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The Effects of Full-Day Kindergarten Versus Half-Day Kindergarten on Students with Asperger's Syndrome

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Kindergarten is a very important time in a child's life. The debate many parents and teachers are having is whether to attend full-day kindergarten or half-day kindergarten. Full-day kindergarten is more costly for a school district to run than half-day kindergarten, but are the benefits worth the money? Full-day kindergarten is beneficial to those students who are from disadvantaged households, those of low-income, and ELL students. A full-day schedule allows teachers more time with students, allows more time for academics, and also allows more time for social interactions with both peers and adults. Although full-day seems promising, there are advantages to half-day kindergarten as well. A half-day schedule is less demanding on students, and has more of a focus on academics instead of transitioning. Little research has been conducted to compare these types of schedules on students with disabilities. This study will examine the social and behavioral effects of a full-day and half-day kindergarten program on students with Asperger's Syndrome. Students will be assessed at both the beginning and end of the school year using the Escambia social skills checklist.

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Many school districts are switching from half-day kindergarten programming to full-day kindergarten. With tough economic times, and a growing amount of single mothers, both parents often need to work outside the home, increasing the popularity of full-day kindergarten (Wolgemuth, Cobb, & Winokur, 2006). Most parents and teachers believe that by implementing full-day kindergarten programs, students will have a greater outcome both academically and socially.

Researchers have surveyed teachers and parents to see whether or not they believed that full-day or half-day kindergarten was more beneficial to the student (Elicker & Mathur, 1997; Kreassig, 2009; Rosamilia, 2008). For example, within the New Jersey Public School System, teachers and parents reported their feelings on the two

different programs (Rosamilia, 2008). In most cases, teachers and parents believed full-day kindergarten was more beneficial to students than half-day kindergarten. Teachers in both studies reported that students learn better in terms of cognitive, physical, and emotional skills by attending full-day programming. Teachers also believe full-day kindergarten helps students transition to first grade easier. Teachers thought that the full-day program gives greater amount of flexibility which leads to more opportunities to challenge students (Elicker & Mathur, 1997; Kreassig, 2009; Rosamilia, 2008). It seems, in general that parents and teachers believe their children have more time to learn and explore in full-day kindergarten rather than half-day kindergarten. Parents also believe the extra time allows teachers a better opportunity to get to know their child better. Some evidence suggests that teacher intuition is correct. Students who had previously attended full-day kindergarten had better cognitive functioning in the areas of reading, language arts, and mathematics throughout first grade

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when compared to those students who attended half-day kindergarten (Cryan, et al. 1992).

Not all parents and teachers agree with the benefits of full-day kindergarten. Some believe full-day kindergarten students are more likely to be stressed and fatigued due to the longer day (Snyder & Hoffman, 2001). Another concern is those students who attend full-day kindergarten are being asked to perform tasks beyond their developmental capabilities. Studies by both Zvoch, Reynolds, and Parker (2008), the Dynamic Indicators of Basic Early Literacy Skills (DIBELS), and Wolgemuth, Cobb, and Winokur (2006) both indicated that full-day kindergarteners scored higher on the literacy skills assessment than half-day kindergarteners; however that difference diminished as students progressed through elementary school.

It seems the benefits of full-day kindergarten might be particularly strong in students from low income households. English language learners (ELL) are more positively impacted when attending a full-day kindergarten rather than a half day kindergarten, compared to those students who are native speakers (Hall-Kenyon, Bingham, & Korth, 2009). Students of low income households' social development skills were strengthened by enrolling in full-day kindergarten versus their half-day counterparts (Elicker & Mathur, 1997). Minority students tend to benefit more from full-day kindergarten as compared to their counterparts. In a study by Evans and Marken, (1983), reported that white, middle-class students had no differences in academic scores between those students who attended full-day kindergarten and those who only attended half-day kindergarten. Students of low income households performed better on language and phonic skills when attending a full-day program, however there were no significant differences in mathematics skills (Saam, & Nowak, 2005). Interestingly, the study also concludes that when comparing low income students language arts and mathematics scores, those who attended the morning session of half-day kindergarten scored higher than those who attended full-day kindergarten.

Classroom activities may differ in full-day kindergarten versus half-day kindergarten. Elicker and Mathur (1997) separated classroom activities into categories of large group teacher-directed activities, child-initiated activities, small teacher-directed activities, meals, and transitioning. Students in full-day kindergarten spent considerably more time eating meals or transitioning than those students in half-day programming. Full-day kindergarten students also tended to spend more time in large group activities rather than small group instruction. Lee (2006) also evaluated instruction time in a full-day classroom versus a half-day classroom. Lee's study concluded that because of transitioning, full-day students only spend up to 30 additional minutes on instruction than half-day classrooms. Research rarely addresses the

classroom sizes of full-day kindergarten versus half-day kindergarten. Lee (2006) reports that because of budget difficulties in many school districts, full-day classes tend to have considerably more students per class than half-day classes. This is a very important factor to consider when weighing the positives and negatives of full and half-day kindergarten.

Social and behavioral factors also play a role in a child's development. Students who attend full-day kindergarten were considered to be more independent, had less fear and anxiety, and were better at creative thinking than those students who only attended half-day kindergarten (Cryan, et al. 1992). A study by Cleminshaw and Guidubaldi (1979) showed no differences in both social and behavioral aspects between those students who attended full-day kindergarten and those students who attended half-day kindergarten. This area has mixed reviews and further study is needed.

The problem with prior research is the limited sample size and analytical methods. Most of these studies only focus on one geographical area or one demographical population. Some also use a nonmatched/posttest-only method, which is very unreliable as compared to pretest and posttest methods (Lee, 2006). When schools test students also needs to be taken into consideration. We assume that the pretest would be given in August/September (depending on the school district) and the posttest would be given in May/June, however this is not always the case. Some studies indicate that the pretest is not given until almost December and the posttest in May. This is only a span of six months instead of a full nine month school year (Lee, 2006).

Most studies agree that full-day kindergarten is beneficial to disadvantaged students (Hall-Kenyon, Bingham, & Korth, 2009), while students who enroll in half-day kindergarten tend to come from more advantaged households (Elicker & Mathur, 1997). Some research indicates full-day kindergarten is the better option (Wolgemuth, Cobb, & Winokur, 2006), while other studies report that there is no significant difference between full-day and half-day programs (Lee, 2006). Statistical reports need to be interpreted with caution. Because most of the students who attend full-day kindergarten come from disadvantaged households, their cognitive abilities at the beginning of kindergarten tend to be lower. In turn, most students who attend half-day kindergarten come from more advantaged households, and tend to have higher cognitive abilities at the start of kindergarten. When tested at the end of the school year, both full-day and half-day students seem to be on the same level.

Reviews of the literature on kindergarten schedules show little evidence favoring one type of schedule over another (Cryan, et al. 1992). This is particularly important when assessing the benefits of full-day versus half-day kindergarten on students with disabilities. Full-day

kindergarten versus half-day kindergarten has rarely been assessed for special education students. An increasingly common diagnosis among children today is Asperger's Syndrome. In this study, I will be examining the effects of both full-day kindergarten and half-day kindergarten on students with Asperger's syndrome. Asperger's syndrome is a pervasive developmental disorder in which individuals display profound social impairment yet maintain a relatively high level of cognitive functioning and language skills (Comer, 2010).

Asperger's syndrome is becoming more and more prevalent. It has been determined that approximately 110 in every 10,000 children will be diagnosed with Asperger's or another form of Autism (Kogan, 2009). Children with Asperger's Syndrome have difficulties communicating with other including both peers and adults. Conversations tend to be one-sided rather than two-sided. Students have difficulty knowing what to say in certain situations and are unaware of the negative impact this may cause in social situations, especially among peers (Dente & Coles, 2012). Being able to acknowledge and read social cues is another difficulty for those with Asperger's. Behaviorally, students with Asperger's tend to go through a range of emotions and behaviors at any given time. They have very concrete thinking processes and can be very sensitive to different sensory measures that are used daily in a classroom (i.e. music, noise level of classroom, textures such as playdough).

Marks (2000) interviewed three junior high students with Asperger's syndrome as well as their parents, and assessed their behaviors, interests, and social development. The results indicated that school can be filled with negative experiences as well as challenging for students with Asperger's Syndrome. For example, all three students struggled greatly with social interactions and all felt overwhelmed with the expectations the teachers were placing on them. Since students with Asperger's usually find one key interest they are passionate about, the three students reported that school was boring because it did not include their key interests. As a result of their boredom, their academic performance suffered, even though students with Asperger's are often very intelligent.

Given this information, I believe that students who are diagnosed with Asperger's syndrome would perform better socially and behaviorally in a half-day kindergarten setting, rather than a full-day kindergarten setting. Half-day schedules are less demanding socially on students because there is less time for interaction with other peers and adults. This would benefit students with Asperger's because they would not feel as stressed in a half-day environment. In turn, this would lead to better behavior in the classroom.

Research Question

Do kindergarten students who have Asperger's Syndrome perform better behaviorally and socially in a full-day kindergarten setting or a half-day kindergarten setting?

PROPOSED METHOD

Study Design

This is a quasi-experiment to compare students with Asperger's Syndrome's performance socially and behaviorally in a half-day program versus a full-day program

Participants

300 pre-kindergarten students will be recruited to participate in a pilot kindergarten program. There will be 16 classes; all classes will have one teacher and one teaching assistant who have received Asperger's training, as well as identical teaching materials and curriculum for the school year. 262 are general education students and 38 have Asperger's Syndrome. The participants will be randomly assigned to two groups, with an equal number of general education students and students with Asperger's in each group. The control group will consist of 150 students who attend full-day kindergarten. Students will be randomly assigned as follows; 22 general education students and 3 students with Asperger's syndrome per classroom. The experimental group will consist of 150 students who attend the morning session of a half-day kindergarten program. Students will be randomly assigned as follows; 13 general education students and 2 students with Asperger's syndrome per classroom.

Procedure

Each student will be evaluated, using the Escambia Social Skills Checklist. This is a measure used by the Escambia School District that assesses the child's social play and emotional development, emotional regulation, and communication skills. Every teacher and teacher's assistant will undergo curriculum training prior to the start of the kindergarten school year. Each teacher has a strict curriculum to follow, with a weekly checklist of topics/activities that need to be completed by the end of each week. At the end of the school year, during the first week of June, each student will be re-evaluated using the Escambia social skills checklist to show no improvement, little improvement, moderate improvement, or great improvement.

CONCLUDING REMARKS

Significance

Asperger's Syndrome is a significant issue in today's society. Being able to accommodate students who have been diagnosed with Asperger's is crucial to the child's development (Dente & Coles, 2012). The more we learn about Asperger's syndrome, the more teachers and school districts can do in order to make students feel more comfortable in a classroom setting both socially and behaviorally. This study looks in depth at the significance of kindergarten and what effects full-day and half-day kindergarten has on students with Asperger's Syndrome.

There is controversy as to whether full-day kindergarten or half-day kindergarten is more beneficial to student's development. This study will specifically look at a group of students who attend full-day kindergarten for one school year versus a group of students who attend the morning session of half-day kindergarten for one school year.

Limitations

Limitations of the study include class sizes, teacher instruction, and training. Benefits of half-day could result from teacher-student ratio or the length of time that is spent on instruction. It is very difficult to separate these two variables in this study. Another important factor to consider is teacher instruction/training. The teachers in this study will undergo training for both Asperger's Syndrome and curriculum. Not all teachers have experience and/or training in teaching students with Asperger's. Curriculum is also a major factor. State to state, curriculum requirements for kindergarten varies, and teachers may not follow through with the given curriculum which could pose a problem when assessing the students not only academically but also socially and behaviorally.

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