POLICY STATEMENT Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

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The Crucial Role of Recess in School: Policy Statement

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This revision serves as an update of the 2013 policy statement, "The Crucial Role of Recess." It reemphasizes the crucial role of recess in child and adolescent development, citing research in the neurophysiology of learning, adolescent health, social-emotional development, executive skills, and the role of peer engagement and play for well-being. Recess represents a temporary suspension of academic cognitive effort helping to maintain efficiency, concentration, and morale. Breaks offer an opportunity for students to manage stress and promote prosocial development, a universal benefit for all ages. Recess positively impacts the teaching-learning environment and children's mental health. Pediatricians are natural allies with parents, students, school nurses, and school staff for the promotion and protection of regular breaks from the demands of concentrated classroom instruction.

INTRODUCTION

The United Nations Convention on the Rights of the Child (UNCRC) recognized childhood as "a special, protected time, in which children must be allowed to grow, learn, play, develop and flourish with dignity." Article 31 states, "Every child has the right to rest, relax, play and to take part in cultural and creative activities…. Children also need leisure, defined as time and space without obligations, entertainment, or stimulus, which they can choose to fill as actively or inactively as they wish."[1]

In 2013, the American Academy of Pediatrics (AAP) stated its perspective: "Recess is a necessary break in the day for optimizing a child's social, emotional, physical, and cognitive development. In essence, recess should be considered a child's personal time, and it should not be withheld for academic or punitive reasons."[2]

The COVID-19 pandemic provided a case study of society without the structure of in-person school.[3,4] Supportive adult relationships and peer engagement proved irreplaceable by the detrimental effects of their absence for children and adolescents. Routines embedded in the school

abstract

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day had bolstered the equilibrium of children and adolescents but were lost during lockdown, including daily recess, with its unique combination of social and physical play.

DEFINING RECESS

Breaks from classroom learning can encompass many experiences (team activities, one-on-one games, solitary play, and nonactive social interactions) within diverse settings (in classroom, indoor spaces, playground, and natural spaces) and for varying periods (brief breaks vs recess coupled with lunch). The Centers for Disease Control and Prevention (CDC) recently expanded its definition of recess to include older students: "A regularly scheduled period in the school day for physical activity and play that is monitored by trained staff or volunteers. During recess, students are encouraged to be physically active and engaged with their peers in activities of their choice, at all grade levels, kindergarten through 12th grade."[5] Students in middle and high school shift away from physical play toward social activities, manifesting among girls in middle school and all students in high school.[6]

PRESERVING THE AUTONOMY OF PLAY

The perspective of childhood as a unique period of intellectual, behavioral, social, and emotional development, spanning birth to young adulthood, is modern.[7] Prior generations of children and adolescents engaged in physical labor. From the late 19th century to the present, there has been a struggle between children seeking autonomy and adults exerting control over play. Often, adults envision purposeful, organized, and safe forms of play. Children and adolescents press for control over their leisure time, often preferring self-directed activities, challenging physical spaces, and free play with peers. The AAP and others have expressed concern about the encroachment of adult-driven, adult-managed games and sports that impede the creativity of youth in terms of play chosen and directed by children.[2] Within schools, recess breaks represent the sole time set aside for child-directed socialization with peers.[3,8] Adult participation at recess can help to make it more physically active, inclusive, and safe, without usurping the students' choice to participate or not, thus preserving student autonomy.

THE IMPORTANCE OF RECESS

Recess represents a temporary suspension of cognitive effort, which helps to maintain efficiency and concentration while managing stress, a benefit for adolescents and children. The importance of regular restorative breaks during an adult's workday is unquestioned. For students and teachers, however, such breaks need to be codified within a highly structured curriculum. Time allotted for recess depends on several factors: state laws, district policies, and importantly, principal and teacher discretion. Recess positively impacts teaching and learning, benefitting student achievement.[9–12] However, not all students experience daily recess. Schools with lower socioeconomic status and/or with a higher proportion of marginalized or minoritized students tend to offer less recess and are more likely to withhold it for academic or punitive reasons.[8,13,14] Generally, there are 2 competing perspectives. In the first, the school's mission is to prepare the student for work in a complex, shifting, technological society and break times compete with academic time. In the second, a school's responsibility is to help develop the whole child, preparing them for the intellectual rigors of adulthood and for the social, emotional, and complex societal challenges of 21st century life. Recess promotes this goal. Yet, irrespective of written state or district policy, recess often occurs at the discretion of an individual teacher, who may withhold it as a disciplinary tool or to extend academic teaching time.[15,16]

THREE CORE BENEFITS OF RECESS

Social and Emotional Benefits

Citing over 100 years of research, pediatricians have stressed the vital role of play and peer relationships in the social and emotional development of youth.[2,17] A school's social environment has been shown to be as important as its academic environment.[10] Recess affords a unique time for peer-to-peer engagement. Through give-and-take play, students master social integration. In this way, students collaboratively create an inclusive, positive school culture, extending from the playground to the learning environment.[18–21] In navigating peer activities at recess as well as the school environment, children and adolescents hone skills that augment academic learning, such as emotional self-control, perseverance, cooperation, communication, conflict resolution, and leadership.[13,17,22] Such skills provide a counterbalance to stress, especially for those who have been exposed to serious adverse events.[2,23–26] Educational settings, including recess, that promote social competence and a sense of connectedness help protect against victimization, substance use, and poor mental health outcomes.[27–29]

Physical Benefits

Concerns about rising sedentary time, weight gain, and declining physical fitness have fueled efforts to promote more moderate-to-vigorous physical activity (MVPA).[30,31] In addition to recess, daily physical activity can be incorporated into the school schedule via in-classroom breaks and integrated, physically active lessons, physical education classes, and before- and after-school activity options, described as a comprehensive school physical activity program.[32,33] Increasing the duration and/or frequency of

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breaks is a simple strategy to encourage greater MVPA during school hours.[33]

Although the intensity may vary, opportunities for movement accumulate throughout the day to counter sedentary hours. Recess offers time for students to engage in physical activities of their choosing "for the sheer joy of it,"[2] which translates to enjoyment of physical activity in adulthood.[34] Beyond the benefits of activity on physical health, physically active play has positive impacts on cognitive processing and development of executive functions.[2,35–37]

Cognitive/Academic Benefits

Two areas of research support taking breaks during the school day to enhance academic learning. One examines the effect of "wakeful rest" as a critical first step for successful information storage. The other explores the positive effects of physical movement on the retention of newly acquired information.

Wakeful Rest and Learning

Learning is the capacity to acquire, store, and recover new information. Newly acquired information is represented by a fragile memory trace in which several neurons fire together. During sleep, repeated firing of the memory trace completes the consolidation process, preparing the memory for transfer to long-term storage within the frontal cortex.[38,39] Stabilization of a new memory trace occurs immediately after learning, provided that additional cognitive demands on working memory are suspended.[40–45] This pause has been termed "wakeful rest," a hiatus after learning that allows the neurons comprising the memory trace to be reactivated, primarily within the hippocampus.[44] Competing cognitive information acts as interference, preventing reactivation of the original memory trace, functionally erasing it.[40,44]

Wakeful rest is an "offline" state, characterized as daydreaming or mind wandering.[42] Studies on the benefits of wakeful rest typically utilize eyes-closed, immobile relaxation for 5 to 20 minutes.[40,42] However, other types of nondemanding activities have shown efficacy, including mindfulness meditation, listening to music, engaging in quiet social interactions, doing simple tasks, and/or drawing.[42] Recess can provide similar conditions that briefly free memory centers from additional cognitive interference.[44]

Physical Activity and Learning

A second line of research suggests that physically active play can aid memory retention, as well. Evidence supports the benefits of exercise and motor activity on brain function, promoting information processing, executive function, attention, and long-term memory in a dose-dependent manner.[46,47] Even a single bout of acute exercise has been shown to foster improved learning among students, from elementary children to young adults.[48–50] Moderate exercise, especially when coupled with wakeful rest, enhances long-term memory better than low- or high-intensity activity.[51] Several studies have utilized activities of similar intensity and duration as those that occur during recess breaks, suggesting that recess can aid learning by providing respite from active cognitive demands and by providing the opportunity for physically active play.[52]

By lowering stress and restoring attention and concentration, acquisition of information is enhanced during subsequent classroom teaching, as well.[9–13] To take advantage of all its cognitive and behavioral benefits, some educators have advocated for multiple daily recess breaks.[53,54]

IMPROVING RECESS QUALITY

Planning

Recess frequency and duration, available resources, types of spaces, and sufficiency of supervision determine what recess can offer.[18,19,21] Breaks must provide students with sufficient time to allow peer interactions and provide options for activity or relaxation to encourage students to regain focus. Simply providing a cessation of academic effort alone will not reap cognitive, social, and physical benefits. Quality recess hinges on quality planning. An evaluation of current policies; assessment of school resources; education of staff, students, and parents; and development of a collaborative strategy for implementation are critical components.[55]

Outdoor and natural spaces positively affect the mental and physical health of students and their readiness to learn and should be prioritized for recess.[56–58] Recess in outdoor spaces may not always be feasible, and some schools may be required to utilize indoor spaces for self-directed peer play. Wherever recess occurs, a variety of experiences should be offered, including a choice of quiet time or social interaction in addition to active free play and group activities.[59] Schools must accommodate physical, medical, and behavioral needs and capabilities; developmental stages; and student interests.

Ideally, students are included in the planning and implementation of recess alongside teachers and school administrators.[28] Student involvement in planning is especially important as students enter adolescence, when peers become a central factor in social and academic connectedness. Recess locations and design must attend to the inclusion of students with physical, mental, or emotional disadvantages or who might experience social isolation because of race, religion, dress, ethnicity, culture, gender identification, or disability.[60–63]

The CDC and SHAPE America have published strategies to support positive physical and social experiences during recess. This guidance includes assessing the state of play at

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recess, promoting physical activity, developing the playground space(s), incorporating inclusiveness, expanding types of play, and involving students and parents in the process of planning and implemention.[5,64]

Timing and Duration

In the United States, the duration and timing of recess varies by age, grade, district, and building.[64,65] The majority of elementary schools that offer recess do so during the same time allocated for students' lunch.[65] For students who eat lunch before recess, meals are often hurried and nutritionally incomplete, with students opting for fewer options and increased waste.[66,67] Research supports "Recess Before Lunch" to prevent a rushed lunch period and positively affect recess participation.[66–71] Teachers and researchers have noted improved behavior and attention once students resume classroom work when recess occurs before lunch.[6,9–13]

In US schools, the duration of recess varies widely, from less than 10 minutes to 60 minutes per day or more.[10,13,18,65] In other countries, such as Australia, Denmark, Finland, Japan, Turkey, Uganda, and the United Kingdom, students have multiple breaks (morning, afternoon, lunch), following every 45 to 50 minutes of instruction.[14,18,21,54,55,72,73]

Peer-reviewed studies indicate that multiple breaks with a minimum of 20 minutes every day is optimal to realize the full cognitive, physical, and social benefits of recess for students.[2,3,5,8–13,18,21,53–55,59,65,72,73] At minimum, recess should occur often enough and long enough, with a variety of options for students, in order to mitigate stress and allow students to regain focus before resuming classroom instruction. The academic value of recess can be reinforced by including recess time as instructional minutes.[3,18,74,75]

RECESS SAFETY

Recess and breaks must be safe. Schools should promote appropriate language for self-expression and demonstrate best measures for conflict resolution as well as respect for others.[13,18] Recess and break times should be monitored directly and indirectly by a variety of staff. School nurses assume responsibility for students' medical well-being at recess.[76] Adults who directly oversee recess may or may not receive adequate training. In schools where monitors have received training in the supervision of safe play, recess has been shown to support learning and improve student focus and overall behavior.[13,18,53,55,77] Sufficient staffing, policies establishing parameters for interaction and behavior, and training that encourages equity and inclusion are critical.[78]

Balancing Safety and "Risky" Play

The exhilaration of play can help develop new skills by pushing against the boundaries of what adults may consider safe.[79,80] Sandseter described 6 different types of risky play, 3 of which are relevant to schools: play involving balance (climbing, swinging); speed (running); and/or "rough-and-tumble play" (keep away, sports).[81] Risky play demands heightened attention, self-regulation, creative problem-solving, and a recognition of personal boundaries, all of which are fundamental to a child's evolving independence. Providing opportunities for children to confront or create uncertainty, unpredictability, and even potential hazard as part of their play experiences should be viewed as an inherent purpose of play.[82,83] When recess monitors are well-trained, they can help establish shared expectations for tolerating some risk as a basis for healthy development.[6,18,21,55,64,77,84] Although physical bullying may be difficult to discern from active rough-and-tumble play, adults trained through risk-reframing workshops will feel more confident to put aside their anxieties and allay parental concerns.[79,80,84–87]

In addition to monitoring for physical safety, monitors must also watch for emotional bullying, which may be expressed face-to-face or more covertly. Bullying can include mocking, rumors, threats, physical intrusions, forced behaviors, alienation, and destruction of property.[88–93] Bullying peaks during middle school years, involving 1 in 4 students, then decreases during high school.[88] Supervisors should look for student isolation, taunting, name-calling, and signs of emotional trauma. Ensuring a positive experience during recess is a fundamental component of supervision, as bullying has been associated with depression and suicidality.[89–92,94] It is important for schools to adopt measures to ensure an inclusive, tolerant culture.[19,20,27,90,91,95] When students are clearly aware of rules and guidelines, and recess monitors reinforce the school's culture of tolerance and respect, the management of risky situations is greatly improved.[84]

The physical space and equipment for recess breaks also must not be neglected. Serious harm can be mitigated by ensuring that recess spaces and structures reflect high safety standards. The Consumer Product Safety Commission's *Playground Safety Handbook* and checklist offers guidance for administrators.[96,97] In addition, recess supervisors can serve as extensions of school facilities personnel by their daily proximity to the space, making suggestions for repair, replacement, and general maintenance using a playground safety report card from the National Program for Playground Safety.[98,99] Older students can participate in the care and upkeep of recess apparatuses, games, and equipment. A balance is needed between taking action to reduce hazards while empowering students' autonomy to enhance their own safety.[100] "School grounds should not be as safe as possible but as safe as necessary."[101]

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RECOMMENDATIONS FOR PEDIATRICIANS

1. Pediatricians naturally ally with parents, teachers, administrators, nurses, and psychologists in protecting daily recess, especially for minoritized students and those in under-resourced schools, who are the least likely to have access to the benefits of quality recess. Pediatricians should emphasize the following: A quality recess will reestablish mental equilibrium and focus, a need of *every* student, kindergarten through 12th grade, every day. As such, recess should be a protected block in the daily schedule and be considered a student's personal time. Recess should not be withheld for academic or punitive reasons. Pediatricians and their AAP chapters should press for state laws protecting equal access to daily recess and educate parents to advocate for the benefits of recess for all children and adolescents.
2. Recess is not merely physical activity. Abundant research supports the physical, social, emotional, and cognitive benefits of recess breaks. At minimum, recess should occur often enough and long enough to mitigate stress and allow students to regain focus before resuming classroom instruction.
3. Recess is more than a break in the curriculum. Rather, it is a process that requires assessment, planning, and evaluation, as well as trained monitors, thus creating a safe space tailored to achieve the school's vision for students' health, education, and well-being. Recess design and locations must attend to the inclusion of all students irrespective of their physical, mental, or behavioral challenges.
4. Recess and physical education each provide unique and complementary contributions to a well-rounded education. Physical education is an academic discipline intended to improve motor skills and raise the appreciation of sports and games to benefit lifelong health and activity. It is not interchangeable with recess. Only recess (particularly unstructured recess) provides the creative, social, and emotional benefits of play, which foster the acquisition of lifelong skills including communication, negotiation, problem solving, and self-regulation.

Families and school leaders trust pediatricians in child-adolescent decisions. It is important for pediatricians to ask patients of all ages about their recess/break experiences and engage school and community leaders about the state of recess for all students. To support implementation of recess recommendations, pediatricians can assimilate and disseminate the research demonstrating the critical role recess plays in schooling and learning outlined in this policy and advocate for resources for quality recess and play spaces in their communities.

CONCLUSIONS

This policy statement reaffirms the central conclusion of the American Academy of Pediatrics in its 2013 iteration: "Recess is a necessary break in the day for optimizing a child's social, emotional, physical, and cognitive development. In essence, recess should be considered a child's personal time, and it should not be withheld for academic or punitive reasons."[2] Attention must be paid to location and design of play spaces and to training for staff that encourages equity and inclusion. School and district policies should emphasize the crucial role of recess breaks for the whole child and protect the time allocated for recess to ensure all students' right to a safe, quality recess experience every day.

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ABBREVIATIONS

AAP: American Academy of Pediatrics
CDC: Centers for Disease Control and Prevention
MVPA: moderate-to-vigorous physical activity
UNCRC: United Nations Convention on the Rights of the Child

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