creates a child's ZPD with concrete details about the mechanisms involved in elevating a preschool child to the level where he is "a head above himself." Elkonin described play as the "giant treasure chest of creativity" available to a growing individual.

Specifically, Elkonin has identified four principal ways for play to facilitate the mastery of mental tools and the development of higher mental functions. First, play has an impact on a child's motivation. In play, children develop a more complex hierarchical system of short-term and long-term goals, wherein immediate goals can be forgone occasionally to reach long-term goals. Through the process of coordinating these short-term and long-term goals, children become aware of their own actions, which makes possible their moving from reactive behaviors to the intentional ones. To play "restaurant," for example, children have to stop and make menus and play food and decide who will be a waiter and who a chef. In other words, they have to postpone the restaurant play to make props, set up the environment, and distribute the roles.

Second, play facilitates cognitive "decentering." The ability to see from other people's perspectives is critical for coordinating multiple roles and negotiating play scenarios. In addition, in play children learn to look at objects "through the eyes" of their play partners, a form of cognitive decentering. Think of a child playing patient whose temperature is being "taken" with a pencil: to act accord-

ing to his role, this child needs to put himself in the shoes of the child playing the nurse, for whom this pencil is a pretend thermometer. Later, this ability to coordinate multiple perspectives and to decenter will be turned inward, leading to the development of reflective thinking.

Third, play advances the development of mental representations, which occurs when children separate the meaning of objects from their physical form. At first children use replicas to substitute for real objects (e.g., play food), then proceed to use objects that are different in appearance but that can perform the same function as the object-prototype (a paper plate representing pizza), and finally, most of the substitution takes place in the child's speech or gestures with no physical objects present (a gesture made by a "customer" in a pretend restaurant indicates that she is eating). Learning to operate not with real objects but with their symbolic substitutes contributes to the development of abstract thinking and imagination. It is important to note again that for Vygotskians, imagination is not a prerequisite for play but an expected outcome.

Finally, play fosters the development of intentional behaviors—in other words, voluntary physical and mental actions. The development of intentionality in play becomes possible because of the child's need to follow the rules of the play. In addition, as children constantly monitor each other in following these rules, they engage in "other regulation"—a process that involves comparing observed behaviors with "planned" ones. Planning and monitoring are essential features of intentional behaviors. Practicing other regulation and self-regulation in play prepares the foundation for more advanced intentional behaviors, including such metacognitive actions as the planning and monitoring of mental processes.

Elkonin identified the main structural elements of play as roles, pretend actions, the use of props, and the relationships children enter as they play. According to Elkonin, the center of make-believe play is the role a child acts out. This role determines which pretend actions a child will take, which props she will use, and how the relationships between play partners will be formed.

Pretend actions are different from real actions even if they involve the use of the same objects. Because actions in play are more abbreviated and generalized, they present more of an outline of a real action than its exact imitation. The way props are used in play also differs from the way the same objects are used in real life, because children use these props to perform pretend actions not real ones.

Finally, the unique feature of the relationships between players is that they engage in play-specific communication, stepping into and out of the roles they are playing. This allows children to maintain the flow of play by setting the rules

and monitoring how these rules are followed.

Elaborating on Vygotsky's insights on the nature of play, Elkonin (2005a) introduced the idea of "mature" or "fully developed" play, emphasizing that only this kind of play can become the leading activity and a source of development in early childhood. Elkonin identified four levels of play, ranging from less mature to more mature. Note that Elkonin does not include in his classification less mature levels where roles do not even exist.

At the first level, the main content of play consists of actions with objects directed at the play partner. The roles exist, but they are determined by the nature of the actions instead of determining the actions. As a rule, children do not name the roles they take on; neither do they assign themselves the names of people whose roles they are playing. The actions themselves are stereotypical and consist of repetitive motions; for example, when playing "family," children follow the same routine as they feed the baby, give the baby a bath, and put the baby to sleep. The entire script of "taking care of a baby" is limited to the actions of bathing, feeding, and rocking, with no other actions preceding or following these (e.g., taking the baby for a walk, or telling a bedtime story, for example). There seems to be no logical order in how the actions are performed—a baby can be dressed first and towed later. If one child acts inconsistently with how this script unfolds in real life (e.g., if a child gives the baby a bath while keeping her clothes on), other children do not object.

At the second level, actions with objects remain the main content of play. However, at this level, it is important for the play action to reflect accurately the action in real life. For a child to play a role means to perform actions associated with this role, and children can name the roles they play, but only after they start to play. The structure and sequence of play actions is determined by how these actions unfold in real life. When one of the players does not follow the real-life sequence of the actions (e.g., if a mommy serves dessert before serving the main dish), the other players do not accept these actions, but neither do they argue with them or explain what was done wrong.

At the third level, the main focus of play shifts to the role and the actions determined by this role; special actions emerge that signal the relationships between the players. The roles are distinct and well defined. Children name the roles they will play before the play starts. The roles determine and direct the children's behavior. A special kind of "role speech" emerges when one player talks to another, using vocabulary, intonation, and register in accordance with the specific roles each plays. The nature of actions and their logic are determined

by the role the child plays. The actions become more varied. For example, the “nurse” does not just give a patient a shot, but also takes his blood pressure, or changes bandages. If a child acts in a way inconsistent with the real-life logic of actions, other children object by saying something like “you are not supposed to do that.” When corrected, children treat their mistake seriously and try to fix it and to explain why they broke the rule.

The main content of play at the fourth level is carrying out actions associated with the relationships between the characters children play. For example, the relationship between a “mother” and a “son” is associated with the mother being in charge, which shows in the way she addresses the son. The roles are well defined. A child playing a role acts in a manner consistent with this role throughout the entire duration of play. The “role-related speech” is consistent with the role played by the child who uses this speech as well as with the role of the child to whom this speech is addressed. The sequence of play actions is well defined and consistent with the logic of these actions in real life. Children object when someone does not follow the logic of actions or breaks the rule. Children go beyond stating that “you are not supposed to do that,” referring to the reason for the existence of this rule in real life.

Thus play, according to Elkonin, starts with the “object-centered” play of two- and three-year-olds (stage 1) and develops to become the elaborate “relationship-centered” play of kindergarten-aged children (stage 4). The ability to follow rules in play rather than submit to one’s immediate wishes seems to appear first at stage 2 but is not fully developed until stage 4. Combined with the changes in the use of play props, role-specific language, and the relationships between play roles and play actions, this evolution of play rules allows us to consider stage 4 the stage of well-developed or mature play.

Play Creates the Zone of Proximal Development: Then and Now

Post-Vygotskian researchers have been able to demonstrate the unique role of play in the development of higher mental functions through a series of experiments that compared children’s performance on various tasks in play and nonplay situations. These experiments were conducted by students of Alexei Leontiev and Alexander Zaporozhets—another student of Vygotsky—and summarized in Elkonin’s *Psychology of Play* (1978). All these experiments follow the

same design. Children ages three, five, and seven were given a similar task in two conditions—in the lab, where the task was given out of context, and in a playroom, where the same task became a part of the role the child was assigned.

One of the researchers, Zinaida Manuilenko (1975), studied children's ability to regulate their body movements in play and nonplay situations. An experimenter asked a child when not playing to stand completely still. But when a child was playing, an experimenter assigned him or her the role of a soldier, guarding an important military object.

In this study, no differences were found for three-year-old children; they could not stand still in either condition. Seven-year-olds also did not demonstrate any differences in behavior across conditions, but the length of time they were able to stand still lasted much longer than in younger children. The five-year-olds, on the other hand, did demonstrate significantly different lengths of time in their assigned roles at play or when standing still and not playing. When tested in the lab, their times were closer to those of three-year-olds. However, when tested in a play context, these children could regulate their body movements for almost as long as the seven-year-olds. When the experimenter added another condition by bringing in other children who pretended to “penetrate the military object” guarded by a child, the latter's time increased even more.

In another study, Zinaida Istomina (1975) compared the number of words children could remember during a dramatic-play session involving a grocery store with the number of words they could remember in a typical laboratory experiment. In both situations, children were given a list of unrelated words to memorize. In the dramatic-play situation, the words were presented as the items on a “shopping list” to use in a pretend grocery store. In the laboratory experiment, the instructions were simply to memorize the words. Istomina found that preschoolers remembered more items in the dramatic-play condition, functioning at the same level as the older children. Again, as in Manuilenko's experiments, neither younger nor older children demonstrated as big a difference between play and nonplay conditions as did the preschoolers.

It is interesting that the graphs representing the data obtained in all these experiments all look like a parallelogram, with the two lines—one for play and the other for nonplay—almost converging for three- and seven-year-olds and diverging for the five-year-olds. These graphs are amazingly similar to the famous “parallelogram of development” obtained by Leontiev in his own studies of mediated memory (1981). On his graph, the two lines representing externally mediated and nonmediated remembering also converge for younger children

(who have not yet mastered any memory tools) and for adults (who already possess internalized memory tools and have no need for external memory aids).

In other words, it seems that play provides a unique kind of mediation for the newly emerging mental functions and that there is a window when this mediation may be especially beneficial.

The common pattern emerging from Manuilenko's and Istomina's studies indicates an age-related change in the way play supports children's cognitive (e.g., memory) and social-emotional (e.g., self-regulation) competencies: the gap between play and nonplay performance was most dramatic in five-year-old children, who were assumed to be at the peak of mature play. At the same time, this gap was virtually nonexistent both for three-year-old children, who had not yet developed advanced forms of play, and seven-year-old children, who no longer needed the support of play to regulate their behaviors.

These findings support Vygotsky's view that play is the source of development, and the ZPD appears in play far earlier than it does in other activities. The findings also indicate that to produce these new developmental accomplishments, children need to reach the stage of mature play.

Recently, scholars of play as well as practitioners working with young children began to notice that children seem not to play as much as they did in the past. When play is observed in many of today's early-childhood classrooms, it rarely fits the definition of mature play (Gudareva 2005; Levin 2008). Even five- and six-year-old children, who according to Vygotsky and Elkonin should be at the peak of their play performance, often display signs of immature play that is more typical for toddlers and younger preschoolers—playing only with realistic props, enacting play scenarios that are stereotypical and primitive, and displaying a rather limited repertoire of themes and roles.

With the main elements—imaginary situation, roles, and rules—underdeveloped, this immature play cannot serve as a source of child development or create a ZPD. Evidence for this assertion was demonstrated in a Russian study replicating the Manuilenko experiment we have described. Today's preschoolers seem no longer able to demonstrate superior self-regulation in play (Smirnova and Gudareva 2004).

In addition, the ability to follow directions at all ages and in all conditions has generally declined in comparison to Manuilenko's study. The researchers found that the seven-year-olds of today have self-regulation levels more like those of the preschool children of the 1940s, and the five-year-olds scored similar to the three-year-olds in the earlier study. The researchers attributed this phe-

nomenon to changes in the culture of childhood in general, including changes in the way children play both at home and in the classroom. This conclusion was supported by the fact that only 10 percent of observed six-year-olds demonstrated a mature level of play, and 48 percent of five-year-olds demonstrated the first (“toddler”) level of play (Gudareva 2005).

Similar findings were obtained in another study in the United States, where the correlations between play and self-regulation were found for children playing at a high level but not for the ones playing at a low level (Berk, Mann, and Ogan 2006). Researchers from different countries agree that the make-believe play of today's children is not simply different from the play of the past but is less sophisticated and mature than in previous generations (for review, see Johnson, Christie, and Wardle 2005; Karpov 2005). Even more troubling, early-childhood programs often fail to support higher levels of play in those children who may need extra support in developing self-regulation. As a result, some children may even leave these programs as less mature players than when they entered (Farran and Son-Yarbrough, 2001).

Leading Children in Their Leading Activity

According to the cultural-historical tradition, play does not develop spontaneously in all children once they reach preschool age. Mature play, the level necessary to be a leading activity for preschoolers, emerges only with adult mediation or as young children are assisted by older children who are acting as play mentors.

The idea that we need to teach young children how to play is not a new one. Until recently, however, it has been primarily discussed in terms of enhancing or facilitating play that has already reached a certain level of development (see Wood 2009 for a review), with explicit instruction in isolated play skills limited to the context of special education. Although children with language delays or emotional disorders are thought to benefit from play interventions, typically developing children are usually expected to develop play skills on their own. This approach, while valid in the past, can no longer be adopted if we want all young children to develop mature play.

With the changes in the culture of childhood, fewer and fewer children have an opportunity to learn to play from their older siblings or friends. For most preschoolers, early-childhood settings may be the only place where they can learn how to play. It is important to note, however, that learning how to

play in the classroom is not the same as learning to play within the informal neighborhood peer groups of yesterday.

First of all, in today's early-childhood settings, children are almost always segregated by age and have to interact with play partners who are as inexperienced as they are. As a result, many of the play skills that children were able to learn in the past by observing and imitating their older playmates now have to be modeled by their teachers. In addition, unlike the unstructured play of the past, which often lasted for hours and days, playtime in today's early-childhood classroom is limited and rarely exceeds one or two hours.

Consequently, to achieve rapid progress in the quality of play, play scaffolding in the classroom needs to be designed strategically to target its most critical components. Specific strategies for scaffolding play were developed and have been successfully used in early-childhood classrooms by post-Vygotskian scholars in both Russia (e.g., Michailenko and Korotkova 2000; Gudareva 2004; Korepanova 2012) and the United States (Bodrova and Leong 2011, 2012).

Although it is important to realize that in this day and age we have to lead children in their leading activity, it is also important not to lose sight of the very nature of play we are promoting. Emphasizing the self-initiated nature of truly mature play, Alexander Zaporozhets (1986) warned educators against taking over children's play and turning it into one more teacher-directed activity. Adding playful elements to a lesson will not turn it into play, cautioned Zaporozhets: "Optimal educational opportunities for a young child to reach his or her potential and to develop in a harmonious fashion are not created by accelerated ultra-early instruction aimed at shortening the childhood period—that would prematurely turn a toddler into a preschooler and a preschooler into a first grader. What is needed is just the opposite—expansion and enrichment of the content in the activities that are uniquely 'preschool': from play to painting to interactions with peers and adults" (88).

REFERENCES

- Berk, Laura E., Trisha Mann, and Amy T. Ogan. 2006. "Make-Believe Play: Wellspring for Development of Self-Regulation." In *Play=Learning: How Play Motivates and Enhances Children's Cognitive and Social-Emotional Growth*, edited by Dorothy G. Singer, Roberta Golinkoff, and Kathy Hirsh-Pasek, 74–100.
- Bodrova, Elena, and Deborah J. Leong. 2011. "Revisiting Vygotskian Perspectives on

- Play and Pedagogy." In *Rethinking Play and Pedagogy in Early Childhood Education: Concepts, Contexts and Cultures*, edited by Sue Rogers, 60–73.
- _____. 2012. Scaffolding Self-Regulated Learning in Young Children: Lessons from Tools of the Mind. In *Handbook of Early Childhood Education*, edited by Robert C. Pianta, W. Steven Barnett, Laura M. Justice, and Susan M. Sheridan, 352–69.
- Elkonin, Daniil B. 1972. "Toward the Problem of Stages in the Mental Development of the Child." *Soviet Psychology* 10:225–51.
- _____. 1976. "Problems of the Psychology of Child's Play in the Works of LS Vygotsky, His Co-workers and Followers." *Soviet Psychology* 65:94–101.
- _____. 1978. *Psychologija igry* [The psychology of play].
- _____. 2005a. "Chapter 1: The Subject of Our Research: The Developed Form of Play." *Journal of Russian and East European Psychology* 43:22–48.
- _____. 2005b. "Chapter 2: On the Historical Origin of Role Play." *Journal of Russian and East European Psychology* 43:49–89.
- Farran, Dale C., and Whasouf Son-Yarbrough. 2001. "Title I Funded Preschools as a Developmental Context for Children's Play and Verbal Behaviors." *Early Childhood Research Quarterly* 16:245–62.
- Gudareva, Olga V. 2005. "Psikhologicheskie osobennosti suzhetno-rol'voy igry sovremennykh doshkol'nikov" [Psychological features of make-believe play in today's preschoolers]. PhD diss., Moscow City University for Psychology and Education.
- Istomina, Zinaida M. 1975. "The Development of Voluntary Memory in Preschool-age Children." *Soviet Psychology* 13:5–64.
- Johnson, James E., James F. Christie, and Francis Wardle. 2005. *Play, Development, and Early Education*.
- Karpov, Yuriy V. 2005. *The Neo-Vygotskian Approach to Child Development*.
- Korepanova, I. A. 2012. "Play as a Subject of Study in the Russian Cultural-Historical School of Psychology." *PsyAnima, Dubna Psychological Journal* 4:1–11.
- Leontiev, Aleksei. N. 2009. "The Psychological Principles of Preschool Play." In *The Development of Mind: Selected Works*, edited by Mike Cole, 331–54.
- _____. 1981. *Problems of the Development of the Mind*.
- Levin, Diane E. 2007. "Problem Solving Deficit Disorder: Programmed Play in Korea and the United States." In *Where Do the Children Play? A Study Guide to the Film*, edited by Elizabeth Goodenough, 137–41.
- Manuilenko, Zinadia V. 1975. "The Development of Voluntary Behavior by Preschool-Age Children." *Soviet Psychology* 13:65–116.
- Michailenko, N. Y., and N. A. Korotkova. 2000. *Organizatsiya suzhetnoj igry v detskom sadu* [Pedagogies of make-believe play in early childhood classrooms].
- Vygotsky, Lev S. 1967. "Play and Its Role in the Mental Development of the Child." *Soviet Psychology* 5:6–18.
- _____. 1971. *The Psychology of Art*. Translated by Scripta Technica, Inc.
- _____. 1997a. "The Historical Meaning of the Crisis in Psychology: A Methodological Investigation." In *Problems of the Theory and History of Psychology*, The Collected

Works of L. S. Vygotsky, Vol. 3, edited by Robert W. Rieber, 233–43.

_____. 1997b. “Prehistory of the Development of Written Language.” In *The History of the Development of Higher Mental Functions*, The Collected Works of L. S. Vygotsky, Vol. 4, edited by Robert W. Rieber, 131–48.

Zaporozhets, Alexander V. 1986. *Izbrannye psichologicheskie trudy* [Selected psychological works].