Social Benefits of Recess for Students with a Sensory Processing Disorder Alaina G. Bierman, Chanelle R. Williams, Elizabeth D. Wilson, & Matthew D. Lucas. Ed.D.

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Introduction

Sensory Processing Disorder (SPD) affects how the brain processes sensory information. SPD affects children and adults and is usually seen in developmental conditions, such as autism spectrum disorder (The Understood Team, 2014.). The authors will define SPD, note its prevalence, describe its characteristics, and explain the benefits of recess for students with SPD. The authors will conclude with recommendations for the recess setting to benefit students with SPD.

Definition and Prevalence of SPD

In the late 1960s and early 1970s, Anna Jean Ayres, an American occupational therapist, identified the characteristics of sensory integration dysfunction, also referred to as sensory processing disorder (STAR Institute, 2020). The American Dictionary of Psychology (2020) defines sensory processing disorder (SPD) as "a condition characterized by difficulties in organizing, processing, and analyzing sensory input" (p. 1). SPD affects how the brain processes and receives sensory information, such as vision, touch, auditory, taste, and smell. In addition, SPD also affects body movement and awareness of the individual (Child Mind, 2020).

The Individuals with Disabilities Education Act (IDEA) states that students diagnosed with a disability are eligible to receive special education services if the disability negatively affects the educational performance of the student. Other Health Impairments (OHI), one of the thirteen categories under the IDEA, includes an "umbrella" of disorders. According to the IDEA:

Other Health Impairment means having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that—

(i) Is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and

(ii) Adversely affects a child's educational performance (CFR §300.8(c) 9)(IDEA, 2004).

Under the IDEA, sensory processing disorder classifies as an Other Health Impairment, which, as noted, includes a "heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment." In the United States, one out of twenty individuals is diagnosed with SPD (STAR Institute, 2020). An elementary class with a size of twenty students would statistically have one student diagnosed with SPD. SPD often coincides with individuals diagnosed with Autism Spectrum Disorder (ASD) or Attention Deficit-Hyperactivity Disorder (ADHD). The exact causes for SPD remain unknown; however, researchers suggest that SPD links to genetics but also considers birth complications and environmental factors as possible causes for SPD. There is no medication for SPD, but occupational therapists use sensory integration therapy to help individuals "cope with sensory challenges" (The Understood Team, 2014).

Characteristics of SPD

Individuals diagnosed with SPD exhibit various characteristics. Students with SPD often show extreme reactions to a sensory input, which leads them to crave the specific sensory stimuli. The two common characteristics for students with SPD are over-sensitivity and under-sensitivity. Individuals diagnosed with this disorder exhibit one or both of these characteristics.

For over-sensitivity, students experience sensory avoidance and feel overwhelmed with the sensory stimuli. According to the Child Mind Institute (2020), a student with over-sensitivity may experience:

- Being unable to tolerate bright lights and loud noises,
- Being distracted by background noise that others don't seem to hear,
- Often having trouble knowing where their body is in relation to other objects or people,
- Running off, or bolting, when they're overwhelmed to get away from the sensory overload, and
- Having extreme meltdowns when overwhelmed (p. 1).

In contrast to over-sensitivity, students with under-sensitivity seek out sensory stimuli.

The Child Mind Institute (2020) lists the characteristics of under-sensitivity as:

- Having a constant need to touch people or textures, even when it's not socially acceptable,
- Being very fidgety and unable to sit still,
- Having an extremely high tolerance for pain,
- Enjoying deep pressure like tight bear hugs, and
- Craving fast spinning and/or intense movement (p.1).

In addition to these two common characteristics (under and over-sensitivity), an individual with SPD also has difficulty, as previously noted, with their body and spatial awareness. According to the Understood Team (2014), students diagnosed with SPD have "trouble knowing where their body is in relation to other [students] or their environment" (p. 1).

The difficulties with body and spatial awareness, commonly associated with SPD, often manifest themselves in the motor skills of a student. In addition, other characteristics of SPD can negatively impact the social skills of children. As previously stated, these include being distracted by background noise that others do not notice, often having trouble knowing where their body is in relation to other objects or people, and sometimes running off when they're overwhelmed to get away from the sensory overload.

Social Benefits of Recess Setting

The recess setting has many benefits for all children, but especially for children with SPD. According to the American Academy of Pediatrics (2012), the benefits of recess are cognitive, emotional, physical, and social. Recess provides the cognitive benefits of attention, productivity, and improved focus as students use recess as a break from the classroom and instruction. Also, recess provides for a setting allowing for the development of social skills for a child (Kovar, 2012). Social benefits include the following:

- A semi-structured form to gain new communication skills, such as sharing, cooperation, problem-solving, perseverance, and self-control (American Academy of Pediatrics, 2012).
- A form to allow children to learn to deal with and manage stress (American Academy of Pediatrics, 2012).
- Learning respect for rules, self-discipline, control of aggression, the ability to learn how to resolve conflicts, and the development of an understanding of playing by the rules (Jarret, 2013).
- Physical benefits including the opportunity for children to practice their movement and motor skills, and it reduces their risk of becoming obese by working to achieve their sixty minutes of physical activity a day (American Academy of Pediatrics, 2012).

Recess Setting Modification for Students with SPD

While students diagnosed with SPD may experience difficulties playing and interacting with their typically-developing peers, there are a variety of modifications to enhance recess for students with SPD. It is important to recognize that students with SPD also enjoy having fun and engaging in physical activity. Modifications to an atypical recess are the key to keep students with SPD active (Kranowitz, 2006). One example of a recess modification is establishing a mini-trampoline. Kranowitz (2006) asserts that jumping improves rhythms and helps regulate the nervous system (p. 65). The mini trampoline requires gross motor skills, which are easier for students with SPD to understand and increase their confidence. There would need to be safety checks for the device, rules, and supervision. In addition to the mini trampoline, some additional examples of recess modifications include:

- Avoid the use of materials that may overstimulate a student with SPD.
- Have multiple activities planned and having the student with SPD choose the activity
- Creating simple and repetitive activities for students with SPD. Examples may include jump roping and hoscoth
- Avoiding the use of multiple obstacles
- Avoiding the use of loud noises
- Allowing students to have recess groups to encourage all group children to interact with each other

Conclusion

A substantial number of students diagnosed with sensory processing disorder are enrolled in schools. The active participation of recess enhances the social and motor skills of students with SPD and their typically-developing peers. Educators will have opportunities to work with a student diagnosed with SPD. The use of the modifications in the recess setting will serve to provide many social benefits for children with SPD. Disclaimer: The websites are for informational purposes only. The information provided on the sites is not intended to be a substitute for professional medical advice, diagnosis, or treatment.

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