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Clinical Report

The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on Children in Poverty

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ABSTRACT

Play is essential to the social, emotional, cognitive, and physical well-being of children beginning in early childhood. It is a natural tool for children to develop resiliency as they learn to cooperate, overcome challenges, and negotiate with others. Play also allows children to be creative. It provides time for parents to be fully engaged with their children, to bond with their children, and to see the world from the perspective of their child. However, children who live in poverty often face socioeconomic obstacles that impede their rights to have playtime, thus affecting their healthy social-emotional development. For children who are underresourced to reach their highest potential, it is essential that parents, educators, and pediatricians recognize the importance of lifelong benefits that children gain from play.

More than 15 million children in the United States younger than 18 years live in poverty.¹ These children experience disparities in education, health care, and socioeconomic resources.²⁻⁶ Children living in poverty may also be deprived of the benefits of safe and creative playtime and access to age-appropriate extracurricular activities. The implications of play deprivation may be substantial, because play is essential to the social, emotional, cognitive, and physical well-being of children beginning in early childhood.⁷ In addition, play offers an opportunity for parents to view the world from their child's perspective as they engage fully with their children during playtime; all families deserve ready access to this bonding opportunity. Even before the United Nations High Commission for Human Rights cited play as a right of every child, philosophers and psychologists, such as Plato, Piaget, and Friedrich Froebel, recognized the importance of play in healthy child development.⁸⁻¹⁰

This report addresses issues that may deprive children who live in poverty from gaining the maximum benefit from play. Because it follows an earlier report that focused on factors reducing

free playtime for children whose families have resources, this report addresses issues specific to children from lower-income families.⁷ Although some of the factors covered in the previous report may also apply to children from lower-income and poor families, 3 issues disproportionately affect these children and merit special attention. First, access to recess and other in-school creative and physical outlets (eg, physical education, art, music), as well as after-school youth development programs are reduced. Second, out-of-school opportunities for play may be compromised by a lack of safe play areas, because parks and playgrounds are less abundant in lower-income areas and, in some cases, may be unsafe because of drug dealing, violence, and vandalism.^{11,12} Finally, because lower-income parents have to deal with additional social, emotional, and economic stressors of daily living, they may have less time, energy, and resources available to provide active and creative playtime at the park, playground, or even in the home.

All children deserve the opportunity to reach their highest potential. The optimal developmental milieu for children includes academic enrichment, as well as opportunities for physical, cognitive, social, and emotional growth offered in school, home, and community settings. There are different forms of play—free unstructured play, which uses unlimited creativity, and semistructured play, which is guided play with joint attention by parent and child. It is beyond the scope of this report to define and divide, but poverty may prevent challenges to both unstructured and guided play.

Free unstructured play, as well as creative and physical outlets, contribute to social and emotional growth. This report offers guidance on how pediatricians can advocate for children by helping families, school systems, and communities consider how best to ensure play is protected and promoted as the optimal developmental milieu for positive child and youth development is explored.

THE BENEFITS OF PLAY

It could be argued that active play is so central to child development that it should be included in the very definition of childhood. Play offers more than cherished memories of growing up, it allows children to develop creativity and imagination while developing physical, cognitive, and emotional strengths. A previous manuscript described the benefits of play in fuller detail.⁷

Play enhances physical health by building active, healthy bodies. Physical activity beginning in early childhood prevents obesity.¹³ In fact, play may be an exceptional way to increase physical activity levels in children and, therefore, may be included as an important strategy in addressing the obesity epidemic.^{14,15}

Play contributes to healthy brain development.^{16–18} Children engage and interact with the world around them through play from a very early age. Even in the academic environment, play helps children adjust to the school setting, thereby fostering school engagement, and enhances children's learning readiness, learning behaviors, and problem-solving skills.^{19–31} In addition, play and recess may increase children's capacity to store new information, as their cognitive capacity is enhanced when they are offered a drastic change in activity.^{19,20}

Play is essential to developing social and emotional ties. First, play helps to build bonds within the family. Children's healthy development is mediated by appropriate nurturing relationships with consistent caregivers.¹⁶ Play allows for a different quality of interaction between parent* and child, one that allows parents to "listen" in a very different, but productive, way. When parents observe their children playing or join them in child-driven play, they can view the world through their child's eyes and, therefore, may learn to communicate or offer guidance more effectively. Less-verbal children may be able to express themselves, including their frustrations, through play, allowing their parents an opportunity to better understand their needs. Above all, the intensive engagement and relaxed interactions that occur while playing tell children that their parents are fully paying attention to them and, thereby, contribute to a strong connection.^{17,32,33} Play also helps forge connections between children. It allows them to learn how to share, to negotiate and resolve conflicts, and to learn self-advocacy skills when necessary.^{34,35} It teaches them leadership as well as group skills that may be useful in adult life.

Play should be an integral component of school engagement. School engagement is best realized when the educational setting attends to the social and emotional development of children as well as their cognitive development. The challenge is to make each child feel competent in a school setting, because the experience of success forms positive associations with school attendance.⁹ Although we hope for each child to demonstrate academic strengths, opportunities to exhibit social, physical, and creative strengths optimizes the chances that children will realize their areas of strength. Play, recess time, and classes that foster creative aptitude and physical fitness allow for peer interactions that contribute both to school engagement and social-emotional learning. Social-emotional learning should not be thought of as distinct from academic learning, because it can creatively be integrated with academic learning and has been shown to enhance children's ability to learn.³⁶⁻³⁸

Play is a natural tool that children can and should use to build their resilience. At its core, the development of resilience is about learning to overcome challenges and adversity. As mentioned, children learn to deal with social challenges and navigate peer relationships on the playground. In addition, even small children use imaginative play and fantasy to take on their fears and create or explore a world they can master. Play allows them to create fantasy heroes that conquer their deepest fears. It allows them to practice adult roles, sometimes while playing with other children and sometimes while play-acting with adults.^{34,39-41} Sensitive adults can observe this play and recognize the fears and fantasies that need to be addressed; however, in many cases, play itself helps children meet their own needs. As they experience mastery of the world they create, children develop new competencies that lead to enhanced confidence and the resilience they need to address future challenges.^{34,42}

FACTORS THAT REDUCE PLAY FOR CHILDREN IN POVERTY AND THE POTENTIAL IMPLICATIONS

Reduced Access to Play in Schools

There has been a national trend over the past decade of reducing playtime as an integral part of the school day. This trend is most easily observed in the reduction and, in some cases, elimination of recess; however, there are more subtle changes throughout the school day that

reduce children's opportunity to play. First, the approach to early education that naturally incorporated play into the school day is shifting toward a more academically oriented instructional approach as new standards for reading readiness have changed for even kindergarten students.⁹ Second, in many districts, there is less school time allocated to the creative arts and physical education.^{9,43,44} These subjects contribute to a well-rounded education for a variety of reasons but share some of the benefits of play. They allow for a break from the standard academic subjects, foster creative and physical expression, and teach relaxation and stress-reduction skills that will last a lifetime.^{9,13} Finally, even after-school activities have shifted away from play and physical activity and toward being an extension of academics and a space for homework completion.⁴³ This report focuses on reduced recess for illustrative purposes.

Many of these trends are disproportionately affecting underresourced school districts because of targeted efforts to reduce significant academic disparities. It is a national imperative that all children are given the opportunity to reach their academic potential, and efforts to reduce disparities between children with varying levels of resources are urgently needed. It remains important, however, that what is known about child development, including social and emotional learning, remains at the forefront of consideration as policies to raise academic standards and performance for children are created and implemented. Play, in all its forms, needs to be considered as the ideal educational and developmental milieu for children is created. Because poorer children are most dramatically affected by these policies, stakeholders must remain vigilant in ensuring that children do not inadvertently suffer from the diminution of play in their lives while exploring potential solutions to benefit them academically.

A report by the National Center for Education Statistics revealed that children who attend schools with high minority and high poverty rates in urban settings are more likely to have reduced recess time as compared with their peers in more affluent suburban areas.⁴⁴⁻⁴⁶ Twenty-eight percent of schools with students who have the highest poverty rates had no recess at all.

The No Child Left Behind Act of 2001, designed to decrease the achievement gap of disadvantaged students, allocated additional educational resources and enrichment programs while decreasing recess time to allow more formal educational encounters.⁴⁷ At its inception, child development experts, including educators and pediatricians, voiced caution about the demise of playtime for young children with the proposed increased curriculum time of the program.⁹ The experts supported the Alliance for Childhood recommendations that children from low-income families be afforded time to learn how to play and time to play.⁹ Perhaps in recognition of the importance of the social and emotional development, as well as academic success of children who live at or below the poverty line, the US Department of Education in 2009 announced the Race to the Top Program, an education initiative that financially rewards school districts that support improving social, cognitive, physical, and emotional school readiness of disadvantaged students. In bids to receive the rewards, school districts must demonstrate focused programs that prepare students in the core academic subjects and other subjects that contribute to the development of well-rounded students, such as physical education and the arts.⁴⁸ Thus, children who might otherwise not be afforded opportunities for physical activity and enrichment programs outside of the school day have designated time to enhance their total development.

The disparity between access to recess between middle-income and lower-income districts may be explained by factors other than recess time being transferred to reading and math instruction. It has been suggested that reduced recess in poorer areas is reflective of adult concerns that it is not safe for poorer children to have unstructured time; yet, it has not been proven that recess is unsafe. A time to play is different from the environment in which play occurs. When children have toys and equipment with which to play and attention is paid to helping the children transition back to class, the benefits of recess in terms of expressivity, exercise, and socialization suggest its vital role in the child's school day and overall well-being. Some experts believe the real danger is that the misunderstanding has led to the removal of playtime.⁴⁹ The reduction of recess and other in-school opportunities to play affect all children but may have a particularly detrimental effect on poorer children, because they are likely to have fewer opportunities to play outside of school.^{11,12} In addition, because school is often the first true socialization environment for vulnerable children, the opportunity for social and emotional learning must not be compromised.

Poor children enter the educational system at a lower level of readiness, averaging 2 years behind their middle- and upper-class peers.⁵⁰ This may be explained in part by their increased exposure to social stressors (higher rates of single mothers who lack social supports and financial resources, absent fathers, limited access to early childhood education, unsafe neighborhoods, lack of preventive health care). They mainly enter schools in poor communities that lack financial resources to enhance the educational process.⁵¹ Schools, under pressure to increase academic performance and to decrease the achievement gap of students, have increased direct educational time, including after-school enrichment and tutorial programs. Although it is important to decrease academic disparities, enhanced nonacademic interactions are also essential to prepare children for future success. If the overall goal is to decrease school failure, which could ultimately lead to depression, entry into the juvenile justice system, and continued economic deprivation, a response to the problem has to include efforts to promote school engagement.⁴⁹ As previously discussed, opportunities for play and social and emotional learning enhance school engagement. Quite simply, school engagement occurs when children succeed academically, have other nonacademic opportunities for success (creative arts, physical education), and consider school a place in which they feel safe and enjoy spending time.

Play in the school day offers benefits to academic as well as social and emotional learning. A recent report by Barros and others stated that a break during the school day of ≥ 15 minutes was associated with better teachers' ratings of classroom behavior scores.¹⁹ Good behavior in the classroom is associated with a more productive learning environment secondary to increased attentiveness.^{19,20} In addition, children's ability to store new information is increased, because their cognitive capacity is enhanced by a drastic change in activity.⁵¹⁻⁵³ A change in academic subject and even physical education class may not offer the same benefit as free-play recess.⁴⁹ A reduction of time for physical activity may have even greater implications for boys. Schools that use only sedentary styles of learning may be a more difficult environment for boys to navigate successfully and contribute to the discordant academic abilities between boys and girls.^{54,55} These findings suggest that decreasing and eliminating recess for students at risk for school failure may be counterproductive.

Finally, it is recognized among educators that recess represents the most powerful strategy to get the most children to participate in physical activity.⁵⁶ In its “Physical Activity Guidelines for Americans,” the US Department of Health and Human Services recommends 1 hour or more of physical activity per day, with a major part of the hour dedicated to moderate to vigorous physical activity at least 3 times per week for children and adolescents.⁵⁷ Physical education curricula should enhance attitudes, habits, and behavioral skills that result in continued physical activity throughout life.¹⁴ Overall, recess offers the most available opportunity for children to play and to engage in physical activity, followed by physical education classes and after-school activities.⁵⁸

Reduced Out-of-School Opportunities for Play

Children cannot play safely outside of the home in many poor communities—urban, suburban, and rural—unless they are under close adult supervision and protection. This is particularly true in areas that are unsafe because of increased violence or where other environmental dangers exist.^{11,12} In the past, when neighbors knew each other and often supervised each other’s children, there was an extra layer of protection for neighborhood children when they played outside. In today’s society, it is not unusual for neighbors not to know one another. Therefore, parents are alone in protecting and supervising their children, which can severely limit outside playtime.

Children who are not engaged in play and physical activity outside of school hours spend time engaged in sedentary activities, such as viewing hours of television, playing video games, or listening to music. This time is often spent in isolation without social interaction and without adult supervision. In sharp contrast to the benefits of active, creative play, there is substantial evidence that excessive screen time has adverse effects.^{59–64} The AAP policy statement on media education presented research that associates media exposure with negative physical and behavioral health problems in children, including obesity, violent and aggressive behavior, depression, anxiety, earlier sexual behaviors, poor academic performance and self-image, nightmares, and tobacco and substance abuse.^{63,64}

The sedentary lifestyle is associated with obesity, for which children from low income and minority families are already disproportionately at risk.⁶⁵ The AAP and others have reported that children who are obese in early childhood are more likely to be obese adults and to be at risk for the comorbidities associated with obesity, including type 2 diabetes mellitus, hypertension, coronary artery disease, hypercholesterolemia, hyperlipidemia, asthma, and sleep apnea.^{14,66,67} In addition to the long-term health effects, obesity may be associated with immediate social and emotional consequences, including low self-esteem, negative body image, depression, teasing and bullying, social marginalization, and discrimination.^{63,64,66,67} Obesity can have socioemotional effects on academic achievement and opportunities and can, therefore, thwart educational trajectories associated with long-term success.^{66,67}

Family Considerations

Although lower-income parents have the same desires for their children to succeed and reach their full potential as do parents with greater economic and social assets, they must focus

primarily on the family's day-to-day survival. When food and shelter are at risk, ensuring time for the children to have free and creative playtime may not be a priority. Economic hardship is a major obstacle for these families, in which the parents are more likely to have a lower educational level or be single heads of households. Minority households (black and Hispanic) and immigrant parents are at increased risk of having children who live in poverty.^{1,68} There is more likely to be a history of substance abuse in poorer families. The neighborhoods in which they live lack community resources, such as community centers, parks, and fully equipped supervised playgrounds that offer safe places for children to play and to gather. Children have fewer opportunities to participate in organized sports. Because of fear of violence, families do not venture outside with their children for fun physical activities, such as walking, bike riding, swinging, swimming, playing tennis, or jogging.^{11,12,69} In a safe environment with community resources, these activities would not be an additional financial burden to already challenged families.

Poor families may also be at a disadvantage in a material-driven culture in which marketing messages, often claims without proof, abound about what children need to prosper. They may absorb the messages that the best toys are those that are the most expensive or that children are only academically prepared for preschool if exposed to a variety of enrichment tools and activities that claim to produce high-achieving children. Parents who cannot afford these market-driven materials may feel disempowered to actively play with and enrich their children using the most effective known tools—themselves. Children's creativity is enhanced with the most basic (and least expensive) toys, blocks, dolls, and art supplies. Children's academic preparedness may be most developed with low-cost time spent reading with parents. They will learn to love books when they associate quality time with their parents with reading.⁷⁰

Lower-income parents may have fewer resources, including time, to invest in playing with their children. Because play holds so many benefits, including fostering connection between parents and children, less play may be an added, although rarely mentioned, risk of poverty. No one is certain what skills will be needed for our children to be best prepared to lead us into the future, but we do have insight into which character traits will produce children capable of navigating an increasingly complex world. These include confidence, the ability to master the environment, and a connection to others. In addition, to be resilient—to retain hope and to be able to overcome adversity—young people need the added character traits of honesty, generosity, decency, tenacity, and compassion.⁷¹ Children gain these essential traits within a home, when parents and children interact in a supportive manner and share unconditional love.⁷¹⁻⁷⁶ Play is a time-tested way for families to have these types of interactions.

WHAT ARE THE SOLUTIONS?

Because there are many causes for the decreased amount of play in the lives of lower-income and poor children, there is no single solution. In addition, simplistic proposed solutions might not take into consideration the complex interplay of factors that have led to decreased play, including the need for safety. For example, if a child does not reside in a safe neighborhood, it may be unwise to simply propose more outdoor child-centered play. Similarly, it may be naïve to insist on more recess without simultaneously coming up with solutions that address the very substantive issue of educational disparities. It is critical, however, that as strategies are developed

that address educational needs and safety, the recognition of children's need to play be strongly advocated, because play is known to promote healthy development and resilience.^{46,52,55,58} To effectively preserve play in the lives of economically disadvantaged children, its presence in schools, communities, and homes must be supported.

In schools, the need to support social and emotional learning and healthy child development must be held alongside the need to increase academic scores. Otherwise, school engagement might suffer and efforts at creating a better-prepared generation might fail. The bottom line to school engagement is that schools should be the kind of places that children and adolescents want to be. This means that educators and policy makers must make opportunities for lower-income children to gain the benefits offered from physical education, recess, and the arts so they can reach their highest potential for cognitive, social, and physical development and so children and adolescents will like school. Advocates can also promote programs such as Head Start, the purpose of which is the promotion of school readiness for low-income children. Head Start provides an environment that enhances students' emotional, social, and cognitive development and has demonstrated effectiveness.⁷⁷ One of the keys to the success of Head Start has been the involvement of parents in social interaction with their children in playing, reading, and reading-related activities.⁷⁸

Policy makers and community leaders must work together to prioritize the need for safe spaces for families to gather and for children to play. Supervised after-school programs can be critical to children who live in communities where outside playing might be dangerous or unsupervised. Community-based programs that offer a wide variety of services, ranging from homework assistance to athletic programs and from character development to the creative arts can contribute heavily to the positive development of youth. Keeping school facilities open for use by community families in the evenings and on weekends when they are usually closed may increase engagement in these activities. Communities can also offer strategies to link families at or below the poverty level to early education, health care, family support, and parenting education.

Parents of all income levels should use time together at home to engage in both free and structured play with their children. Playtime is bonding time for families. A first step may be education about the value of play that simultaneously refutes false notions that for play to be effective, it must involve expensive toys. Parents from across the economic spectrum need to understand that it is their presence and their attention that enrich their children and that one-on-one play is a time-tested, effective way of being fully present. In parallel, we must be sensitive to the fact that time itself is a commodity when struggling for economic survival. The most comprehensive solutions, therefore, must address broader economic disparities and other factors that create stresses for economically disadvantaged parents.

Certainly, these solutions are broad and societal, going beyond the purview of the pediatrician's office. But as child health professionals committed to the attainment of optimal physical, mental, and social health and well-being for all infants and children, pediatricians have a role in advocating for broad-based solutions that will preserve child play.

ADVICE FOR PEDIATRICIANS

As caring, objective child health professionals, pediatricians have a natural role to advocate for the conditions that allow for the optimal physical, emotional, and social development of children and adolescents. Because play contributes substantially to the healthy development and well-being of children, it is important that pediatricians promote the inclusion of play in homes, schools, and communities.[‡]

- Pediatricians can educate parents about the importance of free, unstructured play in the normal development of children.
- Parents may be influenced by marketing messages that suggest the best toys are those that are financially out of reach. They should be educated that simple, inexpensive toys, such as dolls, jump ropes, blocks, balls, and buckets, are more effective in allowing children to be creative and imaginative than more expensive toys, which can make play a more passive and less physically involved experience.
- Pediatricians can educate parents about the benefits of using play as an opportunity to engage fully with their children. Playtime offers opportunities for parent-child bonding. Playtime offers parents the opportunity to promote healthy social-emotional development in their children through active engagement and shared imagination.
- Pediatricians can encourage parents to use love and understanding to encourage children to try again even when at first they fail. Parents can be informed that positive reinforcement goes further than negative responses as children engage in play alone and with others.
- Pediatricians can use well-child encounters to educate parents about the benefits of play to enhance physical activity that can help prevent childhood obesity. Parents should be educated about the potential for lifelong obesity in obese children, the lifelong health morbidities associated with obesity, and the long-term psychosocial impact of obesity.
- Parents should be encouraged to participate in physical activities with their children that will not have a financial impact on the family.
- Pediatricians can provide parents with information about resources that can provide financial, educational, and mental health assistance to families that have been marginalized by poverty. This may address the underlying stressors that interfere with parents' ability to engage fully in play activities.
- Pediatricians can educate parents about the negative impact of media exposure on children and encourage them to limit screen time and substitute other activities, including playtime and outdoor activities, for screen time. This is an opportunity to educate parents about the AAP recommendations regarding no media time for children younger than 2 years and fewer than 2 hours per day for older children.
- Pediatricians can provide parents and families with information about community resources that provide physical activities for children, such as team sports and camps. They should provide information about organizations that provide "scholarships" or grants that pay for activities that have associated costs.
- Pediatricians can educate parents about the importance of children's play outdoors in nature. Spending unstructured time in nature, surrounded by dirt, trees, grass, rocks, flowers, and insects inspires children's play and offers physical and emotional benefits.

- Pediatricians can advocate for safe play spaces for children who live in communities and attend schools with a high proportion of low-income and poor children by emphasizing that the lifelong success of children is based on their ability to be creative and to apply the lessons learned from playing.
- Pediatricians may consider offering presentations to help educators, community leaders, faith-based groups, and politicians understand the developmental benefits of play to children.
- Pediatricians may advocate for policies that reduce educational disparities while supporting the inclusion of recess, physical outlets, and the creative arts as means to enhance social and emotional learning and school engagement.

CONCLUSIONS

Children who live at or below poverty level in the United States experience educational and health disparities from early childhood. These children deserve additional resources to achieve academically, foster school engagement, and develop their social and emotional competencies. Many children reside in families that face stresses related to daily survival, including whether they will have food or safe shelter, leaving less energy to focus on enrichment opportunities, including play. Some live in neighborhoods where violence may be the norm and children playing on neighborhood playgrounds the exception. School systems are focused on overcoming their academic deficiencies in a safe environment often at the expense of time for arts, recess, physical education classes, and after-school activities that include playing, despite evidence that supports that what happens in play contributes substantially to social and emotional learning, even in the classroom.

Regardless of their socioeconomic status, all children have the right to safe places to play regularly, during which they develop cognitive, communication, problem-solving, negotiation, and leadership skills. They have the right to engage in safe and regular physical activity that will decrease the incidence of lifelong health disparities. The physically and emotionally healthy children of today will become the productive citizens who will contribute positively to society in the future.

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* The word “parent” is used in this report to represent the wide range of adult caregivers who raise children.

† The guidance in this report is offered by the AAP and, therefore, is targeted to pediatricians. Other health professionals who serve children and adolescents, including other

physicians, pediatric and family nurse practitioners, and physician assistants are welcome to consider incorporating this guidance into practice.

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