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# The Benefits of Unstructured Time for Students With Special Education Needs

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# THE BENEFITS OF UNSTRUCTURED TIME FOR STUDENTS WITH SPECIAL EDUCATION NEEDS

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The benefits of including unstructured time in the school day is a topic that affects me on a daily basis. I am extremely grateful to have worked with students with special education needs, who led me to choose this topic for my master's thesis. Thank you to my students for teaching me more and more about being an educator every day. I would also like to thank my family who have supported me throughout this process.

## Abstract

This research was completed with the goal of contributing to the discussion of unstructured time in the school day. Specifically, it looked at the question; what are the benefits of unstructured time for students with special education needs? A literature review was completed, where data from different studies across the US and similar countries (Canada, UK) was compared for similarities and discrepancies. Additionally, the search was narrowed to students receiving special education services under the categories of Autism Spectrum Disorder (ASD) and Other Health Disabilities (OHD). Based on the data compiled, it was concluded that for students with these needs, unstructured time presents benefits across developmental categories. Specifically, these students grow physically, socially, emotionally, and cognitively when they are given this time during the school day. Additionally, the data supported the assertion that without this time students can potentially experience some negative consequences, as their needs are not being fully met in the structured portions of their day.

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# CHAPTER I: INTRODUCTION

The passage of the No Child Left Behind Act in 2001 led many school districts to begin cutting unstructured time from the school schedule, in lieu of more seat time for instruction. While these changes presented some benefits in terms of test scores, they ultimately led to more challenges for students. In the coming section the changes that were implemented, along with some background information will be presented to show the need to include this time in the school day schedule.

The basis for the following thesis rests on the research question; what are the benefits of unstructured time for students with special education needs? For the purposes of this research the terms “recess,” “unstructured play,” “free time,” and “special education” will all be defined in depth. Students with special education needs were chosen as the subject of this research, focusing in on students receiving services under the labels of ASD and OHD. This choice was made due to the traits present within this student subset; including their shared characteristics, social skills challenges, behavioral and academic difficulties, and the increased level of documentation supporting these areas.

## No Child Left Behind Act

The No Child Left Behind Act was passed in 2001, and in addition to other things, was the key piece of legislature in supporting standards-based educational reform, specifically in terms of standardized assessment. Each state was required to develop an assessment that would measure students’ basic skills at different grade levels throughout their school careers; in the hope of developing measurable goals for the future. The scores on these tests are then looked at to determine if schools are meeting the necessary

requirements and making sufficient progress. This is the portion that has had the largest effect on unstructured time. Adequate Yearly Progress (AYP) is a measurement used for schools to quantify student performance on these basic skills assessments. This impacts districts differently; schools with high AYP may receive incentives and increased funding, while those not meeting their AYP goals may experience diminished funding and support. Due to this, many schools have opted for increased seat time in the hopes of improving their test scores and in turn their AYP (Wong, 2016).

For the purposes of this thesis it is important to note that the NCLB is not the only contributing factor to the decrease in unstructured time in the school day; but rather played the role of a catalyst, pushing many districts and lawmakers to make this change. With the passage of this act came a greater discussion of seat time, free play, and the effects each has on a student's success in education.

## Special Education

Special education refers to a segment of the student population who receive specialized services within the school day, giving them an equal educational experience to their peers. The Individuals with Disabilities Educational Act (IDEA, 2004) states that all students regardless of their disability are entitled to a free and appropriate public school education, essentially meaning that they will receive the services needed to make their experience equal to that of their peers. Students who receive special education services do so under a wide range of disability categories. However, for the purposes of this thesis students receiving services under the labels of Autism Spectrum Disorder (ASD) and Other Health Disability (OHD) will be the focus.

Autism Spectrum Disorder is a spectrum of neurodevelopmental disorders that affects a student's abilities to interpret and interact with the world around them. This set of disorders is typically characterized by social interaction challenges, communication delays or difficulties, and patterns of restrictive and/or repetitive behaviors. Being a spectrum disorder, individuals with ASD will all present differently and in turn will interact with the educational experience differently. Some students on the spectrum may spend their entire school day with their neuro-typical peers, whereas others may spend the majority of their day in separate special education classroom. However, for all students whom have an ASD label, it is important to remember that the common traits they share are not only varied between individuals but also within individuals given the environment they are in (CDC, 2017).

Other Health Disability (OHD) refers to a category of disabilities under which students can receive special education services. This umbrella term encompasses individuals with ADD, ADHD, medical conditions that impact their learning (cancer, asthma, diabetes), and mental health challenges that impact their educational experience (anxiety, depression, OCD). For these students many repercussions or consequences of their disability impact their educational experience. A few of these potential repercussions include; attendance, social challenges, attention struggles, acting out behaviors, avoidance, etc. With these consequences present, special education services become necessary for students to be successful in their environment (MDE, 2017).

ASD and OHD were chosen as the special education labels of focus for this study based primarily on their shared characteristics. Students receiving services under both of these labels have many character traits in common which often give them a similar

experience in school. For example, students being serviced under each category may have challenges in focusing in a general education classroom. Even though the underlying reasons for this challenge may differ, receiving services will benefit each group in a similar way. Not only do these groups share these common characteristics, but they also are both likely to experience similar time with their neuro-typical peers. These groups of students are often a part of the general education classroom, and are also more likely than other groups to be a part of lunch, gym, and recess times. Therefore, these groups are the most likely to receive the benefits gained during these unstructured times with their peers.

## Recess, Unstructured Time, and Free Play

Recess, unstructured time, and free play are all terms used by advocates of play and unstructured periods in the school day. Each of these terms will be looked at individually for clarification. Often times recess is associated with the outdoor period following or preceding lunch, in which students play on the playground or blacktop. Unstructured play conversely is associated with a broader range of activities that can occur at any time of day and have little restrictions for students. Finally, free play is a term typically used when discussing younger students, that describes play in which students are free to use their imagination and engage in activities of their choosing. Although these three terms have different connotations, they will be used interchangeably for the purposes of this study. This choice was made because in the research different authors and researchers use these terms to describe very similar experiences happening in the school environment.

For the purpose of this thesis, unstructured time (to include recess and free play) will be defined as follows; time in the school day in which students are able to participate

in an activity of their choosing, with little to no interference from supervising adults. Furthermore, this time can occur in the classroom, outside, or in other spaces throughout the school, so long as the space doesn't prescribe a given activity. The choices for student activity during these times will differ based on school, location, and district due to weather, resources, and student age.

In the proceeding literature review the research question "what are the effects of unstructured time on students with special education needs?" was used as the jumping off point. This review looks to compile evidence to support the assertion that this time is beneficial for students in this category; while also looking to find contrasting research concerning challenges that this time presents. This research question was formed based on personal experiences with students who receive special education services, as well as the desire to further develop this area of the educational research pool.

# CHAPTER II: LITERATURE REVIEW

## Literature Search Procedures

Chapter two consists of a review of the current literature on the benefits of including unstructured time in the school day, specifically for students with special education needs. For the purposes of this literature review, "special education" will be defined as students who have an educational or clinical diagnosis or label, leading them to receive special education services under the labels of ASD or OHD. The following discussion will examine the various benefits of unstructured time, review why these benefits come from this time, and look closely at why these benefits are key in the special education curriculum.

Delving into this literature should aid in determining if this time presents significant benefits for this student population. Searches on ERIC, Academic Search Premier, and Google Scholar yielded the literature found in this thesis. The literature included came primarily from sources published between 2003 and 2017, with a few older sources for increased historical reference. The keywords "unstructured play," "recess," "special education," and "free time" were all used in narrowing the search parameters.

## Benefits of Unstructured Time

When students are given the opportunity to participate in unstructured time during their school day, they gain access to the large variety of benefits this time presents. These benefits span the range of student development and include benefits in the student's physical, social, emotional, and cognitive growth. These areas of student growth will be discussed in further detail in the pages to come.

The physical health benefits of unstructured time are typically the most commonly thought of; including increasing students' physical activity time and decreasing the amount of sedentary time in their school day. However, the other three areas of growth are just as important for students and increase at a proportional rate during this time. Socially, students are able to work on problem solving skills, develop friendships, and work through various communication skills. Emotionally, they work through problems, develop coping skills, and are exposed to group and individual needs. Finally, students' cognitive skills are developed through this time in the school day. They are able to put social skills into practice and reflect on their effectiveness, along with other academic skills they have learned in the classroom. While these benefits are largely accepted, unstructured time is still being cut from the school day, thus a further examination of these benefits is necessary.

In a three-part experimental study completed by Pellegrini, Huberty, and Jones (1995) students in Kindergarten, second, and fourth grade were given recess time at different points throughout their school day. During this study each grade level grouping was studied independently, to account for potential age discrepancies. Across the components of this study, the students started receiving recess at 10:00 am and this time was slowly pushed back in 30 minute intervals throughout the school day. Researchers then observed the students' behavior both before and after the recess period. It was observed that the level of student inattention varied based on the "deprivation period," particularly for male students. Pellegrini et al. (1995) summarized that the longer the students waited for recess the more inattentive behaviors they displayed.

In addition to this increased inattention, it was also observed that students consistently "rebounded" following these unstructured recess breaks. This rebounding that occurred allowed for children to be better focused and develop physically, cognitively, emotionally, and socially (Pellegrini et al., 1995). Additionally, the authors of this study observed that when students were deprived of recess for longer periods, their level of social interaction during this unstructured time increased at a parallel rate. Upon the completion of the first research component, Pellegrini et al. (1995) completed observations with two additional variables to check for validity. In the second component of this research study, additional groupings of second and fourth grade students were deprived of recess at a consistent rate with the first study (increasing the deprivation period by thirty-minute intervals). The third portion of this study followed the same time line and used the same aged students, but changed the location of recess to the indoor gym, to further analyze potential variable discrepancies. All three components of this study came to the same conclusions; students were more inattentive the longer they waited for their recess period, students' attention increased following recess when compared to pre-recess behaviors, and students were more socially interactive following the longer deprivation periods. While this study focused on the broad range of unstructured time benefits, many others have focused in on a developmental growth area for students.

**Physical Growth**

The physical development aspects of unstructured school time are often the initial benefits that come to mind when someone thinks of traditional recess. Countless physical education studies, including many completed by the CDC (2017), have found that

children require at least 60 minutes of physical activity each day. By incorporating unstructured time into the school day students receive benefits in increased physical activity, reduced sedentary time, and increased opportunities to exert excess energy. These benefits have been supported through a multitude of educational and health studies. The results of these studies will be discussed to support the need for this time.

Zavacky and Michael (2017) took a comprehensive look at the necessity to keep recess (i.e. unstructured time) in students' schedules. This study focused on the physical benefits that including recess time presents. The authors asserted that schools and teachers often feel pressured to perform well on what they called "high-stakes testing", leading them to remove unstructured time in lieu of more classroom instruction. By removing this time, the schools are taking away students' opportunities to be physically active in an unrestricted setting. Although students are able to participate in gym or physical education classes, this time is typically reserved for regimented exercise or sports instruction. In contrast, recess provides a time for students to get physical activity in an experience of their choosing. The researchers of this study assert that although not all students are participating in physically demanding activities during recess time, even fine motor movements can counterbalance some of the sedentary time spent in the classroom. Zavacky and Michael (2017) conclude that students need time in their day to be physically active without the restrictions of planned activities; thus allowing them to better perform when back in the classroom.

When looking at the student population as a whole it has been found that at least 60% of students engage in physical activity during unstructured recess time integrated into the school day (Pellegrini, 2013). This and the following data was compiled in a

2013 empirical research study. This research review consisted of more than 50 studies completed between the 1990's and the 2000's. It focused on identifying the importance of recess time and the benefits gained by primary aged students during this time. In addition to the preceding statistic the study also found that for most students, the physical activity they participate in during recess is equal to or more vigorous than that of their physical education classes. Therefore, this time in the school day allows for a lot of health benefits to be met, simply through student's choice activities.

The physical activity students participate in helps to build muscle strength, increase coordination, and overall helps children to lead a healthier lifestyle. Particularly for students in the elementary grades these physical development markers are key in building upon their other academic skills. When thinking about students with special education needs these benefits can be even more expansive. As many of these students have related physical limitations, the increased coordination and muscle strength can also benefit them in their classroom activities (Pellegrini, 2013).

As much as the physical development of all students is important, it is particularly important for those students with special education needs. Sit, McKenzie, Cerin, Huang, and Yu (2017) examined the disparities between the activity levels of these students. In this study of 259 students, the amount of active and sedentary time students had in their school day was compared. These students came from 15 schools and encompassed individuals from five disability categories; visual impairments, hearing impairments, physical disabilities, intellectual disabilities, and social development problems. Across three full school days the students wore accelerometers to track their movement. Researchers compiled data on the time students spent engaged in moderate to vigorous

exercise and the time they spent being sedentary. Multiple linear comparisons were compiled by researchers to determine if differences were present between students within disability categories and a multitude of other variables. It was found that nearly 70% of the students' school day was spent being sedentary, and that included lunch, gym, and recess time. With the CDC recommending 60 or more minutes of physical activity per day this study's average time of 17 minutes (+/- 4.2) is not encouraging.

In addition to seeing these results, the researchers also compared the data based on gender, disability category, body mass index, and grade level. These comparisons showed that the only significant differences were present between those individuals with severe intellectual disabilities and their other special education peers. It was found that this group of students had significantly lower rates of active minutes compared to their sedentary time. As well, the researchers found that across gym, recess, and lunch, recess contributed the highest rate of physical activity for all student groupings (Sit et al., 2017). There were no significant differences found between students when grouped by gender, body mass index, or grade level. The benefits of recess were further supported in this study, as the students were found to be the most physically active during their unstructured recess time. These findings further support the need to keep this time in the student's schedule, so that they can receive the physical and other health benefits it provides (Sit et al., 2017).

Savina, Garrity, Kenny, and Doerr (2016) discuss how the physical activity of unstructured recess time allows for students to further develop their cognitive abilities. They cite evidence that students' abilities to effectively use executive functioning skills can be improved through movement. Many classrooms across the country have

implemented scheduled movement breaks, gross motor learning activities, and experiential learning to assist in the link between kinesthetic activity and executive functioning. These programs have proven to be increasingly successful, and further support the need for students to have a considerable unstructured break in their school day. Researchers used these trends as a basis for their research.

Through the collection of data across United States schools the researchers concluded that by allowing students this time; their memory, learning, on-task behavior, and overall academic performance can be improved (Savina, 2016). The researchers' synthesized information that was collected through other research studies and included the number of schools implementing movement strategies in conjunction with their behavior and academic success. The researchers further concluded that by creating a school culture in which movement and active learning are a staple, all students, including those with special education needs, can be more successful during classroom instruction.

**Social Growth**

During unstructured time students are able to further develop the social skills that they are learning in the classroom. Problem solving, perspective taking, communication strategies, building and managing friendships are all things that are learned best through doing. While teachers are able to contrive various situations in the classroom, unstructured school-time allows for students to practice these necessary skills in a real life situation. Highly beneficial for students is that they often encounter these situations without adult prompting during unstructured time, increasing their level of independence. Additionally, students are presented with choices of what social interactions they participate in and are able to learn through doing how to reach their desired outcome.

Particularly for those individuals with special education needs, this time to experiment and practice socially is invaluable.

Butcher (1999) evaluates the effectiveness of social skills intervention on the playground. A research based program was chosen by Butcher as the central variable in her study. By examining the changes in problematic behaviors before and after the implementation of this research based program, she was able to draw many conclusions. This examination was completed by taking data on the number and severity of problematic behaviors prior to and following the program. This research based intervention entailed school social workers being present during unstructured recess time and intervening in social situations between students. These individuals then gave students strategies, prompted interactions, and provided practice opportunities for various social skills. The basis of the program being used is in the belief that when students have positive social interactions, their antisocial or problematic behaviors will then decrease.

It was concluded that, particularly for females, working on social skills during this unstructured time decreased the amount of social problems occurring. These findings support the benefits of further developing social skills during unstructured periods in the school day. For individuals with special education needs, who are often involved in explicit social skills instruction, integrating those skills into recess time allows for further development and growth to occur. Additionally, it provides an opportunity to potentially decrease the antisocial or problematic behaviors these students may display.

In addition to the physical benefits identified by Pellegrini and Bohn-Gettler (2013), they also identified many social benefits that unstructured time presents. Making and maintaining friendships is a key piece in the social development of students,

particularly those who find these relationships a stressor in relation to school. For many students, including those on the Autism Spectrum or who deal with anxiety or depression, forming social relationships can be challenging. The benefit of unstructured time for these individuals is in the opportunity it presents to form meaningful relationships. Students are able to choose peers and activities on their own and form relationships in a more natural and comfortable setting. These friendships in turn allow students to feel more confident and comfortable in the school environment (Pellegrini, 2013). Friendships help to reduce stress, teach healthy relationships, and in turn allow students to perform more successfully in the classroom (Pellegrini, 2013).

McNamara, Colley, and Franklin (2017) focused on the need for schools to address students' social needs, as well as instruct them academically. In this study, the researchers completed a literature review, worked through policy, talked with teachers and administrators, and also interviewed students; looking at what ways recess time can be improved and in what ways it is currently falling short. The researchers indicated that recess time across Canada, the United States, and the United Kingdom is being cut from school schedules. Based on their discussions and research, they found that the biggest components in deciding this change were the desire for students to spend more time in the classroom, and the influx in antisocial behaviors on the playground. These behaviors included bullying, fighting, social challenges, etc. McNamara et al. (2017) looked to see if in fact removing recess is causing more harm than good in regards to these factors.

The completion of this research was a multi-step process. The target student group for this research included students in Kindergarten through 8th grade and consisted of students from a public school setting. The researchers interviewed teachers,

administrators, and students from a number of Canadian public schools; including schools that continue to have recess in their school day and those that do not. Additionally, the policies both at a district and state level were analyzed to look for changes and trends. Finally, over 20 research studies were compiled to ascertain if a common theme was present.

The researchers found that in the current school climate, many recess times are restricted by minimal supervision, minimal equipment, limited space, and social conflicts that are left unresolved. Often times, the ratio of staff to students is unbalanced during recess time. This imbalance varies depending on the school, district, and even the day of the week. Research in this area points to the missed opportunities for students to be able to practice social skills with an adult who is able to prompt and guide them. In addition to limited materials, space is also an issue that popped up during the aforementioned research. Many schools do not have the resources for adequate playground equipment, open space, or game materials; leaving students with little choice in activity. While this is not the ideal situation, McNamara et al. (2017) point out the opportunity this situation presents to encourage students to be cooperative and creative. Finally, and most notably mentioned in the research, were social conflicts. Many schools and districts have chosen to forgo recess time due to the large increase in conflict situations during this time. Here researchers point out that although there has been documentation to support the increase in conflicts in schools, there has been no such research to support conflicts increasing specifically during recess. While delving into each of these sections of the research, the authors also assert that these limitations are really affecting students' opportunities to

effectively utilize their unstructured time in the school day and are things that need to be adjusted by the schools.

As already stated, unstructured recess time gives students opportunities to form meaningful social connections, which further develop their sense of self-esteem and social skill development. When students are able to engage in choice activities with their peers they are able to develop quality social relationships. The importance of these relationships is not only the sense of belonging and welcoming they foster, but also their tie to physical and mental health (McNamara et al., 2017). It has been found that individuals with stronger social peer relationships are better able to develop their sense of self-esteem, stress management techniques, and problem solving skills (McNamara et al., 2017). This finding supports the need for unstructured recess time, as it points to the integrative nature of the benefits it presents. It is not enough to give students' physical activity breaks or more social skills instruction; they need a time when they can 'put it all together'. The researchers from this study postulate that recess is the time to make this synthesis occur.

Developing socially goes deeper than making or maintaining relationships, and also includes a person's growth as an individual. When students are permitted time to play in an unstructured setting they are able to make self-directed choices, experiment with different roles, and practice individual skills (Pellegrini, 2013). Students are free to form social games with those around them, which in turn allow them to develop leadership skills, practice following rules, and interpret different forms of communication (Pellegrini, 2013). Individually these students are able to grow in this time as they must

reflect on the successes and failures experienced and learn how to better achieve the outcome they want.

**Emotional Growth**

Often hand-in-hand with the social development that occurs during unstructured time, is the emotional growth that students experience. When working through solving problems, engaging in group activities, and making choices, students are able to further develop their emotional skills. These skills include aspects of perspective taking, individual and group need awareness, and coping skills. Much like the social skills taught in the classroom, these emotional skills, sometimes termed "self-regulation," are better learned through experience. By incorporating unstructured time into the school day students are able to develop these skills based on their experiences.

When students are granted unstructured time during which to choose their own activities, they are able to further develop their sense of self-guided interests, are able to work on problem solving, and learn to handle their emotions. Entin (2013) discussed this emotional growth. Students are able to use unstructured time as an opportunity to pursue their personal interests and foster the skills of making individual choices for their futures. Unlike the classroom, where they are often completing activities with a predetermined goal, unstructured time allows students to learn without a known end goal. Additionally, through these choice activities students are presented with multiple opportunities during which to practice solving problems. It is in these situations that students must regulate their emotions in order to come to a successful resolution and continue with their activity.

In attempting a new activity on a playground, joining a game with peers, or partaking in a solo activity, students' emotions may run the gambit and force them to deal

with new feelings. Students are confronted with sadness, fear, and anger which they must learn to cope with in a socially acceptable way; while also experiencing equal amounts of happiness, joy, and excitement. This article postulates that these benefits of unstructured time are so important for students, that they claim a correlation between the decline in free time and the rise in depression and anxiety among students (Entin, 2013).

The basis of the aforementioned article is found in a study of articles published in the *American Journal of Play*, which Entin then uses to discuss the trends in recess and its benefits. Peter Grey Ph.D., a professor of psychology at Boston College, was Entin's primary source of personal contact when looking into these previously published articles. Entin and Grey worked through the research as a team, to ensure accuracy in the interpretation. For the purposes of this study "free-play" (i.e. unstructured time/recess) was defined as "play a child undertakes him/herself, which is self-directed and an end in itself, rather than part of some organized activity" (Entin, 2013).

In addition to arriving at this definition, Entin's work with Grey also allowed her to draw some other conclusions. Here she states that the overall trend since 1955 has been a decline in children's free play, and an increase in adult control over these activities. The research cited in this article states that due to this shift there has been a decrease in students' opportunities to use free-play as a "testing ground for life" during which they can experience real life scenarios, helping them to grow their competence and confidence (Entin, 2013).

This article concludes by discussing the five major benefits of play that were found to be themes during the literature review. These five themes are as follows:

1. Play gives children a chance to find and develop a connection to their own self-identified and self-guided interests.
2. It is through play that children first learn how to make decisions, solve problems, exert self-control, and follow rules.
3. Children learn to handle their emotions, including anger and fear, during play.
4. Play helps children make friends and learn to get along with each other as equals.
5. Play is a source of happiness (Entin, 2013).

These themes support Entin's assertion that unstructured play during the school day is critical in student's developing socially and emotionally. Perhaps the biggest conclusion that Entin draws from this literature review is the assertion that unstructured play allows students to learn to handle their emotions. Here she cites that when students are involved in free play they place themselves in physically and socially challenging situations that can be described as 'fun to the degree that they are moderately frightening.' These situations then require students to regulate the emotions that result from these stressors. These points are reiterated, stating that without these opportunities students' abilities to self-regulate are reduced, which can lead to increased anxiety as students age (Entin, 2013).

While students learn to cope and manage their own emotions, developing a sense of empathy is key in progressing emotionally. The trouble here is that empathy is something that is difficult to teach, especially for those students who have social skills or interaction deficits. In a summary of nine studies a discussion of recess' impact on empathy was detailed (Wong, 2016). This discussion was the result of the recent media attention recess has been getting. According to Wong, coalitions have been forming

across the country to petition the need for at least twenty minutes of free play each school day. With the passage of the No Child Left Behind Act and the rise in "playground bullying" recess has been getting cut; but Wong argues that her research compilation shows this to be a misstep.

The most notable research in terms of developing empathy comes from an ongoing study that is being completed by Texas Public Schools, from which the 2015-2016 results are used. This study looked at elementary students enrolled in Texas Public Schools. These students were then grouped into segments of students who received zero minutes of recess per day, fifteen minutes of recess per day, thirty minutes of recess per day, forty-five minutes of recess per day, and sixty minutes of recess per day; all given in fifteen minute blocks throughout the day. The results of this study showed that students who received the four fifteen minute recess blocks showed significantly more empathy towards their peers when compared to students who received no recess (Wong, 2016).

**Cognitive Growth**

Cognitive growth is not usually a benefit of unstructured time that initially comes to mind. However, the development of students' cognitive abilities does not stop when they leave the classroom. Students spend nearly their entire school day taking in new information, practicing in a contrived setting, and reproducing what they have learned. When students are able to use unstructured time as an experiential learning time they further their understanding of what they learn in the classroom and move their understanding to higher levels of Bloom's Taxonomy. Additionally, many studies have shown that allowing students unstructured breaks in their day increases the amount of information they retain from their classroom instruction.

Historically, play as a means of learning has been a topic of discussion across the education community, from the Montessori approach to the free play advocates of today. In fact, these discussions have a lot of scientific backing and point to the validity of cognitive benefits that unstructured time presents. In the fall 2007 The New York Coalition for Play participated in the Ultimate Block Party, an event aimed at bringing children from the community together to participate in imaginative play. Through a partnership with Crayola, Lego, Disney, and MIT and Columbia researchers; the city provided event attracted thousands of parents and children. The hope of this event was to further demonstrate the benefits of free play, and show the community that education does not stop when students leave their desks (Bartlett, 2011).

Bartlett (2011) further supported the claims made by The New York Coalition for Play. This study compared two groups of 4 and 5 year old preschool students, enrolled in contrasting curriculum. The first group of students was enrolled in the Tools of the Mind Curriculum, a play-based Vygotsky inspired setting. While the other grouping of students was enrolled in a typical preschool setting. This study found that those students who were enrolled in Vygotsky's Tools of the Mind Curriculum performed higher across cognitive functioning areas including; self-control, working memory, and flexibility. This curriculum involved students being free to play and experience different aspects of their environment without restriction, allowing them to better foster these skills. Much like the unstructured time built in to many students' school days, this curriculum gave students the opportunity to make self-directed choices and learn through them. In Fact, the research findings were so stark between the two groups, that researchers halted their

study early to enroll the second group of students in the Tools of the Mind Curriculum and gain the same benefits of their peers.

A cognitive benefit of recess that is often overlooked by many administrators, who see this unstructured break as a loss in seat time and classroom instruction, is the increased attendance to and retention of classroom learning (Pellegrini, 2013). With most children receiving only 10 to 15 minutes of unstructured recess time a day they are often left fidgety and distracted in the classroom (Jarrett, 2009).

In order for students to be active participants in their classroom learning they must be able to focus on the lessons and activities to gain true understanding. However, when their bodies are feeling restless or they have built up energy, particularly in the second half of the school day, this can become quite the feat. According to evidence compiled by Jarrett (2009) students who do not receive adequate unstructured time are more likely to have fidgety and off task behaviors. Due to these behaviors students do not attend in the classroom and miss out on learning opportunities. For students with special education needs these fidgety and off-task behaviors can be even more prevalent, as they are often aspects of their disability to begin with.

Further building on the assertion that recess leads to increased classroom learning was the secondary data analysis completed by Barros (2009). This study looked at two levels of student groupings; those exposed to minimal/no recess and those exposed to consistent recess time. Six groups within these levels were composed of an equal number of students with similar defining characteristics. The first level received less than one fifteen minute recess break per day. The remaining five groups made up the second level and were divided based on the frequency and duration of their recess time. Each group

was composed of 8 and 9 year olds whose data was compiled in the Early Childhood Longitudinal Study for the Kindergarten class of 1998 to 1999's third grade data set.

Data from 10,301 of the 11,624 participants was available for analysis upon the completion of this study. Researchers' compiled data on the students' characteristics in terms of their parents, the student individually, their schools, and their classrooms. Teacher ratings of classroom behavior were used to analyze the effects of recess on this behavior. The gender demographic results of the study indicated an equal number of boys (50.3%) and girls present in the available data. When comparing the levels of students who received and did not receive recess time, it was found that students who received minimal to no recess time were more likely to be African American (30% more likely), more likely to be from parents with lower levels of education, more likely to live in large cities, and more likely to attend public schools.

While these other results are important to note, the most pertinent to this thesis was the difference in teacher reported classroom behavior. It was found that when comparing the two groups or levels, those students who received fifteen or more minutes of recess per day received higher teacher rankings for classroom behavior. These behaviors included attendance to classroom instruction, decreased interruptions, and increased participation (Barros, 2009). The aforementioned trends in these behaviors directly correlates to a more productive learning environment for students. The results of this study were further maintained by a multivariable aggregate analysis. This portion of the study showed that while students who received recess time had better classroom behavior scores, the results were not as varied between frequency and duration groupings.

Robert Murray, MD and Catherine Ramstetter, PhD (2013) discuss the American Academy of Pediatrics stance on recess in school. The American Academy of Pediatrics (AAP) is a professional organization of pediatricians, whose goals include writing policy statements that deal with matters concerning school aged children. In this article the Council on Student Health made claims based on their compilation of the current research. Upon this compilation, this Council stated that recess time was a necessary component of the school day that provided benefits for students across developmental areas.

In addition to the cognitive skills, particularly in the area of executive function that are learned during unstructured time, the break from structured activities also helps build upon what students are learning in the classroom (Murray, 2013). This is due to the need for students to take a break from their instruction and do something completely different which has been found to give students the necessary processing time to better learn new information (Murray, 2013). Much like movement breaks or recharge activities, unstructured time gives students the opportunity to reflect on information and simply take a break from instruction.

These researchers also reference other countries where recess and break times are more common. Currently in the United States, the duration of recess times varies between zero to sixty minutes depending upon the school district. However, other countries, like Japan, consistently give their students ten to fifteen minute breaks every hour. This trend comes out of findings that show students' attention spans to range from forty to fifty minutes at one time (Murray, 2013). By giving students breaks every hour, the schools

are then allowing students time to regain their focus before the instructional periods continue.

Often, cognitive challenges in the classroom are exacerbated by challenging behaviors students display. Work refusal, attending challenges, fidgeting, and listlessness are all behaviors Jarrett (1998) points to as potential challenges for cognitive growth. Jarrett and her co-authors looked to determine the effect of recess breaks on classroom behavior. In the first component of this experiment, two groups of fourth grade students were chosen from a southern urban school district, which currently did not have recess time built into the school day. Researchers worked with the school to allow students a recess period once a week. Teacher data was then compiled using a multivariate analysis of variance measures, looking for potential discrepancies present between recess and non-recess days. This analysis yielded the following results for the forty three children, five of which were identified as having special education needs. Sixty percent of the students, including all five of those with special education needs, displayed higher levels of work and less fidgety behaviors on recess days. These results were consistent across boys and girls in this study (Jarrett, 1998).

In the secondary component of this study researchers used a separate grouping elementary-aged students. In this section, researchers manipulated the starting time of recess. On some days of the study, students were given their recess break at 10:00 am; while on other days this time was pushed to 10:30 am. A similar process for analyzing the data was used, in which teacher surveys were given to measure student's attentiveness and fidgety behaviors. Based on the compilation of these results, it was found that students' attentiveness to the lesson decreased the longer they had to wait for their break.

Another interesting component that was supported through this research was that following the recess break, students attentiveness "rebounded" following the dip leading up to the break (Jarrett, 1998).

## Special Education Student Needs

The benefits of unstructured time in the school day are true across the student population; however, the focus of this thesis is on these benefits for students with special education needs. For this reason the following section will address these aspects directly. For the purposes of this literature review two categories of special education students will be discussed, as the broad spectrum of students who receive special education services is beyond the realm of this thesis. The two categories that will be looked at include students receiving services under the following labels and/or diagnoses; Autism Spectrum Disorder (ASD) and Other Health Disability (OHD). These two labels were chosen because these students most typically participate in unstructured time with their mainstream peers and therefore are better likely to receive all of the aforementioned benefits. It is also important to note that under IDEA all students, regardless of their disability are entitled to a free and appropriate public education, so unless otherwise noted in their Individualized Education Plan these students should be participating in recess time with their typical peers.

### Autism Spectrum Disorder

According to the Minnesota Department of Education (2016), Autism Spectrum Disorder (ASD) refers to a spectrum of neurodevelopmental disorders that affects an individual's abilities to "process information and interpret the world." This is further defined in the following key characteristics:

- Social interaction deficits
- Communication struggles
- Patterns of restrictive, repetitive, or stereotyped behaviors and/or interests

The CDC (2017) further expands upon these criteria by discussing the spectrum aspect of the disorder. Individuals with Autism Spectrum Disorder may exhibit similar behavioral patterns to far different degrees of severity. For example, one individual may become anxious when a schedule is changed, where another may have a more extreme reaction to the same situation. For the purposes of this thesis is it important to note that individuals on the spectrum will therefore experience the benefits of unstructured time in different ways. Some additional reasons for potential discrepancies include; the amount of time spent with mainstream peers, physical development delays as a result of their disability, and staff support provided for these students.

In addition to the benefits mentioned in the previous sections of this literature review, the benefits of unstructured time for students on the Autism Spectrum can be even more distinctive. This is because the deficits associated with ASD are often directly linked to benefits found in this unstructured time. Students on the spectrum typically struggle to develop social relationships and communicate effectively with those around them (Lucas, 2010). Incorporating unstructured time in the school day allows these students to practice these skills in an environment where they can choose activities and social partners. These aspects allow the student to feel more comfortable and be more successful in these areas (Lucas, 2010).

For many students on the Autism Spectrum, adjusting to new situations can be a challenge throughout the school day. The unstructured nature of recess provides an

opportunity for students to participate in a way that requires less adjustment (Pellegrini, 1989). While there are social opportunities involved in this time, there is not a pressure or sense of urgency in initiating these interactions. Students are then able to adjust to their setting at their own pace and begin interactions when they have established a comfortable relationship with their environment. For students on the spectrum it provides a safe space to interact, without the pressure of expectations that may be present in a classroom setting.

Many students on the Autism Spectrum struggle with social interactions, which can lead to increased anxiety or sadness (Bauminger, 2003). While teaching social skills in the classroom and including these students with their typically developing peers can help to alleviate many of these struggles, unstructured time presents another option to strengthen these skills. As students are participating in unstructured recess activities they are able to gain social skills through practicing initiations, turn taking, and increasing the variety of activities they participate in (Harper, 2008). These social skills help the students to look forward to social interaction, as they become more confident in their abilities to participate successfully (Bauminger et al., 2003).

In the aforementioned study, Bauminger et al. (2003) discuss the relationship present between feelings of loneliness and social interaction for those individuals on the Autism Spectrum. This compilation of multiple Autism studies examined how individuals on the spectrum experience loneliness at differing rates than their peers, but often lack the awareness that this feeling may be related to their social interaction patterns. Bauminger and Kasari (2000) investigated this trend in higher-functioning adolescents. This group of students is a relevant sample, in that these students are most

likely to spend the majority of their school days with neurotypical peers. In this study, the results of the student interviews indicated that individuals on the spectrum report feeling lonely at a higher rate than their peers; but were significantly less likely to attribute this to their social skills deficits.

This study, along with others, led the group to conduct a research study of their own. Prior to beginning, the group hypothesized that there would be differences present between the quality and frequency of social interactions between individuals on the spectrum and their neurotypical peers. This study included 35 adolescent participants, with an average age of 17.5 years, with 18 of the students being on the spectrum and the remaining 17 typically developing. Other variables, including; IQ, gender, and mother's IQ were kept consistent between the two groups. Among the student sample, all but one individual with ASD were a part of the generalized curriculum; with the exception placed in a high-functioning ASD classroom.

The methodology of this study included a measure of social interaction understanding through picture recognition, social interaction observations, and student interviews. The results of this study are as follows:

- Students with ASD were similar to their peers in their ability to identify a desire to enter a social interaction, based on a picture of this interaction.
- Students with ASD were less likely (37.5% versus 58.8%) to identify complex feelings of others, when presented a picture depiction.
- When presented with social scenarios, only 18.75% of the ASD group were able to identify three potential scenarios, compared to 47% of their neurotypical peers.

- Students in each group participated in low to mid-level social interactions at equal rates.
- Students with ASD were more likely to functionally initiate a social interaction, but were less likely to functionally end a social interaction.
- Students with ASD were less likely to engage in negative social interactions.
- Students with ASD reported higher rates of loneliness than their peers.
- Students with ASD had a higher rate of correlation between their loneliness rate and their understanding of social interaction.

All of these findings are the result of multivariate analysis of variance (MANOVA) for the data compiled from each group of students, further broken down between each measure collected by researchers.

While the previous study focused primarily on adolescent age children, similar research has been completed for students in younger age brackets. Garfinkle et al. (2002) completed a study of preschool aged students. This study examined the use of social imitation in increasing individuals with ASD social interactions. This study was run as a single subject model, where four students were participants. Three of these students were on the Autism Spectrum, and the fourth had developmental delays. The researchers observed these students in their preschool classroom during small group and free play opportunities throughout the school day, to compare with other portions of the students' academic time. The results of this study showed that these students displayed more imitative and prosocial behaviors during free play and small group times. These prosocial behaviors included proximity to peers and number of social interactions. Overall, the researchers concluded that individuals with ASD were better able to imitate their peers

and engage socially when unstructured times presented themselves; further giving them more opportunities to imitate positive behavior.

**Other Health Disability**

Students being served under the Other Health Disability (OHD) umbrella of special education receive services due to a "wide range of chronic or acute health conditions" (MDE, 2017). These students' behaviors, illness, or attendance due to these conditions may affect their abilities to participate in the general education curriculum, therefore they require an IEP to meet their needs. Just as students with ASD were chosen due to their disability characteristics, this umbrella category was chosen because these students are more likely to be involved in the general education curriculum. While the list of individuals whom could receive services under this umbrella is much longer, the following groupings were considered for this thesis:

- Students with Attention Deficit Disorder (ADD)/Attention Deficit Hyperactivity Disorder (ADHD)
- Students with a medical condition such as asthma, diabetes, or cancer
- Students with mental health needs including depression, anxiety, and Obsessive Compulsive Disorder (OCD)

Participation in unstructured recess time is largely beneficial for students with ADHD and ADD not only for the aforementioned reasons, but also as this time works through many of the challenges their label presents. Students with ADHD typically struggle with attending in the classroom, fidgety behavior, task completion, and following of classroom procedures. While there are many classroom interventions that benefit these students and give them a successful learning environment, ensuring that they have an unstructured

period in their day is also very valuable (Lucas, 2014). This time in the school day gives them a break from the classroom structure and routines that can present increased challenges to their day aside from the academic demands. By giving these students a time in their school day where there are fewer expectations, they are free to indulge their inattention and release some energy that they have built up in the classroom (Lucas, 2014).

Similar to those students with ADHD, students suffering from mental health conditions are often faced with increased challenges in the classroom environment. Students with OCD, depression, or anxiety may be academically on par with their peers, but still have unique needs in their education. These unique needs directly correlate to the benefits that they receive from participating in unstructured time in the school day. In addition to the physical, social, emotional, and cognitive benefits detailed, these students may find additional benefits during this time. Unstructured time offers opportunities for group or solitary activities that can give students a break from the classroom expectations (Lucas, 2012). While it is important to note that this time can potentially exacerbate some of these conditions, for the majority of students recess time offers a much needed break for students (Lucas, 2012). An example that Lucas points to here is the potential for students anxieties or stresses to be increased by potential social demands this time presents. However, with proper pre-teaching regarding these times the benefits can far outweigh the potential challenges unstructured time presents.

In a study completed by Bonnie Mervis (1998), the benefits of unstructured time for students with high levels of anxiety were examined. In this study of students at the Indian Trail School and Highland Park school, Mervis worked with administrators to

implement a recess program in which students were given social pairings during unstructured times to improve their social interaction skills. The basis for intervention was in the peer-pair modeling that is used in most social skills curriculum. By providing students with mid-to-high range anxiety levels a peer whom they can model during an unstructured time, they are able to translate some of the skills they are taught in the classroom. Mervis summarized that, "The great advantage of the school setting is that this relationship is more easily generalized outside of the therapy session when this friend is a part of their natural social environment" (1998, p.467). By translating this technique to the natural environment, students are able to acquire these social benefits and gain increased independence in doing so.

Bartko and Eccles (2003), looked at the participation levels of adolescents in structured and unstructured activities. This study operated on a person-oriented approach that took data on adolescents participation in "constructive organized" activities and "relaxed leisure" activities (unstructured). This data was then compared to determine psychosocial patterns present between the groupings. The study included 918 adolescents and 11 activity domains, which were compared using cluster analytic techniques. While this study drew multiple conclusions from this data, this thesis will focus on one. Based on the analytic analyses it was found that there was a clear correlation present between adolescents activity levels and their psychosocial profiles. Specifically, the data indicated that adolescents who scored higher on the depressive scale inventory displayed higher levels of involvement in relaxed or leisure activities when compared to constructive organized activities. This finding is relevant to this thesis in that it indicated that these students, who may be receiving special education services for their depression, are more

likely to participate in an activity that is unstructured than structured. This trend would likely lead these students to receive the benefits of unstructured time during recess periods in the school day.

Finally, a study completed by Lucas and Sturgis (2012) helps to examine how individuals with Obsessive Compulsive Disorder (OCD) can benefit from receiving unstructured time in their school days. This study used the DSM-IV definition and characteristics for OCD and compared them with the research based benefits recess provides. By doing this, the researchers were able to indicate some benefits that would be particularly useful for these individuals. The key benefits of recess for students with OCD that the researchers draw attention to include:

- Improvement of student activity levels
- Improvement of general fitness levels
- Improvement of endurance levels
- Social skills improvements: conflict resolution, cooperation, turn taking, sharing, and problem solving in real life situations

There are multiple reasons that these benefits are particularly important for individuals with OCD. Often times when students are dealing with the characteristics of OCD they experience a decrease in their social functioning skills. Due to this fact, the increased social interaction and social benefits recess presents can be particularly important for this population. Additionally, the physical benefits of recess time can act as a natural treatment for the anxiety often associated with OCD. Lucas and Sturgis conclude that because large amounts of exercise have been proven to be a natural stress-relieving strategy, it can in turn help to control many of the symptoms of OCD.

The disappearance or reduction of recess time across schools has led many in the education and health fields to form coalitions to emphasize the benefits this time presents. As detailed in *The Case for Play* two top play researchers, Kathy Hirsh-Pasek and Roberta Michnick Golinkoff have made it their mission to ensure students receive this time in their school days. These researchers point to the push for better test scores as the key factor in the decline of this unstructured time. For those students falling into the special education grouping this decline comes at an often higher rate, as they many times attend extra classes to work on social skills or extra subject assistance (typically Math and/or Reading). When these classes interfere with the student's access to unstructured play time they miss out on the memory, self-regulation, and stress reduction benefits it presents (Bartlett, 2011).

Overall, when looking at the effects of unstructured time in the school day, both students with special education needs and those without receive a multitude of benefits. The social, emotional, physical, and cognitive growth of this time is critical for students; regardless of if they spend one period or all their academic classes in a resource room. An article from *Teaching Exceptional Children* by David Adamson details five ways to "bridge the gap" between regular education and resource classrooms. These suggestions include:

1. Consultation services
2. Collaborative and Co-Teaching classrooms
3. Recess programs
4. Work completion groups
5. Daily check-outs

Of these five suggestions, recess time is the only option that gives students benefits across all four developmental areas. It is also one of the easiest times for students to integrate into the general education population, as there are often less academic barriers that students may face (Adamson, 1990).

Finally, when looking at both groups of students with special education needs, it is important to also touch on the reasons these students are missing out on the many benefits of unstructured time in their school days. In a qualitative case study of 21 pre-k and elementary level classrooms it was determined that nearly 81% of elementary schools use the reduction or elimination of recess (unstructured time) as a punishment for undesirable behavior (Campbell, 2012). When considering students with exceptional learning needs, who fall into the SPED categories above, this disciplinary action was taken at a higher rate. Due to these student's unique learning needs, the presence of undesirable classroom behaviors falls into a higher percentage when compared to their peers, therefore they are losing out on the benefits of unstructured time at an incomparable rate. It is important to be aware of this disparity and make sure that this population is not missing out on the growth opportunities unstructured time presents.

# CHAPTER III: DISCUSSION AND SUMMARY

## Summary of Literature

With the passage of the No Child Left Behind Act in 2001 and the increase in bullying across US schools, recess (i.e. unstructured time) has been on the decline across the country. In fact, in a nationwide survey of school administrators, nearly 33% stated that there had been a reduction of unstructured time in their district's school days during the early 2000's (Wong, 2016). While this reduction in unstructured time has been occurring a number of studies have also been completed to argue against this decrease (A.D., 2016; A.D., 1995; Adamson, 1990; Barros, 2009; Bartlett, 2011; Bauminger, 2003; Blad, 2015; Butcher, 1999; Campbell, 2012; Elliott, 2011; Entin, 2013; Flannery, 2016; Garfinkle, 2002; Harper, 2008; Jarrett, 1998; Jarrett, 2009; Lucas, 2014; Lucas, 2010; Lucas, 2012; McNamara, 2017; Mervis, 1998; Murray, 2013; Pellegrini, 1989; Pellegrini, 1997; Pellegrini, 2008; Pellegrini, 2013; Ramstetter, 2017; Savina, 2016; Sit, 2017; Tyler, 2000; Wong, 2016; Zavachy, 2017).

The literature presented in the preceding chapter yields many common themes and conclusions regarding the benefits of including unstructured time in the school day. The physical, social, emotional, and cognitive growth that students gain from this time is far reaching and vastly supported by the current literature pool (Bartlett, 2011; Barros, 2009; Butcher, 1999; CDC, 2011; Entin, 2013; Jarrett, 1998; Jarrett, 2009; Murray, 2013; Pellegrini, 1995; Pellegrini, 2013; Savina, 2016; Sit, 2017; Wong, 2016; Zavacky, 2017). A summary of the common findings will further demonstrate the integral role unstructured time plays in student growth across developmental categories.

Physical benefits of recess or other unstructured times are the most commonly thought of and the most clearly supported by the literature. When students have the opportunity to be physical in an activity of their choosing they are more likely to reach the 60 active minutes recommended by the CDC, than when they are forced to complete activities they do not choose. Unfortunately, across our schools the amount of sedentary time students participate in each day is far higher than recommended, and that statistic is even higher for students with special education needs (Sit et al., 2017). Although students are receiving active times in their physical education classes, students are often unengaged during these periods and are in turn less physically active. In fact, it was found that on average students only participate in 17 active minutes outside of recess each day (Sit et al., 2017). This statistic isn't encouraging when thinking about students' physical health. However, 60% of students choose activities that require rigorous movement during unstructured time further encouraging the need for this time (Pellegrini, 2013). Additionally, the physical activities that students are choosing during this unstructured time are often more vigorous than those completed in physical education classes (Pellegrini, 2013; Zavacky, 2017).

The trends toward increased physical movement can also been seen in the benefits it brings to other developmental areas for students. Movement has become a critical part in most classroom routines and is on the rise as a means of stimulating cognition and teaching students new skills (Savina, 2016). Even when breaks are short and in the classroom they have proven to give students a needed break, increasing their focus and allowed their attention to "rebound" (Jarrett, 1998; Pellegrini, 1995).

Recess is a time in the school day where students are presented with real life opportunities to engage in social interaction with their peers. This time allows for students to take social skills that they have learned in the classroom and implement them in scenarios where they may or may not be successful. Therefore, this time offers a rare opportunity for additional social skills development, especially for those students with deficits in this area (Butcher, 1999). Many disability categories including Emotional Behavioral Disorders, Anxiety Disorders, Depression, Autism Spectrum Disorder, and many others share the common characteristic of social development challenges. This shared characteristic makes these opportunities even more important for this student population.

Socially, students also gain a lot of growth opportunities when afforded unstructured periods in their school schedules. For all students, but particularly for those with special education needs, social skills are often explicitly taught. However, contrived situations and social stories are not enough for students to be expected to make meaningful strides. Putting these lessons into practice, trying out social situations and roles, and ultimately finding successes and failures are what push students to develop socially (Butcher, 1999).

The social benefits that students begin to accumulate during these unstructured times are both in the sense of making friends and developing as an individual. When students have the opportunity to engage in choice activities, they often do so with peers who share common interests and personalities. These commonalities can then lead individuals to engage in conversation and even stimulate a friendship. While it may sound cliché, the research supports the assertion that friends make school a more

enjoyable and successful experience for students (McNamara, 2017). Having a peer group allows for individuals to feel as if they belong and gives them a sense of investment in their school experience. Additionally, these social interactions help to foster students' self-growth and self-esteem. Being independent and experiencing social successes allows students to build upon their self-worth (Pellegrini, 2013). Increased confidence, improved communication skills, and increased social engagement all come with a heightened sense of self-worth and help students to continue developing socially (McNamara, 2017; Pellegrini, 2013).

Finally, while bullying and social interaction challenges have often been cited as reasons to diminish recess time, they both have actually been seen to decrease with its presence. With unstructured time comes time for students to move into social groups of their choosing and gives chances for peers to engage in different ways. Rather than stimulating challenges, these opportunities have been shown to increase positive interactions both in and out of the classroom (Butcher, 1999; McNamara, 2017).

In tandem with social growth, emotional growth increases at parallel figures during unstructured time. When students are permitted this time in the school day they are exposed to opportunities that require them to practice problem solving, group activities, and making choices. All of these skills, while explicitly taught in the classroom, share the characteristic with social skills that they are best learned through doing. In turn when these self-regulation skills are practiced, student's emotional skills increase. Specifically, students' abilities to look at things from differing perspectives, evaluate individual and group needs, and use coping skills all improve (Entin, 2013; Wong, 2016).

Students engaging in unstructured time are given the opportunity to invest in their individual interests and make choices independently. These opportunities allow them to look at their own emotions and utilize their problem solving skills to make choices that are best for them. Additionally, with the potential challenges these choices create, students must work to regulate their emotions and react to those around them (Entin, 2013). These reactions often lead to a greater sense of empathy and allow students to better relate to their peers (Wong, 2016).

Unfortunately, emotional skills are typically the most impacted when unstructured time is removed from the school day. Without these opportunities for individual and group exploration, students lose their 'testing ground' in which to try out skills (Entin, 2013). This loss can hinder students' abilities to relate to others and can potentially increase ant-social emotions including anxiety, acting out behavior, and isolation (Entin, 2016). When these changes occur the social benefits previously mentioned would also be hindered.

While advocates for increased seat time push for a reduction of unstructured time, they are often missing the cognitive benefits that including this time presents. Students' learning takes place beyond the classroom, and these opportunities often occur when unstructured time is allotted. By participating in experiential learning opportunities, students are able to take their knowledge to the higher levels of Bloom's Taxonomy and increase their retention of classroom material (Bartlett, 2011; Murray, 2013). From Montessori based education to the inclusion of recharge activities in classrooms, the idea of play as a means for learning is nothing new. Play based curriculum has been proven to

be very effective in engaging students in their learning, leading to increased rates of retention (Bartlett, 2011).

In addition to learning through these unstructured opportunities, students are also more apt to perform better in the classroom when they receive this time. When students are required to go entire school days without a recess break, behavior including fidgeting, being off-task, and low work-completion increase (Barros, 2009; Jarrett, 1998; Jarrett, 2009). These behaviors are detrimental to the learning environment and hinder student's abilities to be successful. Conversely, when students are permitted unstructured breaks in their school days they are likely to have better attention in the classroom, be less fidgety, have higher rates of participation, and complete more work (Barros, 2009; Jarrett, 1998; Jarrett, 2009). These breaks not only provide these benefits to classroom instruction, but they also allow time for students to continue working on their executive functioning skills and process what they learned in the classroom (Murray, 2013).

While the aforementioned benefits are key to the development of all students, they play a particularly critical role for students with special education needs. This role is due to the matching of deficits resulting from their disability directly with the benefits gained during unstructured time. Students with Autism Spectrum Disorder and Other Health Disabilities are two such groups who benefit at increased rates from this time.

Individuals with ASD experience social interaction and communication challenges at a higher rate than their peers as a result of their disability (Lucas, 2010). These challenges then result in increased difficulties to make friends and social connections throughout their school day. However, when given the opportunity to engage in unstructured time, these students are able to practice the social skills they are learning

in the classroom in an environment that requires less adjustment (Harper, 2008; Pellegrini, 1998). These opportunities then allow students to initiate social situations of their choosing; during which they can test out turn taking, humor, and imitation of peers in a variety of different environments (Garfinkle, 2002; Harper, 2008).

Students with ASD are more likely to feel comfortable engaging in a social interaction during unstructured time, as they are not forced into an uncomfortable situation but are instead choosing their own social partners (Garfinkle, 2002; Harper, 2008; Pellegrini, 1998). Students then can begin to look forward to these social situations, decreasing the potential that they feel socially isolated in their school environment (Bauminger, 2000; Bauminger, 2003). Overall, these students are better able to gain the social, emotional, physical, and cognitive benefits when given opportunities to participate with their peers in an unstructured setting.

Much like their peers with ASD, students receiving special education services under the label of OHD benefit highly from participating in unstructured time. While these individuals are receiving services for a wide range of reasons; ADD/ADHD, chronic illness, mental health; they experience similar challenges when it comes to integrating into the general student population. Participating in unstructured time can help alleviate some of these challenges. For many, integrating into the group is an initial hurdle, but unstructured time presents a low expectation opportunity to test out different scenarios (Adamson, 1990; Mervis, 1998). Students can take a break from the high expectation environment of the classroom and release their energy in an environment with decreased demands (Lucas, 2014). Each individual is free to indulge their inattention in a group or as an individual in an activity of their choosing allowing them to relieve

some of the stresses built up throughout the school day (Lucas, 2012; Lucas & Sturgis, 2012; Lucas, 2014). Additionally, these breaks from the day allow students to test out social situations with their peers in the natural environment, making them more likely to engage with peers of their choosing (Bartko, 2003; Mervis, 1998).

While these benefits have been largely supported by the research and published literature, students with special education needs are still missing out on this time at a disproportional rate. Many of these students require additional instruction in Math, Language Arts, or Social Skills; which unfortunately often comes during these unstructured breaks in the school day (Bartlett, 2011). Additionally, loss of these times is used as a behavior management strategy which disproportionally affects individuals with special education needs (Campbell, 2011). Overall, it is important to note that the benefits present in unstructured time are key in the development of all students' success, but are highly beneficial and critical to the development of individuals with special education needs. In order to assure that these needs are being met it is key that unstructured time be included in the school day schedule.

## Limitations of the Research

The research in the preceding literature review was compiled to add to the discussion of the benefits of unstructured time for students with special education needs. When working through the research the goal was to examine the benefits unstructured time presents, review why these benefits are present during this time, and link these benefits to critical aspects of a special education curriculum.

Searches of ERIC, Academic Search Premier, and Google Scholar were used to compile the research studies and background data used throughout this thesis. When

completing searches on these platforms, literature from the years of 2003 to 2017 served as the primary basis for reference. Additionally, some sources from earlier years, including the 1990's, were included to give historical reference to the assertions being drawn. Keywords including, "special education", "unstructured play", "recess", and "free time" were all used in narrowing the search parameters.

In addition to limiting the sources based on publishing year and keyword searches, they were also narrowed by the disability categories under review. As students receiving services under the labels of ASD and OHD tend to have the most in common, these two groups were used as the basis for including research. Studies were also chosen to cover a range of research styles. Literature reviews, qualitative studies, quantitative studies, and case studies were all used to find common links between different research avenues.

The research that was conducted does have limitations that need to be addressed. Relying solely on other's data brings all of their research limitations into this study. These limitations include, but are not limited to, small sample sizes, researcher and participant bias, and short research periods. Another area in which some limitations presented themselves was in finding research that contradicted the benefits of unstructured time. There are few studies that found harmful effects for students receiving unstructured time in their school days, so this viewpoint was not represented in the research or this review. Finally, many of the studies completed used a student population sample that included students outside of the parameters of this review. Therefore, some cross-study comparisons were drawn to specify the importance for this student group.

## Implications for Future Research

Looking forward to research endeavors that others may embark on in the future there are a few areas in which the research should be focused. Based on the research completed in this thesis, there are definitive holes in the study of unstructured time benefits. There are three main areas that could use more research focus going forward; the long-term effects of the reduction of unstructured time, the effects unstructured time has on different special education groups individually, and the potential downsides to including unstructured time in the school day.

There is very little research present in the current literature pool focusing on the effects of reducing or eliminating unstructured time in the long term. As the trend of minimizing this time is a relatively recent development, there has not been ample time for such research to be completed. It would be beneficial for the educational community to look at how this trend is affecting students in the long term, specifically across their school careers. Typically, schools drastically reduce unstructured time as students move through school, with virtually no time present in the high school grades. However, with this time being removed as early as elementary school it is likely that there are effects for students that have yet to be documented.

The literature pool is also lacking in addressing the benefits with respect to specific special education categories. Students who receive special education services do so for a multitude of different needs, lending their experiences to be very different. Removing or reducing unstructured time would inevitably affect each group of students, and truly every individual student, differently. It would be a good step for the special

education community to have research on how these different groups would be benefited from this time being present.

Finally, further research should be completed focusing on what potential problems arise when unstructured time is included in the school day. Behavior problems, cost, and lack of resources have all been identified as reasons that unstructured time has been cut; but little research has been done to support these reasons. Many individuals for the reduction of this time use research that supports increased seat time, but it rarely mentions reducing unstructured time to obtain this. With this trend on the rise, it is important to get an accurate picture from both sides of the debate. More research on the potential problems of unstructured time is necessary, versus research that focuses on the benefits of increased seat time.

## Implications for Professional Application

The implications for this research are far reaching and should be taken into account for educators across settings. Looking at my own educational career there are definite take-away themes that I will work to continue and integrate into my classroom. These same ideas can be applied to students with different backgrounds and educational needs. The biggest pieces of information that should be taken by educators include; integrating unstructured time into the school day, advocating for this time to be built into the school's curriculum, and being available for students during and following this time.

When planning my schedule for the upcoming school year I was very aware of times where I could work unstructured play into my student's daily routine. Working with students on the Autism Spectrum in the lower elementary grades, I felt even more driven to find and allot these times, as the research showed high rates of benefit for these

student groupings. For my classroom I chose to integrate three 15-minute unstructured times into my schedule. These times will be student led, and will allow them choices to meet their needs. Coming from last year, where I had one 30-minute unstructured break in my day, I am confident that the interspersing on these times will increase the benefits my students are receiving.

While I have the luxury of designing my own schedule for my students, that is not the reality for many teachers. That is why finding any times throughout the day or week to give students unstructured time is key. This time does not have to be a daily occurrence, although that would be preferred, but it can be integrated whenever possible by teachers. Potentially taking some time from transitions, arrival, dismissal, or taking a few minutes from each subject area would allow teachers to "make" time in their day for unstructured activities.

Another way in which educators, who may be in or out of the classroom, can put this research into application is to advocate on their students' behalf at the school, district, and state levels. Many of the policies that make unstructured time hard to come by come from individuals outside the classroom, who mandate how many instructional minutes' students should receive each day. With the research as support, teachers and educators should work with districts and state legislatures to discuss the importance of this time for student development. The research shows that students perform better and learn more successfully when they are given this time, so hopefully with these discussions taking place students can receive what they need to be successful in school.

Finally, when this time is built into the school day it is important that educators are willing and able to help students when needed. For most students and in most

situations, students will be able to, and should be pushed to, work through situations on their own to get as many benefits as possible. However, for some students and in particularly tricky social situations, teacher intervention may be necessary for students to learn and grow in the moment. Utilizing these natural environment opportunities to meet students' needs will only enhance their growth across developmental areas, and make this time even more valuable. Additionally, pre-teaching and debriefing conversations preceding and following these times may add to the benefits students are receiving in the long term. Overall, it is important that when students need help or someone to talk to during these times, teachers be available to do so.

## Conclusion

Unstructured time for students in general, but specifically for students with special education needs, is something that is critical to their development across categories. There has been a consistent debate among the educational and administrative communities on whether removing or reducing unstructured time to increase the amount of time spent in the classroom is the best choice for students. Based on the research present in the current literature it is clear that students benefit socially, cognitively, emotionally, and physically when they are given time to play and be active in an unstructured setting. As educators it is our job to meet student's needs and allow them to grow successfully across developmental areas; including unstructured time in the school day is a strong way for educators to do this effectively.

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