

Resurrecting Free Play in Young Children

Looking Beyond Fitness and Fatness to Attention, Affiliation, and Affect

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We have observed that the nature and amount of free play in young children has changed. Our purpose in this article is to demonstrate why play, and particularly active, unstructured, outdoor play, needs to be restored in children's lives. We propose that efforts to increase physical activity in young children might be more successful if physical activity is promoted using different language—encouraging play—and if a different set of outcomes are emphasized—aspects of child well-being other than physical health. Because most physical activity in preschoolers is equivalent to gross motor play, we suggest that the term “play” be used to encourage movement in preschoolers. The benefits of play on children's social, emotional, and cognitive development are explored.

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In observing the obesity epidemic,¹ many grandparents, and even some parents, remark that children of today no longer play the way children used to play. Play is the spontaneous activity in which children engage to amuse and to occupy themselves. It is also a way children optimize their own brain development. Viewed from this perspective, the nostalgic observation that children “no longer play” should be taken seriously because the consequences for child well-being extend beyond the problem of obesity.

We know of few systematically collected data that describe exactly how the amount and/or nature of play in young children has changed; there is indirect evidence that children are doing less of it, less without structure imposed by adults, and less of it outdoors. Between 1981 and 1997 children's free playtime dropped by an estimated 25%, and this change appears to be driven by increases in the amount of time children spend in structured activities.² Within children's unstructured time, there are sedentary and passive activities such as watching television, using the computer, and playing videogames that compete with

active play. For example, compared with preschool children who watch less than 2 hours of television a day, those who watch 2 hours or more spend an average of 30 minutes less time each day playing outside.³

We start with the premise that children's active, free play is disappearing and/or changing. Our purpose is not to explain why this has occurred or to describe what societal values it might reflect. Instead, we aim to demonstrate why play, and particularly unstructured outdoor play, needs to be restored to the lives of children. Play has the potential to improve all aspects of children's well-being: physical, emotional, social, and cognitive. We argue that the current emphasis on increasing physical activity in young children to address the problem of obesity, while an important public health agenda, might be more successful if the exposure (physical activity or exercise) were promoted with different language (play) and if a different set of outcomes were emphasized (aspects of child well-being other than physical health).

WHY A DIFFERENT LANGUAGE?

Young children are physically active in different ways than older children, adoles-

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cents, or adults. Because most physical activity in young children is equivalent to gross motor play, we suggest that the term “play,” not the terms “physical activity,” “exercise,” or “sports,” be used to promote movement in young children. As preschoolers play, they have brief bouts of varied activities with frequent rest periods.⁴ Compared with exercising adults, children at play have more spontaneity and less interest in sustaining a single activity. These differences may result from differing needs of the developing brain to provide itself, through activity, with a pattern of varied stimulation from the environment that subserves its own optimal development.⁵

Another reason to use the word *play* is that parents may view the term more positively. Adults thinking of exercise often imagine structured aerobic activity or sports.⁶ These images can evoke in some parents the upsetting memories of failed efforts at weight loss or maintenance.⁷ Furthermore, many adults have also had negative childhood experiences with exercise or sports. All these memories contrast greatly with joyous recollections of unstructured childhood play. Thus, if parents are to create opportunities and cues for their young children to be physically active, the term play may be the most motivating and positive term to use with parents.

A final problem with using the term *physical activity* is that the word “active” has varied interpretations for parents of young children. In the context of the obesity epidemic, the primary rationale for encouraging both adults and children to increase their physical activity levels is that energy expenditure will increase to match energy intake. A problem with this rationale is that it does not seem coherent to many parents who already perceive that their young children are very active. The recent surge in medical treatment for attention-deficit disorder, especially among preschoolers,⁸ may be a reflection of a widespread parental perception that their children are “too active.” Parents will often use the term *active* to describe a young child who garners their attention by disrupting and distracting them in their own chores. Similarly, the active child might be one who moves busily, with gross motor quickness and curiosity, between novel objects and tasks. Depending on the child’s age and the intensity of the behavior, these characterizations of active children merely describe the behavior of healthy children. Thus, to the extent that it is healthy for children to be active, parents may fail to comprehend advice to increase their children’s level of physical activity. The term play might be more easily understood by parents than the term physical activity when suggesting that their children be more active.

WHY A FOCUS ON OTHER OUTCOMES?

For those researching or delivering health promotion or health care, the link between physical activity and young children’s health has focused primarily on achieving physical fitness and a healthy body weight. There is only indirect evidence in young children of a relationship between active play, physical fitness, and body fatness.⁹ However, preschool children seem to have highest physical activity levels while engaged in play outdoors,^{10,11} and in older children physical activity improves fitness and

reduces excess body fat.^{12,13} A major difficulty in focusing on the outcomes of fitness and fatness is parents’ perceptions about health and weight in young children. First, most parents with overweight preschoolers do not think their overweight children are overweight.¹⁴ This is probably because parents have differing views from public health or health care professionals regarding the definition, causes, and consequences of overweight.¹⁵ Second, parents, especially those who are obese, can be offended by the labels of obesity or overweight, making it potentially problematic to use either term or to link these terms to physical activity.¹⁶ Third, parents tend to see their child’s weight gain early in life as a marker of successful nurturance.

In addition to these complex perceptions about weight, there are also complex perceptions of health. Although the inseparable nature of health and well-being has been emphasized for more than a half century,¹⁷ the artificial dichotomy between mind and body may inadvertently be exacerbated by calls to promote physical activity in children as a response to the obesity epidemic. A parent who is asked to consider how their young child is “doing” (as opposed to whether their child is “healthy”) is more likely to think about whether their child is happy, calm, curious, sleeping well, and playing with other children than whether their child is sufficiently lean or active.

Parents are the primary mediators of gross motor play in their young children. To encourage parents to maximize the opportunity for their children’s play, we believe there should be more emphasis on the 3 *a*’s of child well-being than on the 2 *f*’s of physical health. That is to say, parents will be more inspired by the potential benefits of play arising in 3 domains of their child’s well-being—attention (cognitive), affiliation (social), and affect (emotional)—than in 2 domains of physical health—fitness and fatness.

ATTENTION

Attention, an aspect of cognitive functioning that involves inhibition and impulse control, is highly valued by parents because of its ability to enhance learning. The emergence of this aspect of cognition in young children, for example, permits group learning—listening quietly with others to the reading of a story or taking turns with others in a shared activity. In a recent national survey of 500 public school teachers and 800 parents, 90% of teachers and 86% of parents believed that physically active children are better able to learn and are better behaved in the classroom.¹⁸ While there has been research linking physical activity in children with the development of sensory-motor integration,¹⁹ there has been little research in children examining the relationship between physical activity and attention or other aspects of cognition.

In animal experiments, rats and mice exposed to an enriched environment show improvements in learning and memory that are related to changes in brain neurogenesis.²⁰⁻²² An enriched environment is one in which there are more rodents in the cage, objects such as toys and tunnels to stimulate exploration, and a running wheel for exercise. For children the outdoors seems to provide

such an enriched environment. Outdoors is where free play and gross motor activity in young children are most likely to occur.^{10,11,23,24}

While playing outdoors a child is likely to encounter opportunities for decision making that stimulate problem solving and creative thinking because outdoor spaces are often more varied and less structured than indoor spaces. In addition, there are usually fewer constraints outdoors on children's gross motor movement and less restriction on their range of visual and gross motor exploration. Together these factors that do not prescribe or limit activity induce curiosity and the use of imagination.^{25,26}

The problem solving that occurs in play may promote executive functioning—a higher-level skill that integrates attention and other cognitive functions such as planning, organizing, sequencing, and decision making. Executive functioning is required not only for later academic success but for success in those tasks of daily living that all children must master to gain full independence, such as managing their belongings and traveling to unfamiliar places. Parallel to these cognitive problem-solving skills are another set of skills that children require for social problem solving, and these skills may also be promoted by play.

AFFILIATION

Play provides opportunities for children to learn social interaction, and all parents aspire for their children to be successful in these interactions. This success is a measure of the children's social well-being and is marked by the ability of children to develop and sustain friendships, to cooperate, to lead, and to follow. Unstructured active play with others, including with parents, siblings, and peers, is a major opportunity to cultivate social skills.^{27,28} This is because all play with others requires solving some form of a social problem, such as deciding what to play, who can play, when to start, when to stop, and the rules of engagement.²⁹ Solving these dilemmas and conflicts that arise in play encourages children to compromise and to cooperate. This process can cultivate a range of social and emotional capabilities such as empathy, flexibility, self-awareness, and self-regulation. Such capabilities, sometimes referred to together as "emotional intelligence," are essential for successful social interactions in adult life.³⁰ Emotional intelligence contributes to success in the workplace,^{31,32} and it is the foundation for success in the intimate social relationships, such as between parents, that become the primary models for children's social development.³³

There is a large body of scientific literature that demonstrates the health-promoting effects in adults of various forms of social connection.³⁴ However, little attention has been paid to those influences in early life that allow children to enter adulthood with the abilities to develop and to maintain social connections. These abilities arise through early influences on the developing brain that can be cultivated through unstructured free play. Although many abilities may contribute to achieving social connections, we maintain that empathy, which can be defined as recognizing the emotions of self and others and convey-

ing that recognition, is an ability that emerges in early childhood, is the key to meaningful affiliation, and arises, in part, from the experience of free play.

AFFECT

Perhaps, even more than being smart and getting along with others, parents want their children to be happy, and it is the happiness that children can achieve through play that may be the most important message to communicate to parents about the benefits of physical activity in children. Although it has been the subject of little scientific inquiry in young children, free play has the potential to improve many aspects of emotional well-being such as minimizing anxiety, depression, aggression, and sleep problems. In adults, physical activity can decrease depressive symptoms^{35,36} while physical inactivity has been shown to increase the risk of developing depression.^{37,38} In addition, exercise in adults has been shown to lessen anxiety both acutely and over time.^{39,40} Studies in older children have shown that improved mood and emotional well-being are associated with physical activity.^{41,42} Mood may be affected not only by the physical activity itself but also by exposure to sunlight if the activity occurs outdoors.⁴³

Therefore, it seems likely that free play in young children can improve emotional well-being. In focus groups with low-income mothers of preschool children, most mothers felt that improvements in their children's mood and mental health were the most immediate benefits of physical activity in their children.⁴⁴ Furthermore, by joining their children in gross motor play, parents may also be able to increase their own physical activity and receive, for themselves, some improvement in mood.

Because improved mood may be the most immediate and visible benefit of play, it is also the benefit most likely to reinforce play. If playing with a child makes both the parent and child feel better, play will be sustained without any public health prescription. Indeed, many adults who exercise regularly report doing so because it makes them feel better and it relieves stress. Even the lives of young children are full of emotional stresses. These stresses, experienced by the child's brain, result in a number of physiologic responses in the body, collectively referred to as "allostatic load,"⁴⁵ that can impair children's health.⁴⁶ Gross motor play may be an important mechanism to dampen allostatic load. A smile on the face of a playing child reflects multiple physiologic processes in the body that can improve health. Learning at a critical period in development that play and movement relieves stress and enhances mood may help children sustain physical activity patterns over their lifetime.

CONVEYING THE MESSAGE ABOUT PLAY

A major challenge in resurrecting free play is how best to reach parents with messages about the important role of play in their children's lives. Although those who are providing primary health care to children have a crowded agenda and little time for behavioral counseling, communicating with parents about play should, nevertheless, receive high consideration because the benefits of play can

be presented in a way that is congruent with parents' aspirations for their children's well-being. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) also has an enormous potential to provide the same messages to parents about play. The WIC Program serves more than 7.5 million US women and children,⁴⁷ and almost half of all US children are enrolled in WIC at some point in their lives.⁴⁸ With the growing problem of obesity in children enrolled in WIC,⁴⁹ new behavioral messages are required to promote energy expenditure, but these messages also need to be formulated with the language and set of outcomes that parents will find most meaningful.¹⁵

If we wish to get young children physically active through play, those efforts should extend beyond parents and the household. With an increasing number of parents working outside the home, many children younger than 5 years spend time in preschools or center-based day-care facilities.⁵⁰ The Head Start Program reaches almost 850 000 US preschool children and has a core mission to address child well-being from a holistic perspective.⁵¹ Preschools and day-care centers are ideal venues to consider incorporating guidelines for the amount of time and settings, particularly outdoor settings, available for unstructured, gross motor play.⁵² In all of these settings it needs to be emphasized that these activities are necessary for optimal brain development in children.

Fostering outdoor play will also require broader environmental and policy changes that cannot be implemented by individual pediatricians or parents acting alone. Developing safe outdoor play spaces is one intervention that must be addressed at the community level. Even where playgrounds are available, their use could differ according to neighborhood safety.^{53,54} To enhance the safety of playgrounds, the equipment should be appropriate for the range of developmental capabilities in young children, have protective surfaces, and be free of litter, broken glass, and illegal activity. Creating community coalitions to build and to maintain playgrounds can increase not only the number and safety of outdoor play spaces for children, but it can also foster social connections in the community, create spaces that are attractive for both children and their parents, and give community members a sense of ownership for these spaces.⁵⁵ The streets and yards around young children's homes can also be socially enriching and cognitively stimulating spaces in which children can play,⁵⁶ but traffic is a safety threat to many children outside of their homes.⁵⁷ Various traffic calming interventions in residential areas are one promising way to reduce children's injury risk while playing outdoors.^{58,59}

In an effort to resurrect free play, we should enthusiastically promote it on its traditional merits—that play allows children to experience the joys of movement, creativity, and friendship. Though it seems urgent to emphasize that play improves energy balance, we may get further in obesity prevention by realizing that modern neurobiology supports grandmother's conventional wisdom and that the brain will naturally reinforce behaviors that make it healthy.

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