



Play

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Synthesis

How important is it?

Play is a spontaneous, voluntary, pleasurable and flexible activity involving a combination of body, object, symbol use and relationships. In contrast to games, play behaviour is more disorganized, and is typically done for its own sake (i.e., the process is more important than any goals or end points). Recognized as a universal phenomenon, play is a legitimate right of childhood and should be part of all children's life. Between 3% to 20% of young children's time and energy is spent in play, and more so in non-impooverished environment. Although play is an important arena in children's life associated with immediate, short-term and long-term term benefits, cultural factors influence children's opportunities for free play in different ways. Over the last decade, there has been on-going reduction of playtime in favour of educational instructions, especially in modern and urban societies. Furthermore, parental concerns about safety sometimes limit children's opportunities to engage in playful and creative activities. Along the same lines, the increase of commercial toys and technological developments by the toy industry has fostered more sedentary and less healthy play behaviours in children. Yet, play is essential to young children's education and should not be abruptly minimized and segregated from learning. Not only play helps children develop pre-literacy skills, problem solving skills and concentration, but it also generates social learning experiences, and helps children to express possible stresses and problems.

What do we know?

Throughout the preschool years, young children engage in different forms of play, including social, parallel, object, sociodramatic and locomotor play. The frequency and type of play vary according to children's age, cognitive maturity, physical development, as well as the cultural context. For example, children with physical, intellectual, and/or language disabilities engage in play behaviours, yet they may experience delays in some forms of play and require more parental supervision than typically developing children.

Social play is usually the first form of play observed in young children. Social play is characterized by playful interactions with parents (up to age 2) and/or other children (from two years onwards). In spite of being around other children of their age, children between 2 to 3 years old commonly

play next to each other without much interaction (i.e., parallel play). As their cognitive skills develop, including their ability to imagine, imitate and understand other's beliefs and intents, children start to engage in sociodramatic play. While interacting with with same-age peers, children develops narrative thinking, problem-solving skills (e.g., when negotiating roles), and a general understanding of the building blocks of story. Around the same time, physical/locomotor play also increases in frequency. Although locomotor play typically includes running and climbing, play fighting is common, especially amongst boys age three to six. In contrast to the popular belief, play fighting lacks intent to harm either emotionally or physically even though it can look like real fighting. In fact, during the primary school years, only about 1% of play-fighting turn into serious physical aggressions. Nevertheless, the effects of such play are of special concern among children who display antisocial behaviour and less empathic understanding, and therefore supervision is warranted.

In addition, to vary according to child's factors, the frequency, type and play area are influenced by the cultural context. While there are universal features of play across cultures (e.g., traditional games and activities and gender-based play preferences), differences also exist. For instance, children who live in rural areas typically engage in more free play and have access to larger spaces for playing. In contrast, adult supervision in children's play is more frequent in urban areas due to safety concerns. Along the same lines, cultures value and react differently to play. Some adults refrain from engaging in play as it represents a spontaneous activity for children while others promote the importance of structuring play to foster children's cognitive, social and emotional development.

According to proponents of play pedagogy, there are specific skills and knowledge children should be supported in developing, and therefore play needs to be goal directed to some extent. Playworlds is an example of educational practice in which children and adults interpret a text from children's literature through visual and plastic arts, pretend play, and oral narration. These highly engaging activities foster children's literacy skills and interests in books and reading without imposing adult authority and hierarchy.

What can be done?

If play is associated with children's academic and social development, teachers, parents and therapists are encouraged to develop knowledge about the different techniques to help children develop their play-related skills. However, in order to come up with best practices, further

research on the examination of high-quality play is warranted.

From the available literature on play, it is recommended to create play environments to stimulate and foster children's learning. Depending on the type of play, researchers suggest providing toys that enhance children's:

- motor coordination (e.g., challenging forms of climbing structure);
- creativity (e.g., building blocks, paint, clay, play dough);
- mathematic skills (e.g., board games "Chutes and Ladders" - estimation, counting and numeral identification);
- language and reading skills (e.g., plastic letters, rhyming games, making shopping lists, bedtime story books, toys for pretending).

Other recommendations have been suggested in order to enhance literacy skills in children. Researchers suggest that setting up literacy-rich environments, such as a "real restaurant" with tables, menus, name-tags, pencils and notepads, are effective to increase children's potential in early literacy development. Educators are also encouraged to adopt a whole child approach that targets not only literacy learning but also the child's creativity, imagination, persistence and positive attitudes in reading. Teachers and educators should also make a parallel between what can be learned from playful activities and academic curriculum in order for children to understand that play allows them to practice and reinforce what is learned in class. However, educators should ensure that a curriculum based on playful learning includes activities that are perceived as playful by children themselves rather than only by the teachers. Most experts agree that a balanced approach consisting of periods of free play and structured/guided play should be favoured. Indeed, adults are encouraged to give children space during playtime to enable the development of self-expression and independence in children with and without disabilities. Lastly, parents of children with socio-emotional difficulties are encouraged to receive play therapy training (filial play therapy) to develop empathic understanding and responsive involvement during playtime.

Learning Through Play

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Introduction

We define play, review the main types of play and their developmental benefits in various areas.

Subject: What is Play?

Play is often defined as activity done for its own sake, characterized by means rather than ends (the process is more important than any end point or goal), flexibility (objects are put in new combinations or roles are acted out in new ways), and positive affect (children often smile, laugh, and say they enjoy it). These criteria contrast play with exploration (focused investigation as a child gets more familiar with a new toy or environment, that may then lead into play), work (which has a definite goal), and games (more organized activities in which there is some goal, typically winning the game). Developmentally, games with rules tend to be common after about 6 years of age, whereas play is very frequent for 2- to 6-year-olds.^{1,2}

The Research Context

Play has been observed in all cultural contexts, including hunter-gatherer societies.³ Between 3% and 20% of young children's time and energy is typically spent in play, more so in richly provisioned niches.^{4,5} If young children are temporarily deprived of play opportunities, for example being kept in a classroom, they play for longer and more vigorously afterwards.⁶

As children invest time and energy in play, and there are opportunities for learning when they do play, there seems to be a need for play. This is true of young mammals generally, although other mammals show much less variety of play forms than human children. These findings suggest that play has developmental benefits. Benefits might be immediate, long-term, or both.⁷ However, the exact role of play in learning is still debated. A prevailing "play ethos" has tended to exaggerate the evidence for the essential role of play. Nevertheless, correlational and experimental evidence

suggest important benefits of play, even if some benefits can also be obtained in other ways.⁵

Locomotor play, including exercise play (running, climbing, etc.), involves large body activity and is generally thought to support physical training of muscles, for strength, endurance, and skill. Exercise play increases from toddlers to preschool and peaks at early primary school ages, when the neural and muscular basis of physical coordination and healthy growth is important, and vigorous play obviously provides good opportunities for this; later, it declines. There is evidence that active, playground-type breaks can help young children concentrate better at subsequent sedentary tasks, consistent with the cognitive immaturity hypothesis that the “need to exercise helps young children to space out cognitive demands for which they have less mature capacities.”⁸

Social play refers to playful interactions between children and parents or caregivers in children up to 2 years old, but increasingly with other children as social play increases dramatically from 2 to 6 years of age. At first, playing with one partner is complex enough, but by 3 or 4 years old a play group can consist of three or more participants, as children acquire social coordination skills and social scripts.

Parallel play, common in 2- and 3-year-olds, is when children play next to others without much interaction. Some play is solitary.⁹ This type of play can be physical, incorporate objects or language, be pretend, or include all of these aspects. Rough-and-tumble play, including play fighting and chasing, can look like real fighting, but in play fighting children are often laughing, kicks and blows are not hard or do not make contact, and it is usually done with friends.¹⁰

Object play refers to playful use of objects such as building blocks, jigsaw puzzles, cars, dolls, etc. With babies, this play is mouthing objects and dropping them. With toddlers, this is sometimes just manipulating the objects (e.g., assembling blocks), but sometimes involves pretend play (e.g., building a house, feeding a doll). Play with objects allows children to try out new combinations of actions, free of external constraint, and may help develop problem solving skills. Any benefits of object play need to be balanced against those of instruction, bearing in mind the ages of the children, the nature of the task, and whether learning is for specific skills, or a more general inquisitive and creative attitude. The more marked benefits may be for independent and creative thought, though the evidence is equivocal.¹¹

Language play -- At around 2 years old, toddlers often talk to themselves before going to sleep or upon waking up. This is playful, with repetition and sometimes laughter. Children use language

humorously at 3 and 4 years old. (“I’m a whale. This is my tail.” “I’m a flamingo. Look at my wingo.”) Language skills--phonology (speech sounds), vocabulary and meaning (semantics), grammar (syntax), and pragmatics (using language appropriately in social situations)--are rapidly developing in the preschool years. Some phonological skills can be developed in the solitary monologues when children babble to themselves in their cot, but most benefits of language learning probably come in sociodramatic play.

Pretend play involves pretending an object or an action is something else than it really is. A banana is a telephone, for example. This play develops from 15 months of age with simple actions, such as pretending to sleep or putting dolly to bed, developing into longer story sequences and role play. Sociodramatic play, common from around 3 years of age, is pretend play with others, sustained role taking, and a narrative line. It can involve understanding others’ intent, sophisticated language constructions, and development of (sometimes) novel and intricate story lines. Children negotiate meanings and roles (“You be daddy, right?”) and argue about appropriate behavior (“No, you don’t feed the baby like that!”).

Many learning functions have been advanced for pretend and especially sociodramatic play.⁵ One hypothesis is that it is useful for developing preliteracy skills, such as awareness of letters and print, and the purpose of books.¹² The narrative structure of sociodramatic play sequences mirrors the narratives of story books. For these benefits, some structuring by adults is helpful (in maintaining a story line, having suitable materials including plastic letters, books, etc.).

Another hypothesis is that pretend play enhances emotional security. A child who is emotionally upset, for example, by parents arguing or the illness or death of someone in the family, can work through the anxieties by acting out such themes in pretend play, with dolls for example. Play therapists use such techniques to help understand children’s anxieties; and most therapists believe that it helps the child work towards a resolution of them.¹³

A further hypothesis is that pretend play enhances theory of mind development. Theory of mind ability means being able to understand (represent) the knowledge and beliefs of others; that is, that someone else can have a different belief or state of knowledge from yourself. This does not happen until the age of late 3 or 4 years old. Social interaction with age-mates seems to be important for this, and social pretend play (with siblings or with other age-mates) may be especially helpful, as children negotiate different roles and realize that different roles entail different behaviors.¹⁴ While these benefits are plausible, there is little experimental evidence; the

correlational evidence suggests that social pretend play is helpful but is only one route to acquiring theory of mind.^{5,15} More high-quality studies and evidence are needed before we can be confident of what benefits pretend play has.¹⁶

Key Research Questions and Gaps

We lack descriptive information on the time and energy spent in various forms of play, in different cultural contexts. Without this we cannot understand the putative benefits of play. Further, while play may have many positive benefits, this is not always so. Play fighting is viewed ambivalently by nursery staff as many staff find it noisy and disruptive, and believe it often leads to real fights. In fact, research suggests that during the primary school years, only about 1% of rough-and-tumble play bouts turn into real fighting. However, this is more frequent for some children who lack social skills and are rejected by playmates. These children often respond to rough-and-tumble play aggressively.¹⁰ More generally, risky play can bring benefits for physical activity and well-being, but does need to be balanced with safety concerns.¹⁷

A related area of concern has been war play (play with toy guns, weapons, or combat superhero figures).¹⁸ A developmental view that play including war play is a primary vehicle for children to express themselves, can be contrasted with a sociopolitical view that children learn militaristic political concepts and values through war play.¹⁹ There is not a large research base on which to make informed judgments about whether the concerns are justified. One study found that 4-year-old, hard-to-manage children showed frequent violent fantasy and the extent of this was related to poorer language and play skills, more antisocial behaviour, and less empathic understanding at the age of 6 years. This does suggest concerns for the effects of such play on disturbed children.²⁰

Implications

Almost all children spontaneously play. An exception may be those who are malnourished, deprived, or have severe disabilities, where specific play-based intervention can be helpful.²¹ In contemporary societies, adults are usually involved in children's play, providing play environments and toys. Preliteracy benefits of play can be enhanced by providing paper, crayons, and plastic letters. Exercise benefits of play can be enhanced by providing challenging forms of climbing apparatus. Creative play can be enhanced by providing lego-type bricks to stimulate creative construction activities.

Play training can be one enjoyable and effective way of improving skills in language development, cognitive development, creativity, and role-taking. Nursery staff can work with children to structure their play and give it more educational value by including activities such as jigsaw puzzles, color and pattern matching games, and materials like water, sand, and clay that children can manipulate and by enhancing sociodramatic play.²² Such play tutoring involves providing suitable props (play house, clothes for role play, hospital equipment, etc.), taking children on visits to stimulate their imagination (to a hospital, zoo, etc.), and suggesting play themes and helping children to develop them.²³

Most experts in play research believe that a balanced approach is best.^{22,24} There should be good opportunities for genuine free play. Also, there should be some active involvement of adults in structuring some play, as in play tutoring. And, increasingly, as children get older, there is a need for direct instruction. The balance between types of play is a matter of continuing debate. As all types of play provide different opportunities, a blended program in preschool, with plenty of opportunities for free and structured play, is likely to be best for children and to provide them with a happy and stimulating environment in which they can flourish.

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Play and Learning

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Introduction

This article discusses historical and present-day notions of play and learning in the context of early childhood education (ECE).

The beginning of ECE

Early childhood education has two sources: the Froebel Kindergarten tradition¹ in Germany and the Infant School in Britain.² ECE learning has traditionally been considered different from learning in primary school, and play has had an important role in both traditions, but in different ways.³

In Kindergarten, the focus has been on developing the whole child rather than teaching specific subjects. The idea is that children should first develop social, emotional, motor and cognitive skills in order to be ready to later begin learning knowledge contents in primary school. At the same time learning materials have been developed for young children that focus their interest and attentions towards early mathematics learning.⁴

Further, according to the kindergarten tradition, children should be active in their early learning, supported by the teacher who should organise tasks that what will help the child develop various skills and attitudes, which in turn will create knowledge. For example, activities based on the theme of sheep could have children learning songs about sheep, making sheep drawings, listening to stories about sheep and learning about how the sheep's wool is made into fabric for clothing.⁵ The idea with this type of learning is that the teacher plans activities or organises tasks for the children so that they learn by doing.⁶ Play was introduced, by Froebel as a means for learning.¹ He used the notions of play, learning and work as three aspects of the child's experiences in kindergarten. Play was strongly related to solving mathematical problems by dealing with various materials and tasks. However, children could also play with other materials and organise role-play.

In the British Infant School tradition,⁷ the educational approach was slightly different: Children were taught traditional school subjects during shorter lessons, and play became a form of

relaxation in between the lessons. But here also play was considered important – given that children were not supposed to be able to concentrate other than for a short time – play was a way to recuperate before a new lesson.⁸

Play and Learning in the Field of ECE

In both the Kindergarten and Infant School traditions, play had and continues to have an important role in young children’s education. Currently, in most ECE frameworks or curricula, play is considered important.^{9,10,11,12} However, even though there are many books that discuss play and learning on an academic level,^{13,14} research seldom studies how play and learning are related, or what function play has in the ECE system.¹⁵ In practice, it seems it is taken for granted that play is the children’s world and is crucial to their education. Further, the United Nations Convention of the Rights of the Child,¹⁶ states that all children have the right to play. On one hand, it is hard not to view play as central to young children’s lives. On the other hand, play is not part of all children’s life, either in their neighborhood or in ECE,¹⁷ even if all humans at heart could be argued to be playing individuals, as suggested by Huizinga.¹⁸

One can claim that ECE generally involves structured activities, for learning or pleasure, but also less structured activities, often called “free play.” The notion of free play is generally understood as being the opposite of teacher-organized activities. In free play, children lead their activity and use their imagination, and no specific skills or knowledge are expected to be learned. Montessori¹⁹ even talked about not letting young children read stories and fantasies (play with reality) before they first learn about reality. In an international comparison of young children’s experiences in ECE in seven countries, it was obvious that play is central to the lives of all young children.²⁰ Also, in some countries it was not even a question of talking about the youngest children in terms of learning, other than that children learn when they play. Participants from most countries expressed the intention of finding a more up-to-date approach to early years education, and play was always considered an important part of the approach.

There is also a kind of rhetoric and belief in ECE that play is always positive, which is, actually not always the case.²¹ The romantic view of young children’s play is built on the idea that children learn when they play. However, in the context of ECE, there are specific skills and knowledge children according to curricula should be supported in developing and, therefore, activities to some extent have to be goal-directed.²²

The Playing-Learning Child

In a meta-analysis of praxis-oriented research, Pramling Samuelsson and Asplund Carlsson²³ formulated the concept of the playing-learning child. This is a child who does not separate between play and learning, and instead relates to the world around him or her in a playful manner. They create ideas, fantasize and talk about reality simultaneously. For example, when a teacher asks a child to draw a tree they studied during an excursion to the forest, the child may challenge the teacher by adding Winnie-the-Pooh to the drawing of the tree.³ Approaches to ECE would differ in how teachers respond to this kind of suggestion: incorporate it or separate it (i.e., draw the tree from the forest first and then the child could play with reality!).

Children, particularly young children, in ECE have not yet learned to decipher what is to be considered learning and what is to be considered play, but they do allow themselves to be creative if the teacher gives them communicative space.²⁴ This means that the teacher also has to take the child's approach as a base for arranging a preschool approach built on the playing-learning child.

Learning while Playing in Early Years Pedagogy

What does the playing-learning child mean in everyday life in ECE? What does it take for a teacher to work according to this theoretical notion of children as playing-learning individuals in ECE? It puts demands on the teachers to adopt specific theoretical approaches, that is, theories built on communication and interaction. It also requires the teacher to look at knowledge in terms of the meaning children create, how they make sense of the world around them.

Looking at current ECE practices, there are generally three forms of early childhood curricula: the "traditional" social pedagogy based on Froebel, the "academic" pedagogy based on school subjects and skills, and innovations such as "developmental pedagogy" in which play and learning are integrated through an investigative pedagogy. Sylva et al.²⁵ found that differences in pedagogy (linked to curricula) led to wide differences in children's developmental outcomes. Thus, curriculum and pedagogy make a difference to children's development as well as contribute to the success and well-being of society.

The concept of didactics (especially as understood from a European perspective) is central in some countries, especially in the Nordic preschools. Based on the German/European idea of "Bildung," curriculum and pedagogy become integrated. Didactics focuses on the ways the

teacher “points something out to children,” that is, directing children’s attention towards specific areas of knowledge, skills or attitudes that will enhance their development. Didactics is the crossroad between the learning object (what children should be supported in creating meaning about) and the act of learning (how children play-learn). Shared meaning-making depends on the teacher’s capacity to relate her/himself to the child within the learning situation. This approach is centred on children’s meaning-making.²² This didactic approach is based on “variation as a fundamental aspect of learning,” framing the learning situation, social encounters and coordinating the child’s and the teacher’s perspectives. This means that there will be a space for each child to be involved with their experiences and to also use play and fantasy to try to make sense of the world around them. It is through communicative didactics that children can begin with a context-bound language and move towards an expansive language and knowledge of what it means to know something deeply, and finally to also become aware of knowledge patterns.²⁶

Recent development

The latest developments in theorising learning to play are the PlayWorld approach,²⁷ developed in Australia, and Play-Responsive Early Childhood Education and Care (PRECEC), developed in Sweden.²⁸ Working from the PlayWorld approach, children are introduced to a theme through a fictional story that is dramatized, using props, children and teachers take roles as they enter into the fantasy, where they encounter real-world problems, with a particular focus on STEM knowledge (Science, Technology, Engineering, and Mathematics). PRECEC is a theory about how teaching – that is, the supporting of learning – in ECE can be responsive to play. Being responsive in the sense of children’s actions being consequential for how activities develop, including, critically, shifts and relationship-building between as is (real-world knowledge) and as if (fantasising) is critical to supporting children’s learning and development in, of and through play.

Research Gaps, Conclusions and Policy Implications

By tradition, researchers study play or learning, while there is a need for studies of how play and learning relate in a goal-related practice,²⁹ but also what it means for the child to be in an ECE where children’s worlds are appreciated and valued. Countries could consider theirs compared to other curricula and consider how play and learning are talked about and planned for/supported, to potentially develop a new approach that builds on a more play and child-centred communicative approach in early years. Since we know today that the early years are fundamental for the child’s future learning, as well as for the development of society,³⁰ every country should review their

curriculum and approaches to ECE with a focus on play.

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Young Children's Play Fighting and Use of War Toys

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Introduction

Adults often perceive young children's play fighting and use of war toys as violent or aggressive behaviour rather than beneficial to their development. Movies (e.g., Star Wars), books (e.g., Harry Potter), national figures (e.g. military forces), community helpers (e.g., police officers), professional sports (e.g., rugby) and commercial toys (e.g., Nerf guns) influence young children's desire to engage in such play. In spite of that, educational programs often either discourage or ban this controversial form of play resulting in contrasting societal messaging for young children related to the appropriateness of play fighting and war toys. For example, fencing, an international sport, where those who excel are awarded medals, features three types of bladed weapons maneuvered in actions representative of fighting. Further, police officers use stun guns, firearms, and tear gas, yet are often recognized as instrumental for any society seeking to protect citizens. A closer look at the characteristics of children's play fighting and use of war toys will indicate that the behaviour is voluntary, choreographed, enjoyable and usually proceeds with caution and care.

Subject

Parents and educators struggle with the appropriateness of young children's play fighting,¹ and interest in war toys (e.g., guns, swords, bombs, light sabers and blasters) in home and school settings. Play fighting with symbolic weapons or war toys is a form of socio-dramatic play predominantly observed amongst boys ages three to six years. Play fighting is defined as verbally and physically cooperative play behaviour involving at least two children, where all participants enjoyably and voluntarily engage in reciprocal role-playing that includes aggressive make-believe themes, actions, and words; yet lacks intent to harm either emotionally or physically. Play fighting encompasses superhero play,² "bad guy" play,³ active pretend play,⁴ physically active and imaginative play,⁵ rough-and-tumble play,^{6,7,8} and war play.

Problems

Educators are pressured to disregard the benefits of aggressive socio-dramatic play resulting in prohibition of various forms of the play, particularly play fighting^{4,9} and engagement with war toys. However, the elimination of play fighting and war toys by parents and educators may have a significant impact on young children's development. Research suggests that the optimal education and development of young children, particularly boys, is not being met when playful aggressive tendencies are forbidden.^{4,6,7,10} Further, educational programs that restrict play types may foster play deficits, which inadvertently will leave children unprepared for future experiences.¹¹ While educators are often uncomfortable with play fighting and with war toys, it can be argued that the omission of these forms of play in early childhood programs limits opportunities for development of social, emotional, physical, cognitive and communicative abilities in young children.

Research Context

Play fighting generates central social learning experiences which support children as they practice controlled and motivated competitive and cooperative behaviour among peers.⁶ Understandably, this form of play is controversial. Carlsson-Paige suggest that war play is detrimental to child development due to its imitative nature rather than the creation of novel play experiences.¹² Nevertheless, research supports dramatic and sociodramtic play as important to child development^{2,5} with two key elements of sociodramatic play being imitation and make-believe.¹

Professional organizations have influenced early childhood practice when considering exposure to fighting and war toys. For example, developmentally appropriate practice, the initiative by the National Association for the Education of Young Children (NAEYC), supports and encourages the presence of certain forms of uniforms and images in the classroom, yet bans weapons and actions symbolic of, or believed to glorify, violence. Educator training and development often does not delineate playful aggression from serious aggression perpetuated by the aspiration to decrease violence in all forms¹³ and promote legislative efforts for the standardization of manufacturing physically and psychologically safe commercial toys.¹⁴ For example, Watson and Peng¹⁵ suggest that toy gun play is not associated with many positive behaviours, while Fry¹⁶ noted that play fighting and serious fighting can be categorized into separate types of behaviour in young children. Hellendoorn and Harinck¹⁷ differentiated play fighting as make-believe-aggression and rough-and-tumble since playful aggression should not be considered real aggression. Educators

may discourage or ban play fighting and war toys because they perceive the play fighting as detrimental to child development rather than beneficial^{3,4,8} and the war toys as symbols of violence.

It is important to recognize that play fighting and play with war toys lack intent to harm. Participants may sustain injuries, but such injuries are due to the nature of play, and not the purpose. This is an important distinction when identifying serious aggression, where the manifestation of behaviour holds the purpose of explicitly intending to injure or destroy and such behaviour is directed towards another with the intent to harm.^{18,19} However, children who exhibit significantly higher rates of antisocial behaviour and negative emotion display more violent actions during pretend play and engage in more frequent antisocial behaviour outside the context of their play.²⁰ Additional support is needed for young children who lack age-appropriate prosocial skills and emotional regulation.

Key Research Questions

Smilansky²¹ suggests socio-dramatic play involves the cooperative interaction of at least two children, who act out roles both verbally and physically, with two key elements: imitation and make-believe. The acceptance or suppression of socio-dramatic play is determined by the knowledge and perceptions of early childhood educators. For greater understanding researchers should consider to what extent play fighting and war toys are accepted in the home and educational settings along with the contextual components that influence acceptance or suppression.

Recent Research Results

Parents and educators often misinterpret or are uncomfortable with play fighting due to its resemblance to serious aggression and difficulty recognizing subtle differences between the two.^{3,7} Playful aggression is a common component in socio-dramatic play — typically among boys.^{6,10,22,23} If playful aggression is supported, it is highly beneficial to child development.³ The act of pretending to be aggressive is not equivalent to being aggressive.³ Role reversal, cooperation, voluntary engagement, chasing and fleeing, restrained physical contact, smiling and laughing are common characteristics of playful aggression.¹⁶ Within this framework of understanding, play fighting and war toys can be considered components of socio-dramatic play.³ This suggests that early childhood educators need opportunities to enhance their understanding of the benefits of pretend

play, including aggressive dramatic play themes such as fighting and war, in order to more effectively support play.

Research Gaps

Although there is abundant literature supporting forms of socio-dramatic play commonly perceived as appropriate (i.e., house keeping, community helpers), little is known of how to support aggressive socio-dramatic play such as play fighting¹ and the use of war toys in the classroom. Research is needed to develop a cohesive terminology that clearly identifies various types of aggressive socio-dramatic play, targets the developmental benefits of each type, and distinguishes various toys and actions characteristic of aggressively representative play. Research findings to date have supported the inclusion of aggressive socio-dramatic play in early childhood education, yet minimal practical guidance for educators is offered to aid in the development of strategies and clear tactics for supervising play fighting and war toy play.

Conclusion

Research demonstrates distinct differences between serious aggressive behaviour and playful aggressive behaviour, with intent to harm being the major factor of serious aggression. Research further demonstrates playful aggressive behaviour as a neglected, yet important element of socio-dramatic play, especially for young boys. Children who engage in play fighting are simply pretending to be aggressive as they develop a fighting theme that commonly involves symbolic weapons or war toys. They frequently exchange roles, collaboratively develop storylines, and repeat sequences in an effort to perfect their physical movements and the social dynamics of their play. Participants enjoyably and voluntarily engage in reciprocal role-playing that includes aggressive make-believe themes, actions, words and weapons; yet lacks intent to harm either emotionally or physically. However, educators must be cognizant of supervision, a key component for supporting play fighting. As with learning to cut with scissors, writing with a sharp pencil, and climbing on playground equipment, young children need the establishment of clear guidelines and reinforcement or redirection from educators to ensure their safety is assured within developmentally appropriate play.

Implications for Parents, Services and Policy

Without a full understanding of the distinct difference between serious and symbolic aggression educators may react with conflicting messages to young children regarding the appropriateness of

engaging in socio-dramatic play involving play fighting and war toys. This confusion often results in educators who are pressured to disregard the benefits of aggressive socio-dramatic play by banning play fighting^{4,9} and war toys.

Inconsistent rules and guidelines relating to the role of play fighting and war toys in early childhood education contribute to the struggle to recognize benefits and support children's engagement. Educators who hold a foundation of understanding will be better able to communicate the importance of not only allowing playful aggression but also supporting it with the inclusion of war toys in early childhood programs.

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Play and Cultural Context

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Introduction

Human beings are biologically sociocultural.¹ Every human activity is, thus, permeated with and affected by culture, and reciprocally affects culture's dynamics and historical transformations. Play is no exception. Culture permeates and is affected by children's play in two major ways: creative assimilation, or interpretive reproduction² of meso- and macro-cultural aspects of the social environment (routines, rules, values); and construction of shared meanings and routines that constitute the microculture of peer groups.^{2,3}

Subject

Understanding play as a basic human motivation and a locus of individual development and of culture assimilation and construction leads to a particular view on childhood and early education. Play should not be opposed to learning activities or to "serious" work, but rather seen as an important arena of children's lives, a condition for children's welfare and a legitimate right of childhood.

Problems

Many studies on play are guided by a futuristic perspective, looking for correlates between play activities and developmental outcomes in near or remote future, and often missing the relevance of play during childhood. Furthermore, and as a consequence of this perspective, studies are often performed in controlled, laboratory conditions, where the potential of free play in displaying children's creativity and agency may be obscured.

Research Context

In this paper priority will be given to field studies in natural settings, with an ethnographic and observational approach.

Key Research Questions

- Identifying culture in play activities: universality and variability.
- Main factors affecting the frequency, duration and nature of play activities.
- Gender differences.
- Environmental contexts and cultural conceptions and practices affecting the availability of time, space, materials and play partners.

Recent Research Results

Play has been observed in every society where children were studied. It can be considered a universal trait of human psychology. However, like every human activity, it is affected by our cultural context. Different cultures value and react differently to play: play can be recognized by adults as having important consequences for cognitive, social and emotional development, and adults can engage as playmates; play can be seen as a spontaneous activity of children, which adults do not structure or participate in; or else play can be seen as a spontaneous activity, but the amount of play is limited because other activities are considered more important.⁴ Children at play reproduce and also recreate the specificities of their cultural environment.^{2,5}

Studies on play in different cultural contexts enlighten the various ways in which culture flows throughout play activities. The availability of time and space, of objects and playmates; adult role models and attitudes toward play are some of the contextual aspects that affect the frequency, duration and nature of children's play. In a South American Indian community, boys often play bow-and-arrows; boys and girls of varied ages dive and swim in the river and play chase around the village, with little or no adult supervision. They use primarily natural objects in their pretend play (i.e., sand, water, stone, plants). Urban children in large towns play more often with manufactured toys, at home, at school or playgroups, playgrounds or parks, usually with some adult supervision, especially when they are younger; locomotor play and chase play tend to occur in protected spaces.⁶

Many common play activities, such as marbles, kite-flying, dolls, houses, hopscotch and so forth, reappear with their deep structure preserved in different cultural contexts, but are modified in varied ways, creating local versions, using local resources and called by different names (even within a single language). In different regions of Brazil, for instance, marbles are called *búrica*,

búlica, papão, peteca or gude, and are practiced with local rules, with glass balls, mud balls or even cashew nuts.⁶

Besides the deep structure of many play activities, gender differences regarding choice of partners and the nature of play activities are another very recurrent cross-cultural similarity. Preference for companions of the same gender appears to arise around age 3.⁷ It is usually attributed to processes of social identification, of which gender identity is one of the main aspects, and tends to increase as children deepen their understanding of gender differences.⁸ Gender preferences, as expressed in the imitation of same gender activities, are resistant to adult encouragement to inter-gender imitation.⁹ These preferences tend to occur even when there are few available same age partners and it implies interacting with varied age companions. In larger groups, children of the same gender and age similarity tend to be drawn together to form play subgroups.⁵

Gender differences can also be explained by similar preferences for play activities, regardless of cultural contexts. Boys tend to occupy larger spaces, play in larger groups and farther away from home, and engage in activities that involve gross movements. Girls occupy internal or more restricted spaces, play in smaller groups, near their houses and with themes related to social and domestic activities. Pretend play themes are more varied among girls than among boys, which may be due to lack of male models in some cultural contexts: even when mothers work out of home, they still offer female models of domestic chores.^{6,8,10,11,12,13}

There is evidence that sexual hormones may contribute to gender differences in play behaviour,^{12,14,15,16} but also of strong cultural influences regarding the appropriateness of certain types of play for boys and girls. These perceptions vary in different cultural contexts: in some societies, gender roles are well defined and children's choice of play activities¹⁷ closely mirror adult practices.^{6,8,18}

Structural aspects of the immediate environment (time and space availability, social environment, etc.) are easily identifiable factors affecting the frequency, duration and nature of play activities.

The time allowed for play activities varies widely in different contexts. In rural societies, in low-income families and in isolated communities such as African-Brazilian “quilombos” and South-American Indian groups, children (particularly girls) are often required to help adults in varied chores, which leaves less free time to play – although they often insert play activities into their tasks.^{5,8,13,19,20,21}

The amount of proximity with adult activities in different ways of life affects the degree of realism in their representation of these activities in pretend play. In hunter-gatherer societies, children are in close contact with adults as they perform their daily chores. In urban contexts, where fathers work out of home, boys tend to represent male activities in vague, poorly-specified manners, such as “Daddy is driving to work.” The representation of female activities, especially domestic chores, tends to be richer. The influence of media characters (superheroes, space travellers) is more noticeable in boys' pretend play.^{18,22,23,24,25}

Most modern societies limit children’s play due to safety concerns. Young children are not allowed to play freely because parents are afraid of accidents or do not have time to take them to a playground. Parents prefer to keep their children safely at home, for example, playing videogame or watching TV. When television is not available, children spend more time playing²⁶: the time spent in play by Japanese boys outside the house is inversely proportional to the time spent in video games.²⁷ South American Indian children and those who live in rural areas, even with some access to the media, often have more freedom, little adult intervention, large spaces and many available companions, factors which favour the occurrence of play.⁵

The availability of play partners, particularly partners of different ages, reflects cultural conceptions and practices regarding childhood, as well as the varied social networks in which the child takes part. Families with several children and/or extended families, either living together or in close proximity, usually provide a large multi-age group of siblings and/or cousins of both genders. The same may happen in small communities, in rural contexts or in small towns where children are allowed to play in the streets with their siblings and neighbours. By contrast, urban children living in large towns are often restricted to interactions with same age partners in day care centers and have less access to safe areas for free and active play.^{28,29}

Research Gaps

Studies in different socioeconomic and cultural contexts highlight both universal and particular features of play activities and traditions. Despite the increasing communication between researchers around the world, our knowledge about play is still marked by the prevalence of studies conducted in the Western developed world.

Themes that deserve more attention:

- Processes of appropriation, transmission, innovation and creation of culture: how and through which communication processes, do children construct play activities and cultural facts such as peer cultures? Which research procedures and perspectives highlight children's agency in play?
- Studies with multi-age free play groups, with little adult intervention, can highlight interactional abilities that are not easily observable in same-age groups, such as caregiving, creation of different play rules and expectations regarding younger partners, transmission of knowledge between older/more experienced partners and younger/less experienced ones and so forth.

Conclusions

Playing is a universal phenomenon, a basic motivation and a legitimate right of children. Studies in different cultural contexts highlight both universal features of play (such as the deep structure of traditional games/play activities and gender differences regarding play preferences and performance) and cultural variability, either introduced by the children themselves or constrained by the availability of time, space, objects and partners, reflecting the conceptions of each context about childhood and play.

Implications for Parents, Services and Policy

Modern urban life tends to limit children's opportunities for free play in several ways. Due to mothers' engagement in the labor market or to other factors, since the early years children increasingly attend pre-school centers where time for free play is often reduced to breaks between educational tasks intended to enhance precociousness and competitive future competence. Parental concerns about safety or other factors, such as dwelling conditions, limit their access to open places where active play with varied aged partners would be possible, thus favoring more sedentary and less healthy play activities: the availability of parks and other neighbourhood safe play areas should be as much a concern of child-oriented policies as the provision of educational and health services. The toy industry and technological developments respond to these conditions by offering an increasing variety of sedentary and often individualized and highly-structured toys and games which allow little space for children's creativity in the exploration and collective construction of play objects and materials. The psychological literature depicts the child as an active agent of his/her development since an early age; this conception seems to be often mis-translated in cultural practices and attitudes regarding the availability of

time, space, choice of play partners and of play activities by the children.

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Play and Disability

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Introduction and Subject

This article identifies the main groups of disabilities present in early childhood and considers how those disabilities affect children's development and engagement in play.

Disabilities refer to impairments, limitations or restrictions to one or more of children's physical, cognitive, sensory, language, speech, communication, behavioural and/or social functions.^{1,2,3}

Disabilities can be mild to severe, according to how much core mobility, communication and self-care activities are affected.¹ Between 3.65% and 4% of 0- to 5-year-old children in developed countries are disabled, with higher prevalence among boys.^{1,2,3}

Typically developing children engage in solitary and social play and find play pleasurable.^{4,5} Play has different forms – locomotor, object, language, pretence and sociodramatic⁵ – readily recognised by children and adults.⁶ For some children, disabilities affect how often and what they play or whether they play at all.

Studying play in disabled children is challenging, because of existing debates in play and disability research.⁷ In play research, debate focuses on potential developmental functions of different play forms.⁶ In disability research, inconsistencies exist in classifying disabilities, and in recruiting disabled research participants.^{7,8} Studying play in multiply disabled children is especially challenging, because of difficulty in understanding the unique or interactive affect each disability has on children's play. Knowledge of disabled children's play has accrued incidentally from studying other aspects of disabled children's behaviour.⁹

Research Context and Results

Disabilities in language, speech and communication disorders are the most common types of disabilities in early childhood.¹⁰ This is not surprising given that language, speech and communication delays are often comorbid with other disabilities.^{11,12} Some language, speech or communication disabilities result from acquired brain injuries to language, speech and

communication regions.¹³ Insights into the effects of injuries to these areas suggest that, the more severe the injury, the more delayed children's play, especially pretence and sociodramatic play.¹⁰

Autism Spectrum Disorder (ASD) is one of the most widely investigated disabilities to affect children's language, speech and communication. ASD children, besides language and communication delays, have significant impairments to social functioning and many have repetitive and stereotyped behaviours. Others have anomalies in posture and gait.¹⁴ Symptoms, skill deficits and impairment severity vary enormously among ASD children.¹⁴

Posture and gait anomalies in ASD children impair locomotor play.¹⁴ Restricted and repetitive behaviours, either self-focussed (e.g., finger flipping) or with a preferred object (e.g. stroking a favourite toy), affect most functionality in all or most play forms: locomotor, object, language and even pretend play.¹⁴ ASD children have significant delays in eye gaze, facial expression, gesture, imitation and turn taking, which form the substratum of sociability and facilitate sociodramatic play. When observed in social classroom settings, ASD children are more often unoccupied onlookers and engage less in pretend and sociodramatic play than typically developing peers.¹⁵

Children with physical disabilities, for example, cerebral palsy (CP), have mild-severe motor delays affecting mobility, posture and strength¹⁶ needed for locomotion and exploration of their surroundings. Locomotion helps to develop spatial understanding.¹¹ Severely disabled children with CP need assistance with mobility, restricting exploration¹⁶ and affecting the development of locomotor and object play. Many children with CP also have impairments in sensory and language functions,¹⁶ restricting social play. For some of them, opportunities to play are restricted to playful contexts set up and controlled by adults for instruction.⁹ Their opportunities to develop play skills are incidental to learning in these interventions. Children with CP are usually time poor, because of time spent in adult-structured activities that preclude opportunity for play or leisure activities.¹⁶ Severe forms of CP affect children's development of gestures and emotional expression, limiting or even precluding pretence and sociodramatic play.¹⁷

Children with intellectual disabilities (ID) have delays in intellectual functioning (learning, reasoning, problem solving) and adaptive behaviours needed for everyday living.¹² Such children develop play forms more slowly than typically developing children, and spend less time playing with others,¹⁸ perhaps because many of them have language delays and/or sensory impairments.¹² When adults modelled play, children with ID engaged less in locomotor play, less toy play and less play with children than typically developing children.⁷ However, when given opportunities to

initiate their own play without adults, they played more with other children, used more complex language and engaged more in pretend and sociodramatic play than when adults structured activities.⁷

Visually impaired and blind children have concomitant delays in motor development, which impact upon mobility and spatial understanding.¹⁹ Looking, reaching for and grasping objects promotes exploration and object play and contributes to spatial development.¹⁹ Visually impaired children use tactile and auditory cues to locate, reach for and grasp objects. This develops later in visually impaired children, resulting in locomotor, object and social play delays.¹⁹ Motion sensors that emit audible signals in response to sensors attached to children have been adapted to assist blind children to navigate their environments safely and develop spatial awareness.²⁰ Visually impaired children may develop idiosyncratic gesture and facial expressions, because they cannot observe the gestures and expressions that others use in communication.²¹ It has been asserted that visually impaired children have delays in pretence and social play comparable to play delays of autistic children.²¹ Yet there is evidence that blind children's level of symbol play can be comparable to age and IQ matched non-handicapped peers.²¹ Social skills of children, not vision, predicted the level of symbolic play.²¹

Hearing impaired and deaf children experience delayed language acquisition, if their hearing impairment remains undetected and there is no intervention to teach oral or sign language.²² Hearing impaired children maintain joint attention and lip read to sustain social play with playmates using oral language, which are challenging tasks for young children.²² Deaf children can have delays in gesture and vocalisations compared with hearing children, because they do not hear oral cues that place the gestures in its social context.²² Signing and oral language used proficiently by young bilingual deaf children enabled conversations with others and led to *Theory of Mind (ToM)* performance comparable to hearing children.²³ Implications of these findings for the role of ToM in hearing impaired children's play development is speculative, because we do not yet understand the role of ToM in play, especially pretend and sociodramatic play.²⁴

Research Gaps

There are inconsistencies in classification of the same disability in different studies affecting generalisability of research findings. Diagnostic criteria of different categories of disability (e.g., CP, ASD, ID) encompass broad symptoms of varying severity. Many children thus classified have additional delays characteristic of other disabilities. There is a need to develop rigorous

classification of disability in early childhood.⁸

Many children have multiple disabilities making it difficult for play researchers to design research that informs them about how each disability uniquely or interactively affects children's play. Disabled children can have similar delays in play, associated with distinct disabilities that have different aetiologies and life courses.

Comparison studies within disability groups are needed, because individual differences, for example, in blind children's social skilfulness,²² and ID children's temperament,^{25,26} affect play behaviours but are rarely controlled for in disability and play research.

Information about disabled children's play is often reported incidentally to main findings of adult modelled interventions designed to teach disabled children many different skills within playful contexts using toys.^{22,24} There is a need to focus on disabled children's play behaviours per se to understand how disability affects play development.

Conclusion

There is evidence that even children with severe and multiple disabilities can engage in some or all play forms during early childhood. There are, however, conflicting findings about the level of play development achieved by children with different disabilities. Methodological shortfalls in both play and disability research have contributed to this uncertainty. Information about play elicited during training and intervention studies provide only incidental evidence about the effect of particular disability on children's play development, yet have the potential to provide valuable insights into the role of play in development.

Implications

All signatory nations are obliged to ensure that all the rights of their children are protected, as enshrined in United Nations Convention of the Rights of the Child.²⁷ Disabled children have the right to receive special care and support to ensure they reach their full developmental potential (Article 21) and all children have the right to play, rest, recreation and leisure (Article 31). The goal should be to foster self-initiated play in an adequately provisioned and physically safe environment for disabled children. It is important to encourage play while remaining realistic about limitations and restrictions of children's disabilities. Children with multiple disabilities present special challenges when structuring environments appropriately and safely, selecting

appropriate toys and adapting emerging technologies that might serve these goals. It is also important to make sure that adults are not overly controlling during play interventions to enable the development of self-expression and independence in disabled children's play.

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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

As in other areas of early childhood development, the “classic” theories of Piaget¹⁰ and Vygotsky¹¹ 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, alphabets, 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 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 Weininger²² observed a structural correspondence between Rummelhart's²³ 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.

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 Rizen¹⁴ 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.

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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Play Therapy

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Introduction

Play therapy draws on the proven therapeutic power of play, using professional therapists as catalysts and support to help children with their troubles through play activity. Play therapy may also be of value beyond the clinical setting, conducted through parents as well as in preschools.

Subject

How is play therapeutic?

Lay adults often view play as a medium of happy fun unrelated to troubles. The professionals who carry out play therapy have shown that play also extends to troublesome aspects of existence, including the stresses, trauma, family dysfunction, illness and other dilemmas that abound in the real experience of children. Play therapy, in which children are encouraged to act out their feelings and dilemmas through play and fantasy, draws on the power of play to give palpable expression to children's concerns. Play therapy is consistent with children's tendencies to "play out" problems outside of clinical intervention, reenacting troubling experience as a way to come to terms with conflicted feelings. Child inmates during the Holocaust pretended to be guards and prisoners, dramatizing in play concentration camp routines and killings.¹ Following Hurricane Katrina, children who saw the hurricane on television improvised play at preschool, imagining how wind and flood waters threatened pretend characters.² In play therapy the propensity for children to express dilemmas through play is channeled as a clinical intervention, supported by an adult therapist who catalyzes, but does not explicitly direct, a child's therapeutic play.

Research Context

As a mode of clinical intervention with children, play therapy established its credibility through praxis. The clinical case study has been a prevailing means of communicating the workings of play therapy. Two pioneers of clinical play therapy were Anna Freud and Melanie Klein, who argued that play was a means to adapt psychoanalysis, used with adults, to suit children. Play, Klein

argued, could substitute for the verbal free association used in adult therapy. Freud asserted that play could reveal unconscious processes, even as it accommodated mutual relating between a child and a therapist.³ Virginia Axline authored case-based explications of play therapy still in use today.⁴ Axline influenced the idea that play should provide a secure therapist-child relationship, thereby allowing the child “freedom and room to state himself in his own terms” using play.

Psychoanalyst Donald Winnicott produced case studies exemplifying the practice of play therapy as well as influential theoretical contributions about play and imagination. Winnicott’s book *The Piggle* described the treatment of a girl troubled by the birth of her younger brother, who visited Winnicott for treatment 16 times over ages two through five. A portion of Winnicott’s account of the girl known as Piggle was written by her parents, who reported that after play therapy she functioned well; Piggle’s parents speculated that play therapy had allowed her to be “understood on a deep level” and may have instilled in her a notable degree of inner judgment and insights into others. A theory of Winnicott, deriving from his clinical work, concerned the transitional object, an object (e.g., a toy, a blanket) regarded with a special status used for soothing purposes by children. Winnicott theorized that the significance of the transitional object derived from the mother-child relationship, with broad implications for children’s capacity to suspend disbelief when engaged with cultural or religious symbolism.⁶

The plentiful case records published about play therapy established its applicability to a wide range of conditions and circumstances. Among preschool-age children, play therapy has an established track record in treating separation problems, attention deficit/hyperactivity, disruptive behaviour, mood and anxiety disorders, trauma from natural disasters or violence, the stress of terminal and chronic illness, as well as countless other conditions. Play therapists work in varied settings including social services, schools and medical settings.

Play therapists are considered central to treatment. Conveying deep empathy, genuineness, and unconditional positive regard for the child contributes to a therapeutic relationship, thereby maintaining a supportive atmosphere for the child’s self-directed play. Play therapists use toys and a plethora of playful activities, but the child is empowered to choose what to play with and how to play.⁷ Play therapists actively observe and listen. They follow the child’s lead as the play proceeds, reflecting back to the child in attunement with the child’s play. Therapists respond to the child’s requests to enact pretend roles or to assist play in other ways. Play therapists are not judgmental, although they do set limits when a play action poses possible harm.

The child-directed nature of play therapy is central to its healing dynamics. Children undergoing play therapy often choose to repeat play sequences across multiple sessions of therapy.⁸ In metaphorically representing events that were originally threatening, children are able to take an active stance to control events in the reenactment, contributing a sense of empowerment or mastery over what was once unresolved and unsettling.⁹ New associations can be made to negatively charged objects or incidents through make-believe transactions that symbolize conflicts, fears or wishes, in forms that children are able to cognitively and affectively assimilate.

Meta-analyses have assessed the effectiveness of play therapy in bringing about desirable change in children.^{10,11,12} Empirical assessment studies consistently have validated play therapy as effective.¹³ A child with emotional problems treated through play therapy, as it has been shown, does better than 75-82% of untreated children.¹⁴ Of course, play therapy does not have a monopoly on mental health interventions with children, since other methods including behavioural or cognitive interventions also play a part in current treatment.

Key Research Issues

Empirical studies support the effectiveness of parental involvement in play therapy. Filial play therapy (play therapy conducted by clinically-trained parents) has been associated with an even more pronounced effect on outcomes than play therapy using professional therapists.¹⁵ This opens the possibility for play therapy to be affordable on a large scale, by training parents to use empathic understanding and responsive involvement in therapeutic play. Historical precedents for filial therapy date to Sigmund Freud¹⁶ as well as to Carl Rogers, who guided his adult daughter's use of filial therapy with a grandchild suffering from *encopresis*.¹⁷ In filial therapy, a set of playthings are put aside to be brought out strictly for use in therapeutic play, conducted on a regular and predictable schedule.

The use of trained lay therapists has also increased the accessibility of play therapy for preschool programs.¹⁸ There is promising evidence from recent empirical research that child-centered play therapy (guided by Master's degreed counselors) can dramatically reduce disruptive behaviour and aggression among impoverished children of diverse ethnicities in Head Start programs.¹⁹

Research Gaps

While play therapy's effectiveness has been established, it is still not fully clear how play therapy compares in effectiveness to other therapies, including behavioural or cognitive approaches.

Comprehensive research tracing the relative impact of various therapies on a full range of conditions is still to be completed.

Since play is a cross-culturally variable activity, it is important for research to explore culturally related issues that might pose barriers for “standard” play therapy. Materials used, procedures followed, and interpretations made may vary according to cultural context, a topic for further research.

Another germane issue for study involves the ongoing reduction of play time in the United States, including the reduction of recess in favour of increased academic instruction. Since unstructured play has proven value to exercise affective flexibility and emotional resilience, the restriction of free play for children bears close examination with regard to children’s emotional adaptation.

The therapeutic value of play, in general, justifies giving play a more prominent place in psychological and cultural research.

Conclusions

Play therapy is a form of therapeutic renewal, guided by a therapist or a trained lay person. Therapeutic play has proven value across a wide range of childhood problems. As Brian Sutton-Smith has shown, play is a viable model of adaptive human functioning, in which adaptability is achieved by the limber use of symbols and narratives.²⁰ By age three and sometimes earlier, children play out their troubles with impressive flexibility as they manipulate meanings symbolically.

Play therapy, by formalizing a context for children’s self-guided play, highlights the importance of play to adaptive healing generally. Children’s intense involvements in particular play themes can be telling indicators of underlying unresolved issues, including for physically ill children.²¹ Given time to engage in pretense freely, children playfully confront difficult meanings on their own terms. Peggy Miller’s son Kurt, as early as age two, relistened and retold the story of Peter Rabbit repeatedly in a home setting, using intriguing authorial license in his retellings. His story renditions ran in parallel with his everyday emotional concerns about misbehaviour and its anxious implications.²² Play can poetically encode what is not resolved, in an approachable and confrontable framework. Play therapy in a clinical setting enables children to address even extreme disruptions, scaffolded by an empathic and supportive adult.

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Play Pedagogy and Playworlds

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Introduction

The cultural perspective on play offers us rich ground for developing play pedagogy, as this perspective shows how play and culture are connected. This entry focuses on one play pedagogy within the cultural perspective on play, which is of particular interest because it builds off a unique reading of the work of L. S. Vygotsky, one of the foremost theorists of children's play within the socio-cultural perspective, or any perspective, on play. The *creative pedagogy of play*¹ was developed by Gunilla Lindqvist, whose reading of Vygotsky's work breaks ground by integrating his ideas about art with his ideas about play, culture, creativity, imagination, and development.

Specifically, we will focus on the key component of this pedagogy, what Lindqvist called the common denominator of play and aesthetics forms: *playworlds*.¹ Playworlds can be described as a form of adult-child joint play in which adults and children create a common fantasy that is designed to support the development of both adults and children.^{18,25,26} This adult-child joint play is often structured around a piece of literature or another work of art. Adults and children work together to 'bring the literature to life' through drama and play.

Playworlds are in widespread use in both Sweden and Finland. Playworlds are growing in popularity in many other countries and are now taking place in early childhood education and care classrooms (and senior centers) in Japan, Serbia, and the US; with related but distinct pedagogies, such as Conceptual Playworlds² and current Narrative Learning,³ being practiced and studied in Australia, Indonesia, China, and Lithuania, as well as in other countries. This entry is written by members of the International Playworld Network (IPWNW), a group of scholars who have been studying playworlds together since 2003,^{4,5} and is expanded upon in two recent books by IPWNW scholars and colleagues.^{4,6}

Subject

Lindqvist^{1,7-14} was interested in how children make meaning in play, and particularly how play can be inspired by various aesthetic forms of expression.^{15,16} The playworlds that Lindqvist created with preschool teachers can be described as fantasy worlds that children and teachers create, enter, play in, and exit, together; or as a form of adult-child joint play in which play is combined with art or science. Teachers become emotionally engaged in these playworlds and, thus, they are not the forms of play that one typically sees in preschool, where the teachers may become "extras" in children's play, participating with their bodies but without their whole selves.

In her study of the aesthetics of play,¹ Lindqvist takes a critical attitude towards understanding play from within a developmental psychological approach. She does not concur that there is a well-defined progression in children's play. Instead, Lindqvist advocates for understanding play as a social and cultural activity that depends on aesthetic, cultural, and social conditions.

It is worth noting that not all playworlds derive from Gunilla Lindqvist's work. For instance, some Japanese playworlds originated before anyone involved in these playworlds had read Lindqvist's work, and the US playworlds are heavily influenced by the work of the preschool teacher and author, Vivian Paley.¹⁷ Playworlds have evolved through a combination of practice and theory that has remained local; and practice and theory that has had an international influence.¹⁸

In all playworlds, children contribute with their expertise in playing and adults with their experiences from the adult world (art and science). In Lindqvist's playworlds, the point of departure is usually a text, such as a children's book, poem, or fairytale, but it is a text that ties in with a theme that the teachers consider appropriate for the specific class, for instance the theme of clouds or of escaping war. The classroom becomes the world found in the text and the characters come to life as they are embodied by the participants.

Problems

Playworlds can be described as collaborative acts of creation or ways of being.^{19,4} Playworlds are not instructional methods or techniques, although teachers and caregivers who create playworlds find that playworlds help them a great deal as they teach and care. As such, playworlds promote the development not only of children, but of teachers, caregivers, artists, imaginary characters, and university researchers as well.

Broadly, playworlds are designed to include all who wish to join.^{33,34,40,44} They support all participants in feeling some combination of welcomed, valued, cared for, and caring. Because of

this, members of our group of playworld scholars understand playworlds to be a part of the struggles, which are more prominent in some of our nations than others, but are important to all of us, to end the oppression via exclusion of children and the elderly with special needs, and also those who are often excluded because they are emergent bilinguals, undocumented, Black, Indigenous, queer, neurodivergent, or members of excluded groups that are present in some but not all of our nations, such as Latinx participants.

Furthermore, playworlds have been sustained in a variety of settings. For instance, in Finland and Sweden there is widespread support for the human right of children to play. Playworlds have also been sustained in publicly funded schools in the United States, one of the few nations that has not ratified the United Nation's Convention on the Rights of the Child, which contains Article 31, declaring the right of children to play.

Research Context

Lindqvist¹ developed her creative pedagogy of play based on Vygotsky's theories of play,^{20,21} imagination and creativity,^{22,23} and art.²⁴ Lindqvist's interpretation of Vygotsky's theory of play emphasizes the importance of understanding imagination as an aspect of reality, rather than something other than reality. This means that fantasy and reality, or as Vygotsky puts it, imagination and realistic thinking, are not two independent processes.

Instead, invention and artistic creativity require realistic thinking and imagination: in these processes, "The two act as a unity."^{22, p.349} With this understanding that adult invention and artistic creativity, like play, include imagination and realistic thinking, Lindqvist was likely to appreciate children's creative potential in play. Playworlds, as a common denominator of play and art, can, thus, offer us new and potentially important ways of relating to children.

Vygotsky writes that imagination is an integral part of realistic thinking, that no cognition of reality is possible without imagination. He explains why the everyday perception that imagination is separate from reality, is not correct.²³ Imagination, according to Vygotsky, is closely linked to reality, and he describes imagination and creativity as parts of one cyclical process.

Imagination and creativity are, therefore, both necessary for thinking, and for human growth and development. The process that combines the two is characteristic of all people, including small children, says Vygotsky. Furthermore, he argues that this can be seen particularly clearly in play, writing that children's play is "imagination in action."^{20, p.79} Play is embodied imagination and

creativity. A child's play is, thus, not a reproduction of what is experienced, but is a creative reworking of impressions and experiences: "... the creative processes are already fully manifest in earliest childhood."^{23, p.6}

In Lindqvist's creative pedagogy of play, children's play is visible and develops in such a way that it can more easily be seen and understood by adults to be an early form of the artistic and scientific endeavors of adulthood, and, therefore, to produce new and intrinsically valuable insights that can be of value to people of all ages. This understanding is in contrast with contemporary Western European and American biological, psychoanalytic, cognitive-developmental and cross-cultural psychological theories of play. In all of these theories one finds assertions that children's play is fundamentally different from adult activities, and that adult knowledge, experience or developmental stage is a teleology for children's play.^{25,26}

Key Research Questions

Playworlds are powerful tools for studying development, including the development of play, from a greater number of perspectives and from traditionally excluded perspectives. Playworlds enable an important form of what is called participatory design research (PDR).²⁷ They are a means of including young children and their teachers,²⁸ people with dementia and their caregivers,⁵⁵ artists, and imaginary characters⁵⁴ -- all of whom are often excluded from designing even play research, despite their play expertise -- as research designers.^{4,6,29}

Key Research Results

Teachers and caregivers who have participated in playworlds explain that playworlds allow them to listen to children and seniors in new ways.¹⁹ As did Lindqvist,¹ other researchers have been able to show that teachers who have participated in playworlds have had opportunities to develop new and useful approaches to working with children and new ways of understanding their role as teachers.³⁰⁻³⁴ Researchers have also shown that teachers change their ways of relating to their students and to each other, in ways that they consider to be important to their teaching and their personal growth, through their participation in playworlds.^{4,6,25,31,32,35-37}

In relation to children, studies have shown that participation in playworlds promotes a wide range of developmental changes. On the one hand, children experience important changes in their social, cognitive, and emotional development.²⁵ At the same time, research in Finland has shown that children in playworlds are given the opportunity to become subjects and agents in their own

growing and learning, and that playworlds can create conditions for teachers in classrooms to recognize and deal with contradictions, dilemmas and difficulties that arise when trying to support children's agency and engagement in classrooms in institutional settings.^{32,33,38-40} This then creates more possibilities for the multiple manifestations and development of children's agency in classrooms.⁴¹⁻⁴³ Also in Finland, playworlds became popular due to their having been shown to support children during their transition from preschool to school.³

There are examples from several nations of the ways that playworlds allow all the children in the classroom, particularly those who might typically be left out of classroom activities, to participate actively and in leadership capacities.^{19,25,34,40,44} Studies have also shown that children's participation in a playworld can promote their narrative competence.⁴⁵ (Narrative competence is a literacy skill that is often neglected in current discussions of literacy in the US, although it is highly predictive of academic success.⁴⁵) Researchers have also shown that participation in a playworld creates "zones of proximal development"^{21, p.86} in which children and adults can mutually support one another in developing.³⁰

Research Gaps

All of the areas of study discussed above merit further study. Particularly promising and much needed is the further study of the ways that playworlds create conditions for teachers in classrooms to recognize and deal with contradictions, dilemmas and difficulties that arise when trying to support children's agency and engagement.^{32,33,38-40} There is an understudied potential in playworlds to develop and change educational institutions, and to understand and explain the dynamics of such change processes requires further study.^{32,34,42} Researchers based in universities have also developed synthetic-analytic methods for the study of development through their participation in playworlds.^{25,46,47} These methods allow one to study developmental phenomena that are difficult to observe in their full, dynamic complexity, such as *perezhivanie* (a technical term that is difficult to translate into English in a few words but, roughly, an intensely-emotional-lived-through(-so experienced again)-experience).^{25,46,48,49,50} Further trials of these methods constitute another promising area of study.

Concluding Thoughts

We can see two almost-opposing categories in regards to play in many ECEC curricula, worldwide.^{25,26,45} On the one hand, there is what is often called "free play," in which children's play is

protected from adult interference. On the other hand, children's play is directed toward goals that adults decide are most important. These two categories appear to be equally powerless in response to the current restriction of play in which "academic" subject matter learning is becoming the focus of the curriculum, in place of play, in many early childhood classrooms internationally.⁵¹ This is happening despite all that we know about the importance of play for children's wellbeing, learning, and development, and the status of play as one of the fundamental rights of the child. Meanwhile the above-mentioned two categories of curricula have remained, to a great extent, unchallenged by many third alternatives.⁴ Playworlds may be a third, alternative category of play, neither free play nor adult-directed play, as playworlds include adults and children in joint play that is directed towards adult and also child-made goals (and is based on mutual caring between adults and children).^{4,25,26,43,52}

Implications for Parents, Services and Policy

Playworlds deserve the attention of ECEC and elementary school teachers and administrators, policy makers and parents, because, over the past three decades, playworlds have been shown to promote development and support the study of development in unique and powerful ways. Sweden, with their world famous EDUCARE early childhood education and care system, develops and fosters early childhood pedagogies via a unique process that includes the input of both well-educated early childhood teachers who are given ample time for research and excellent working conditions; and researchers who are well connected to work in preschools and whose research is amply supported. Finland is world famous for their children's high achievement in school subjects. Both Sweden and Finland are leaders in the development and use of playworlds, but playworlds have received less attention than many other Swedish and Finnish contributions to education and ECEC. Furthermore, playworlds may help us to respond effectively to the forces that are reducing play in early childhood education and care, by challenging the above-mentioned two categories of play, neither of which has been able, thus far, to withstand these forces.⁵³ Playworlds offer such varied and important means to support children in great part because playworlds allow adults to listen to children in a unique way: from within adult-child joint play.

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Play: Commenting on Smith & Pellegrini, Christie & Roskos, Samuelsson & Pramling, Baumer, Hart & Tannock, Gosso & Carvalho, Clark, and Jenvey

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Introduction

Increasing attention to play during the early years is witnessed both in results from scientific studies and in the uses made of the findings by service providers and policy-makers. Disciplined inquiry into play is extensive across many important and relevant topics such as found in the papers in this chapter,¹⁻⁸ even as the depth and quality of evidence and understanding varies considerably. Moreover, how research on play is used in practical settings like school classrooms, playgrounds, nature and community centers, children's libraries and museums, hospital playrooms, and child guidance centers is complicated by different agendas, constraints, world views and conceptual frameworks among researchers, practitioners and policy-makers.⁹

The challenges of studying, advocating and using play in the field of early childhood development and education (ECDE) are further compounded by internal and external factors. Internally, with methodological and theoretical advances producing ever more answers to research questions and additions to the knowledge base, we see new research questions and the truth of the adage "the more you know, the more you realize what you don't know." Externally, the targets and needs for play research and application are made greater given the quickened pace of social, educational and technological changes, brought on by the digital revolution, global climate change, shifting demographics, and economic and political changes.

The field of ECDE has a long tradition of play-related theorizing, research and practice. The eight papers¹⁻⁸ in this chapter reinforce and extend the meaning and utility of widely accepted propositions that play is a major occupation¹⁰ (as opposed to work or business) of young children (with the caveat that the play "umbrella" includes exploration, imitation, narration, investigation, imagination, and, meta-play planning and negotiation along with play enactments). Play expression can take on many different forms by combining the four "play elements" of (1) body,

(2) object, (3) symbol use and (4) relationships; play is associated with the being and becoming of the wholechild --characterized by different but interrelated developmental dimensions/domains (e.g., emotional, social, physical, cognitive, linguistic, spiritual and moral), and that play actions and thoughts of young children are connectable to micro- and macro-contextual factors.¹¹

The papers in this chapter are diverse and do not yield to a simple unifying theme. Still, as a composite they relate to the above propositions within the literature and to the broader issues mentioned earlier. Furthermore, these research summaries together suggest three important considerations: (1) What is “quality” play and how to evaluate it in young children? (2) What is the role of the adult (i.e., teacher, parent, therapist, etc.) in ECDE play?; and (3) How differentiated are adult play beliefs and practices as children mature from birth to eight or nine years?

Research and Conclusions

The contributions in this chapter 1-8 define and describe play and its attributes and summarize literature within four areas: (1) Play and learning/development; (2) Play and teaching; (3) Cultural context; and (4) Play interventions.

Play reflects, reinforces, or generates new learning and development.¹¹ As Smith and Pellegrini¹ discuss, although play is seemingly needed by young children (i.e., the cognitive immaturity hypothesis), a prevailing “play ethos” dating back decades¹² has exaggerated its benefits; and the principles of equifinality and epiphenomena should always be kept in mind.^{13,14} Equifinality refers to the idea that many developmental outcomes have alternative pathways (e.g., There is no one royal road to literacy). Epiphenomena signals that confounding variables obscure the role of play in learning and development. Adult tuition, verbal behaviour, social interaction, occurring at the same time as playing might be responsible for the apparent benefits of play and not necessarily the process of playing per se. Christie and Roskos² also urge caution about the putative benefits of play as they probe the dynamics of the play-literacy interface searching for moderating and mediating variables in how play processes are related to early literacy and development.

Play teaching, intervention and culture are targeted in other papers in this chapter. Samuelsson and Pramling³ also refer to the relation of play with learning and development. The concept of the playing-learning child informs the teacher’s role in the pedagogy of play (i.e., teacher guided and directed play). Here children’s meaning-making and the teacher’s curricular objectives include Nordic didactics and content knowledge. Baumer⁴ continues the discussion about the pedagogy of

play focusing on a particular kind of joint adult-child play “Playworlds” which was coined by Gunilla Lundqvist.¹⁵

Hart and Tannock⁵ add the sensitive topic of thematic violence in play, as in mock fighting and use of war toys, and discuss what the teacher’s role should be. The authors stress the socio-emotional needs of children and they make a good point that when they exhibit thematic aggressive play it is not real aggression. Their enthusiasm for adult encouragement of thematic aggression in social pretense deserves more qualification however; the evidence is slim and suggestive at best that playful aggression supported by teachers would be “highly beneficial to child development.” Furthermore, there are practical teacher concerns relating to classroom management, such as some children misunderstanding playful aggression.

Gosso and Carvalho⁶ aptly note how culture flows throughout play activities, indicate gender differences in play across cultures, and cite how more research is needed about child agency in play and cross-age peer play. There is also interesting work on cultural variations in parental belief systems about play, which can usefully augment their presentation.¹⁶

Clark’s⁷ focus on play therapy balances the earlier entries on play and education with a clear statement about play as healing and its socio-emotional benefits, together with its potential educational or learning benefits. Child well-being (and suffering and how to alleviate it) deserve more attention in play research. Finally, Jenvey⁸ discusses methodological problems that beset the study of the play of children with disabilities; she informs the reader about how different impairments affect play. All children whatever their abilities or disabilities have a right to play, as enshrined in the United Nations Convention on the Rights of the Child.¹⁷

Development and policy implications

Although a science of play is emerging,¹⁸ obstacles prevail in trying to translate research into new practice and policy; politics and the status quo often stand in the way of change and improvement. Often the agendas of play advocates, such as those for recess in the schools, are driven by much more than research findings. Improvement in turning research into new positive play realities for children in practical settings are more likely to happen by filling the research gap in three areas.

Play evaluation

The literature has attempted to articulate what play is and its attributes and forms in ECDE much more than it has grappled with what is good play.¹⁹ Teachers, therapists and parents need to know more about what to aim for as the next step in a child's play skill.²⁰ If one is queasy about measuring play quality, perhaps at least calibrating component social and mental skills undergirding play performance can be scrutinized and some yardsticks can be used to gauge progress in young children's play actions, words and thoughts. Authentic holistic, transactional, dynamic assessment as an alternative to traditional assessment can include evidence about a child's play skills and interests; but this needs to be done accurately, reliably and validly.

Adult roles

Policy and practice guidelines need to be informed by research on the fine lines between respecting the child's agenda in play and failing to provide adult support and scaffolding. Attention to cultural and individual differences is paramount in importance. Adult agendas and child agendas must be balanced; how to solve the dilemma of meeting both the child's mental and learning needs and socio-emotional needs; how to simultaneously accept and challenge the child at play and learning, at doing and making, inventing and imagining, when the child is alone, in small and large groups, at the horizon of new consciousness.²¹ Adult involvement in technology play and nature play of children are both important; enriching the play of immigrants and language learners helps these little children become little students in schools.¹⁰

Shifts over the ECDE range

Play expectations and play benefits are not the same across the early learning continuum from birth to age 8 or 9 years, the traditional definition of ECDE. Play is a medium and context for learning during the early years. Play serves as a "leading activity" for mental development from birth to five years;²² but schoolwork and subject matter mastery assumes this role in intellectual development as the child enters the latter stages of the early childhood education age range.²³ More research is needed to fill the gaps in what is known about the changing forms and functions of playful learning and learn-full play over the entire range of ECDE. The same applies to the study of cultural contexts, disabilities and play, play therapy and sundry other important play and early childhood topics.

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