The Impact of Academic Peer Support Intervention on the

Frequency of Social Interactions between Peers
of the Inclusion Classroom

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Abstract

The purpose of this study was to determine if second grade students in the inclusion classroom would increase their frequency of social interactions during non-academic times as a result of implementation of an academic based peer support intervention between special education and general education students. This study involved use of a quasi-experimental design to measure the surveys collected pre- and post-intervention, as well as comparative data collection of frequency data from week 1 to week 8. Positive results were found for 18 out of 20 survey questions as well as frequency data; however the researcher did not find a difference with significant value. Research in this area should continue to determine best practices for implementing peer support interventions within the inclusion classroom in order to support desired outcomes for increase in social and communication skills within the special education community.

CHAPTER I

INTRODUCTION

Overview

Over the past 20 years, education has made a shift towards promoting the inclusion classroom rather than segregation of students with identified learning disabilities. The Individuals with Disabilities Act (2004) mandates that students receiving special education services receive their education within the least restrictive environment. Schools strive to have disabled and non-disabled peers receive education within the same classroom setting for 80% or more of their school day. The inclusion classroom can offer benefits to both general education and special education students. General education students develop an increased understanding of people with a variety of disabilities as well as an increased level of positive attitudes towards peers beyond their same characteristics (Hong, Kwon & Jeon, 2014). Special education students gain access to higher expectations from teachers to increase academic performance, and shared learning opportunities with typical developing peers to increase social and communication skills (Carter, et al. 2015).

In order for all students to receive the benefits from the inclusion classroom, educators and para professionals must be trained in implementing best practices, including peer support. For example, due to the severity of the disability and the impact on access to grade level curriculum, some students are provided with a paraprofessional to assist academic tasks, behavior challenges, adaptive skills, etc. The constant presence of a paraprofessional can result in poor social interactions and a lack of access to curriculum when not properly trained on best practices (Carter et al., 2015). It can be common for students with disabilities such as ADHD, ED, ASD, and intellectual disabilities to have communication and social skill deficits that require

additional support. This directly impacts the frequency with which students with disabilities appropriately seek social interactions with typical developing peers. In addition to the communication and social skill deficits of special education students, general education students' attitudes towards disabled peers can negatively impact the frequency in which typical developing peers seek relationships with disabled peers (Boer, Pijl, Post & Minnaert, 2013). The inclusion classroom can be an isolating place for students with disabilities, who struggle to make social interactions. Due to the presented challenges within the inclusion classroom, it is important for schools to understand the importance of supporting peer relationships and healthy social interactions through developmentally appropriate peer support interventions.

Statement of Problem

The purpose of this study is to investigate the impact of a peer support intervention in a second-grade inclusion classroom during academic times in relation to the frequency of nondisabled students' positive social interactions with disabled peers during non-academic times.

Hypothesis

The Peer Support Intervention implemented in a second grade inclusion classroom during academic times will have no significant impact on the frequency of positive social interactions between disabled and non-disabled peers during non-academic times.

Operational Definitions

The independent variable is Peer Support as before, during, and after students were given the peer support Intervention. Special education students were paired with a trained general education student for the intervention. Data was collected from surveys given to general education students before and after the intervention to assess attitudes towards disabled peers and frequency of positive social interactions. The dependent variable for this study is the frequency

of positive social interactions between disabled and non-disabled peers during non-structured times. This was measured by frequency observational data sheets collected on a weekly basis to compare interaction frequency.

Disabled Peer

A disabled peer in the study is defined as one who is receiving special education services and therefore has met the criteria for a learning disability within the 14 recognized educational labels for the state of Maryland.

Non-Disabled Peer

A non-disabled peer in the study is defined as one who is not receiving special education services, 504 plan, behavioral intervention plan, or academic interventions. This student is typically developing for their age and does not present any social/emotional/behavioral concerns.

Peer Support Intervention

The peer support intervention is defined as the paired relationship assigned by general education classroom teachers. Each disabled peer in the study is strategically assigned to a non-disabled peer. The non-disabled peer is trained by a special educator on turn taking during conversations, scribing for a disabled peer, and providing verbal prompting to assist in communication. The peer support intervention will occur during a structured literacy block, and will require both students to work together in order to create a product.

Positive Social Interactions

Positive social interactions during non-structured times in this study are defined as communication between a disabled peer and non-disabled peer during recess or lunch. This communication can be verbal or nonverbal but must demonstrate turn taking. The frequency in which a disabled peer initiates the interaction with a non-disabled peer is recorded for this study

as well as frequency in which a non-disabled peer initiates the interaction with disabled peer.

CHAPTER II

LITERATURE REVIEW

In this literature review, peer support interventions and the impact on social interactions between students with disabilities and students without disabilities within the inclusion classroom are explored. Section one provides an overview of the benefits of the inclusion classroom and best practices for the inclusion classroom environment. Social interactions between general education students and special education students are discussed in section two. Peer attitudes and social connections between peers are reviewed. Section three addresses peer support interventions and their benefits within inclusion classrooms.

Inclusion Classrooms

Traditionally, students with physical and intellectual disabilities were educated in settings segregated from their typically developed or nondisabled peers. However, over the last 20 years, the approach shifts towards advocating for the inclusion classroom. According to King-Sears (1997),

inclusion is students with disabilities (a) attending the same school as siblings and neighbors, (b) being in general education classrooms with chronological age-appropriate classmates, (c) having individualized and relevant learning objectives, and (d) being provided with the necessary support. Inclusion is not students with disabilities who (a) must spend every minute of the school day in general education classes, (b) never receive small-group or individualized instruction, and (c) are in general education classes to learn the core curriculum only. (p. 2)

The inclusion classroom environment provides benefits to both the general education student and the special education student. For the general education student, research shows that students

benefit from having regular contact with people with disabilities as it assists in developing positive feelings towards people with disabilities and increases their understanding of disabilities (Hong et al. 2014). This is consistent with the data of Carter et al. (2015), who find that peers who receive education with special education students have improved attitudes, personal growth, and new friendships beyond peers with their same characteristics. Data obtained by researchers Hong et al. (2014) show that preschool children, prior to receiving an education alongside students with disabilities, have a less than basic level of understanding of disabilities beyond those associated with visual adaptive equipment, such as wheelchairs. This demonstrates that without the inclusion classroom, children without disabilities may have limited exposure to people with disabilities. For the student receiving special education, the inclusion classroom offers access to learning opportunities with interesting curricular content, shared learning opportunities that increase communication and social skills, higher expectations from teachers that increase academics performance, and new peer relationships (Carter et al., 2015).

While research demonstrates that the majority of students receiving special education services are more successful in an integrated classroom rather than an isolated classroom, it is important to recognize that there are proven best practices for the inclusion classroom in order to ensure all students benefit from the experience (King-Sears, 1997). In order for teachers to implement the most effective inclusive classroom, the teacher should receive training in best practices and be provided with additional support for implementing all of the following practices: cooperative learning, strategy instruction, differentiation, self-determination, explicit instruction, curriculum based-assessment, generalization techniques, collaboration, proactive behavior management, and peer supports. Each of these practices benefit both general education students and special education students. In addition to the necessary training of teachers for best

academic practices within the inclusion classroom, it is equally important to recognize the impact of the adults within the inclusion classroom. For instance, as a result of inclusion classrooms, it is sometimes necessary for students receiving special education services to be provided with support from a paraprofessional in order for the student to receive equal access to curriculum. As of 2015, there are more than 400,000 paraprofessionals working with school aged children within the inclusion classrooms of America, under the Individuals with Disabilities Education Act (Carter et al., 2015). However, researchers find that in order to have a positive impact for all students within the inclusion classroom, the paraprofessional requires high-quality training and should be properly utilized with specific strategies and purposeful support (Brock & Carter, 2013). Without proper training, the presence of a paraprofessional can result in poor social interactions and lack of access to curriculum for special education students (Carter et al., 2015). The challenge of implementing best practices within the inclusion classroom supports the researchers' claim that "despite growing awareness and increased interaction, peer acceptance is often lacking" (Boer, Pijl, Minnaert & Post 2014, p. 573).

Social Interactions Between Peers

According to Boer, et al. (2014), "...30 percent of students with disabilities have significantly fewer friends and are less likely to be accepted by their typically developing peers" (p. 832). While this may be due to the lack of implementation of best practices within an inclusion classroom, research indicates that student attitudes towards disabled peers directly impact peer acceptance. The attitudes of typically developing peers or students without disabilities prove to be less positive towards students with disabilities such as ADHD, ASD, and intellectual disabilities (Boer et al., 2013). While researchers acknowledge there are contributing factors that may influence peer attitudes towards disabled peers (age, gender, disability type,

education), a key component to the social difficulties is that typical developing peers prefer to become friends with peers based on similar characteristics, and that the social behavior and type of disability of the student emphasize differences between students, which directly result in less peer initiation of friendships (Boer et al. 2013). This results in general education students being less likely to pursue a friendship with a student who has a disability than a student without a disability, and instead they prefer to make friendships with peers who share their own characteristics.

In addition to the attitudes of general education students towards students with disabilities within the inclusion classroom negatively impacting social relationships, special education students have a specifically hard time engaging in social interactions during free time provided in the school day. Students are not consistently able to generalize taught social strategies within social free time areas (lunch, recess, transitions, gym), and therefore prime times for socialization within the school day tend to be particularly isolating for students with a disability (Hochman, Carter, Bottema-Beutel, Harvey, & Gustafson, 2015). Students with disabilities often require support with their social and communication skills in order to initiate social interactions and engage in conversation. This requires implementation of an inclusion classroom best practices in order to promote peer relationships between disabled and non-disabled peers. Without the support of a peer interaction intervention, the frequency of any type of social interactions between peers range from 0% to 14% (Hochman et al., 2015).

Peer Support Interventions

Due to the increase in inclusion classrooms and the need to promote social relationships between students, researchers have recognized the need for evaluating the effectiveness of peer support interventions in order to positively increase the educational experience for both special education and general education students. Carter E. W., Moss, C. K., Hoffman, A., Chung, Y., & Sisco, L. (2011) discuss that despite the promise attributed to inclusive education, meaningful social participation with general education students tends to be elusive for many students with disabilities. This resulted in evaluation of effective and feasible strategies that enable students to benefit fully from inclusive classrooms. As previously noted above, one of the best practices for implementing an inclusive classroom is to promote social relationships between all students by fostering peer support within the classroom setting. It was originally thought that by simply placing students in physical proximity, social interactions would increase; however, research findings demonstrate that some type of peer support training program must occur in order for social interactions between peers to increase (King-Sears, 1997).

Peer support interventions can look different within different classroom environments, as they require the teacher to tailor the intervention to match the needs of the students (Ayvazo & Aljadeff-Abergel, 2014). For instance, while one class may benefit from peers supporting reading, another class may benefit from peers supporting behavior or communication skills. Muslem & Abbas (2017) find that low at-risk ESOL students who received peer interventions were more successful with their communication skills. Peer support intervention requires that the paired students receive social skills training in communication and turn-taking in conversation, and that the pairs take turns in the role of student and teacher. Classwide Peer Tutoring (CWPT) is a research-based peer support intervention that involves the entire class. It allows all class

students to engage in teaching and practicing by pairing the students, providing all students with hands on learning and cognitive learning at the same time, resulting in a sense of teamwork. Abyvazo & Aljadef-Abergel (2014) find that due to the programmed interactions within CWPT and between general education and special education peers, both groups of students increased their performance after receiving CWPT. McCurdy & Cole (2014) state that involving peers rather than adults in intervention efforts has several advantages over adult-directed intervention strategies. Peers are readily available, making the practice cost and time effective.

Improvements ensue with regard to engagement time, attention to task, academic and cognitive performance, and social interactions.

Summary

Proper implementation of peer support strategies within the inclusion classroom is important to the development and maintenance of social interactions between peers. Indeed, the inclusive classroom is now a common occurrence across America, resulting in teachers facing the challenge of individualizing instruction for diverse learners. Research findings show that students with disabilities, receiving their education within an inclusion classroom, require trained adult professionals who are able to foster peer relationships. The attitudes of typical developing peers play a large role in initiated friendships, as well as common social and communicative challenges faced by many special education students. However, with tailored peer interventions, all students can benefit from the inclusion classroom, socially and academically.

CHAPTER III

METHODS

The study was conducted to determine the impact of a peer support intervention implemented during the literacy block of a second grade inclusion classroom on the frequency of positive social interactions between disabled and non-disabled peers during non-structured times.

Design

The study utilized a quasi-experimental design, which consisted of a pretest, utilizing student surveys to determine a baseline for peer attitudes towards disabled peers and frequency of social interactions. The study spanned an 8-week trial period, late in April through mid-June. Social interactions during non-structured times were monitored through observational data collected weekly. A posttest, utilizing a student survey, was used to determine the impact of peer intervention on attitudes towards disabled peers at the end of the 8 weeks. The frequency of social interactions between disabled and nondisabled peers were also recorded.

Participants

The participants in this study are second grade students who attend an inclusive expeditionary learning public charter school serving students in Anne Arundel County, MD.

There are approximately 75 second grade students, 10 receiving specialized instruction through an IEP.

The students were selected with a convenience sampling technique. The 10 students receiving specialized instruction were assigned a non-disabled peer as their peer tutor during the second grade literacy block. General education teachers were asked to nominate general education students to participate during this study based on academic ability and patterns of behavior. The study consisted of 20 students (10 disabled, 10 non-disabled). The students in the

study consisted of 13 males and 7 females. Of the 10 disabled participants, 6 were white and 4 were African American. Within the group of disabled participants, 3 out of 10 students currently receive support from a para professional. Of the 10 non-disabled participants, 6 were white, 1 was African American, 1 was of Mixed Race, 1 was Asian, and 1 was of Indian descent.

Table 1 shows the eligibility category for each of the 10 disabled participants, along with their gender, race, and assigned peer tutors' gender and race. Each participant was assigned a peer tutor of the same gender, except for one student who has demonstrated a discomfort for engaging in social interactions with peers of the same gender.

Table 1

Participants

Eligibility Category	Gender	Race	Peer Tutor
Multiple Disabilities (ED, ADHD)	Male	White	Male, White
Autism	Male	White	Female, White
Multiple Disabilities (SLD	Female	White	Female, Mixed
Reading, ADHD)			Race
Multiple Disabilities (SLD	Male	African-	Male, African-
Reading, ADHD)		American	American
Intellectual Disability	Female	White	Female, White
Other Health Impairment	Male	White	Male, Asian
(seizure disorder)			
Multiple Disabilities (Speech and	Male	African-	Male, White
Language Impairment, ADHD)		American	
Autism	Male	White	Male, White

Speech and Language	Male	African-	Male, Indian
Impairment		American	
Other Health Impairment	Female	African-	Female, White
(ADHD)		American	

Instrument

A survey was given to non-disabled peers, based on the Contact with Disabilities Persons Scale (CDP) and Attitude Toward Disabled Persons Scale (ATDP). For the purpose of this study, both scales were altered and condensed in order to reflect the developmental level of the participants (ages 7-8). The instrument consists of 20 items assessing frequency of interactions with people who have disabilities (10 questions) and attitudes towards people with disabilities (10 questions). Respondents were asked to indicate the frequency of interactions, on a 5-point scale ranging from 1 (never), to 5 (very often). Respondents then were asked to indicate the degree to which they agree or disagree with the statement regarding attitude towards people who have disabilities on a 5 point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

An observational record was kept weekly. This record reflects the frequency of social interactions observed between the disabled participant and non-disabled peers. The date, setting (lunch or recess), initiated by disabled participant or by non-disabled peer, and amount of turn taking interaction (verbal and nonverbal) was recorded.

Procedure

Once the participants were identified using IEP service hours and general education teacher input, a meeting was held with the three second grade teachers and instructional coach.

At that point, the decision was made on how to pair the students and train each non-disabled peer

on appropriate protocols for the peer intervention. Currently, students engage in a literacy rotation block that provides the opportunity for peer interactions during the completion of assigned tasks. It was decided that the most appropriate time would be during "work on writing."

During a Morning Crew session, the general education teacher provided time for the special educator to explain the instrument and give examples for how to respond. All second grade students were given the instrument, despite only collecting and analyzing the strategically chosen 10 non-disabled participants. The participants were engaged and responded to every question on the tool. After completing the instrument, the special educator and general education teacher co-taught a crew lesson on working with an assigned partner during literacy rotations. The crew lesson focus was on initiating conversation ("What is something you know a lot about?", continuing a conversation ("Tell me more about ___, Wh- questions) and giving wait time for responses. An anchor chart was created to assist partners in facilitating a conversation in order to create of piece of writing. Each second grade student was assigned a partner, despite the study only focusing on 20 participants. Partners were given a folder to save their writing and rate their level of happiness for how well they worked together that day.

Weekly, the general education and special education teacher would facilitate a crew lesson to check in on partners and provide a share time for their writing. Teachers revisited appropriate ways to engage in conversations and work together as needed. The three paraprofessionals and special educator worked together to record observational data of the 10 disabled peers on a weekly basis.

At the end of the 8 weeks, the second grade classes engaged in a final crew lesson in which they completed the instrument again and reflected on their experiences working with a partner during writing.

CHAPTER IV

RESULTS

This study examined the impact of a peer intervention between 10 second grade general education students and 10 special education students during academic times in relation to the frequency of positive social interactions between peers during non-academic times. Before and after implementing the peer intervention, the attitudes of non-disabled peers towards disabled peers were measured using a 20 question survey: 10 questions from Contact with Disabled Peers (CDP) and 10 questions from Attitudes towards Disabled Peers (ATDP). During the implementation of the peer intervention, weekly frequency observations of positive interactions involving turn-taking was recorded. The frequency of interactions was differentiated between interactions initiated by the disabled peer and interactions initiated by a non-disabled peer.

Following the intervention, the difference between the pre- and post-CDP and ATDP surveys was not significant. Only one question with the ATDP portion of the survey held a significant result. However, a positive result was seen for 18 out of 20 questions, with one negative result on number 6 within the CDP survey and one negative result on number 4 within the ATDP survey.

During the intervention, from week 1 to week 8, the difference of interactions initiated by disabled students towards non-disabled peers (P value= 0.077) was not significant at a 0.05 level, but was significant at a 0.1 level. Interactions initiated by non-disabled peers towards disabled peers (P value= 0.056) from week 1 to week 8 was not significant at 0.05 level, but was significant at 0.1 level. Due to the small sample size, there is not enough data to support that the peer tutoring intervention had a significant impact on the frequency of social interactions between special education and general education students.

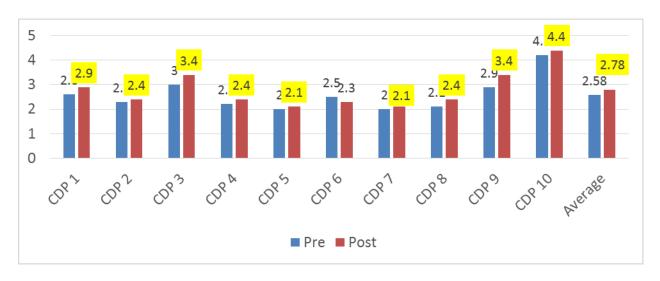


Figure 1. Comparing Pre- and Post-CDP Survey Mean Results

Table 2

Paired Differences for Pre- and Post-CDP survey

		Mean difference (Post Minus Pre)	Std. Deviation	Std. Error Mean	t	df	Sig. (2- tailed)**
Pair 1	CDP Post Scale 1 - CDP Pre Scale 1	0.30	0.67	0.21	1.406	9	0.193
Pair 2	CDP Post Scale 2 - CDP Pre Scale 2	0.10	0.57	0.18	0.557	9	0.591
Pair 3	CDP Post Scale 3 - CDP Pre Scale 3	0.40	0.97	0.31	1.309	9	0.223
Pair 4	CDP Post Scale 4 - CDP Pre Scale 4	0.20	0.42	0.13	1.500	9	0.168
Pair 5	CDP Post Scale 5 - CDP Pre Scale 5	0.10	0.99	0.31	0.318	9	0.758
Pair 6	CDP Post Scale 6 - CDP Pre Scale 6	-0.2	0.79	0.25	-0.802	9	0.443
Pair 7	CDP Post Scale 7 - CDP Pre Scale 7	0.10	0.57	0.18	0.557	9	0.591
Pair 8	CDP Post scale 8 - CDP Pre Scale 8	0.30	0.95	0.30	1.000	9	0.343
Pair 9	CDP Post Scale 9 - CDP Pre Scale 9	0.50	0.97	0.31	1.627	9	0.138
Pair 10	CDP Post Scale 10 - CDP Pre Scale 10	0.20	0.42	0.13	1.500	9	0.168

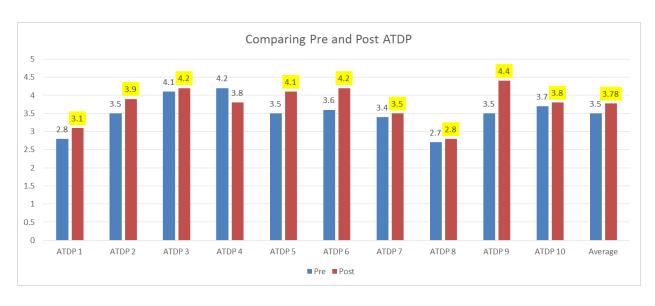


Figure 2. Comparing Pre- and Post-ATDP Survey Mean Results

Table 3

Paired Differences for Pre- and Post-ATDP Survey

		Mean Difference (Post Minus Pre)	Std. Deviation	Std. Error Mean			
Pair 1	ATDP Post 1 - ATDP Pre 1	0.300	0.483	0.153	1.964	9	0.081
Pair 2	ATDP Post 2 - ATDP Pre 2	0.400	1.075	0.340	1.177	9	0.269
Pair 3	ATDP Post 3 - ATDP Pre 3	0.100	0.738	0.233	0.429	9	0.678
Pair 4	ATDP Post4 - ATDP Pre 4	-0.4	1.075	0.340	-1.177	9	0.269
Pair 5	ATDP Post 5 - ATDP Pre 5	0.600	1.075	0.340	1.765	9	0.111
Pair 6	ATDP Post 6 - ATDP Pre 6	0.600	0.843	0.267	2.250	9	0.051
Pair 7	ATDP Post 7 - ATDP Pre 7	0.100	0.994	0.314	0.318	9	0.758
Pair 8	ATDP Post 8 - ATDP Pre 8	0.100	0.568	0.180	0.557	9	0.591
Pair 9	ATDP Post 9 - ATDP Pre 9	0.900	0.994	0.314	2.862	9	0.019
Pair 10	ATDP Post 10 - ATDP Pre 10	0.100	0.994	0.314	0.318	9	0.758

Table 4

Paired Differences for Frequency Interactions from Week 1 to Week 8

		Mean Difference	Std.	Std. Error Mean	t	df	Sig. (2-tailed)
Pair 1 Disabled Peer	Dis. W8 - Dis. W1	2.00	2.96	0.99	2.028	8	0.077
Pair 2 Non- Disabled Peer	Non W8 - Non W1	2.22	2.99	1.00	2.229	8	0.056

CHAPTER V

DISCUSSION

The purpose of this study was to investigate the impact of a peer support intervention in a second-grade inclusion classroom during academic times in relation to the frequency of nondisabled students' positive social interactions with disabled peers during non-academic times. The researcher sought to answer the question of whether or not establishing and maintaining peer tutoring relationships during academic times would affect students' frequency of positive social interactions during non-academic times between general education and special education students. The null hypothesis that there would be no significant statistical impact on the frequency of positive social interactions between peers after the implementation of the peer intervention failed to be rejected.

Implications of Results

According to the results of the study, there is not significant evidence to support that the Peer Tutoring Intervention is effective in increasing the frequency of positive social interactions between disabled and non-disabled peers during non-academic times. However, the researcher collected data to support the positive trends of the intervention on general education student attitudes towards peers with disabilities and the frequency of both groups of peers initiating positive social interactions.

According to the post-survey collected from general education students, on average general education students had an increase in positive contact with disabled peers and an increase in positive attitude towards disabled peers. Non-disabled students increased their frequency of initiating positive social interactions with disabled peers from week 1 to week 8 of the intervention, and disabled students increased their frequency of initiating social interactions with

non-disabled peers from week 1 to week 8 of the intervention. While the frequency did not increase at a statistically significant level, they demonstrate the potential for the intervention to increase the positive social interactions between disabled and non-disabled students.

In terms of application, this intervention can be moderately difficult to implement with consistency and fidelity. Peer tutoring between general education and special education students requires strategic lessons for students in building their capacity to work collaboratively. Students were required to work with peers that have communication difficulties, social or emotional challenges, and learning deficits. It requires both partners to have a basic understanding for turn taking protocols and both students to have the ability to select and implement strategies that will initiate collaborative conversation and continue the process of completing an academic task. The intervention requires structure and routine; teachers must be able to make adequate time to check in with student needs and conference as needed on a weekly basis. Depending on the service hours required of the disabled peers, and their emotional availability, this factor can decrease the application and reach of the intervention in a significant manner. Based on trends, Peer Tutoring Interventions have the potential to be a worthwhile intervention, provided that the students and teachers meet consistently and follow turn taking protocols.

Theoretical Consequences

Although the results did not demonstrate statistical significance, trends in the qualitative data provide support for establishing peer tutoring relationships between disabled and non-disabled peers. Through assigned partners, students were able to engage in turn taking protocols in order to collaborate on a writing assignment. The crew meetings allowed for direct instruction on following protocols, and students were able to practice their communication and social skills while learning more about each other. Through check-ins, teachers were able to support peer

partners and help to establish and maintain a positive interaction during the academic period. Within this study, 3 of the 10 students receive support from a paraprofessional. Historically, the presence of a paraprofessional can result in poor social interactions and lack of access to curriculum for special education students (Carter et al., 2015). By facilitating the peer intervention, students are provided with needed social interactions and access to grade level curriculum from the assistance of a same age peer and are given an opportunity for a level of independence from adults. According to the qualitative data, the peer intervention increased the likelihood that both a disabled peer and non-disabled peer would initiate a positive interaction during a non-academic time, supporting the possibility that establishing a positive peer relationship of turn taking within the classroom can be transferred to non-academic times.

Threats to Validity

There are multiple threats to validity within this study. First, the sample size was small, therefore reducing the power to find a significant difference. In addition, the subjects were not randomly assigned within the peer support intervention. This study included a selection of participants based on disability label and teacher recommendations for assigned partners. It should be noted that the non-disabled peers involved in this experiment were perceived by teachers as having positive attitudes towards their disabled peers prior to the implementation of the intervention. The researcher asked for general education teacher input in an attempt to ensure disabled students would be provided a patient and tolerant partner that could support their individual needs. This nonrandom selection of participants limits the generalizability of the study.

Another threat to the validity of the study was student participation. During the 8-week intervention, three out of ten disabled students had issues with behavior (non-compliance or

refusal to engage in tasks, and verbal and/or physical aggression), impacting their availability for intervention participation and application of turn taking interactions during non-academic times. One of the three mentioned students became emotionally unavailable during the month of May and later was admitted to a day program at a hospital. He did not participate during the final three weeks of the intervention.

Furthermore, the results cannot be generalized beyond the narrow scope of the study. The participants in this study were ten special education students and ten general education students within second grade at one school. It is also important to note that the school at which this study took place is a Public Charter School, listed within the county as an "alternate school," affiliated with The Children's Guild. Duplicating this intervention in a different setting likely would yield different results. In a setting where the school does not implement school-wide protocols to facilitate collaboration within inclusion classrooms (promoting Habits of Excellence such as collaboration, service and compassion, perseverance, responsibility, inquiry, and quality), provide weekly professional development for teachers and staff, and have school specific resource professionals (OT, SLP, Psychologist, Social Worker, School Counselor, grade level special educators, etc.), the school would need to establish a baseline for best practices within the inclusion classroom for facilitating such an intervention.

Additionally, the non-disabled peers participating in the survey did not have a clear understanding of what constitutes as a disability. Some students made comments indicating they thought their younger siblings had a disability due to their mom needing to help them, and others reported that they didn't know anyone with a disability despite being partners with an intellectually disabled peer. Because the surveys required honest feedback on attitudes towards

peers with a disability and frequency of interactions with disabled peers, the researcher cannot generalize the results of this study.

Connections to Previous Studies

A study conducted by Hochman et al. (2015) examined the effects of peer networks to increase social connections among high school students with and without Autism Spectrum Disorder (ASD). The researchers collected data on the effects of "lunchtime peer network intervention on the social engagement and peer interactions of four adolescents with ASD" (p. 96). Researchers found that upon the introduction of the peer network intervention, there was a substantial increase in the percentage of peer interactions and social engagement among all participants. In addition to the increase in interactions and social engagement, all peer partners, students with ASD, school personnel, and parents, reported that the intervention was helpful. School personnel were trained in facilitating the lunchtime peer network intervention and supported desired social behaviors as needed. The frequency with which students with ASD required facilitation was recorded. Results found that as the intervention continued, students required less school personnel support. The results of this study support previous findings by McCurdy and Cole (2014), stating that peer interventions are effective, cost-efficient, and easy to use interventions within inclusion classroom settings. Their study found that students with Autism in the general education settings benefit from peer intervention by reducing the off-task behaviors of the students with ASD in the inclusion settings.

Although, the studies cited above cannot be directly compared due to differences in the age of participants within the first study and the focus of impact for the second study, there are connections that can be made. Similar to the Hochman et al. (2015) study, this study sought to analyze the effect of peer intervention on social connections for students with ASD; however,

the focus of this study was more broad in that it focused on all special education students within the second grade classrooms. In this study, disabilities included ASD, Intellectual Disability, Emotional Disability, Speech and Language Impairment, Other Health Impairment (i.e. ADHD and Seizure disorder), and Specific Learning Disability in Reading. While this study focused on a younger group of students and a wider range of educational disabilities, this study did produce qualitative feedback that matches the findings of Hochman et al. In place of a lunchroom peer network, this study implemented an academic based peer support intervention to serve the communication and social needs of students with disabilities within the writing and reading block of their second grade class. In both studies, students received a partner and had assistance in learning appropriate protocols for conversational turn taking. The McCurdy and Cole (2014) study provide support for the use of peer intervention from the mindset of effectiveness, cost efficiency, and easy implementation. This connects to the application of intervention within this study in that both utilized the natural dynamic of the general education/inclusion classroom and built upon the framework of student engagement. In both studies, participants were selected based on teacher input and needs of the special education student.

Implications for Future Research

Future research related to ways in which peer support intervention relationships can increase the frequency of positive social interactions between disabled and non-disabled peers during non-academic times might address threats to validity identified in the current study. For example, future research should include more participants and the participants should be randomly assigned within the inclusion classroom. Although, the best interests of student safety and mental health of students should always be considered.

Additionally, future research could build on elements of this study by comparing the behavioral impact of the peer support intervention. By comparing the frequency of targeted behaviors prior to and after the intervention, the researcher would determine if there is a difference in the effect on students who are aggressive or noncompliant. It would be beneficial to compare students with different functions for misbehavior in order to target the students who would benefit most from a peer support intervention and determine measures applicable for ensuring students are able to access the intervention consistently.

It may also be beneficial for future researchers to include a student (special education) and parent perspective on social interactions pre- and post-survey. The current study was limited to attitudes of general education students towards special education students; however, it would be beneficial to gain insight into the perspective of special education students as well. This addition would allow researchers to compare the attitudes of all students pre- and post-intervention, as well as track frequency of positive social interactions.

Furthermore, future research should consider adding an aspect to the intervention that would increase the understanding of educational disabilities. General education students were unclear on what it meant to have a disability and did not make connections between the survey questions and interactions occurring with their classrooms. Future researchers should consider evaluating disability awareness and provide direct education on visible and non-visible disabilities. There may be differences in the attitudes surveys once students obtain an understanding of differences.

Summary and Conclusion

In summary, creating positive peer relationships and facilitating turn-taking protocols within academic settings are essential components in promoting social interactions between

disabled and non-disabled peers. This study examined the effect of a peer intervention during academic times on the frequency of positive social interactions during non-academic times between peers. The intervention used in this study was a tailored Class-wide Peer Intervention, implemented within second grade classrooms at a Public Charter School to support special education students who do not engage in frequent social interactions with non-disabled same aged peers.

The results of this study combined with previous research suggest that peer support interventions have the potential to impact academic achievement and social acceptance.

According to qualitative data, both groups of students increased their frequency of positive social interactions, and general education students gained positive attitudes towards disabled peers.

Therefore, it is reasonable to assume that, while there was not a statistically significant data, the peer intervention has the potential to positively impact social interactions during non-academic times. When students engage in positive collaboration with their same aged peers, they may likely become more comfortable to approach peers in a positive way.

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