RESEARCH

Effectiveness of a peer-mediated intervention on writing skills for students with autism

Journal of the American Academy of Special Education Professionals
2025, Vol. 20(3) 1 – 12

DOI: 10.64546/jaasep.585

Siddiq Ahmed, Ph.D.[1] & Mohammed Al Jaffal, Ph.D[2*]

[1]*American College of Education, Indianapolis, IN*
[2]*King Saud University, Riyadh, Saudia Arabia*

*Correspondence:
aljaffalm@duq.edu

Abstract

The current study aimed to investigate the effectiveness of a Peer-Mediated Intervention (PMI) on writing skills for students with autism spectrum disorder (ASD) in the inclusive classroom. The participants in this study were two seventh-grade students, one neurotypical student who acted as a tutor and has achieved high academic outcomes in the area of writing, the other participant is the tutee, who had been diagnosed with autism spectrum disorder (ASD) and struggled with development of writing skills. The study utilized multiple-baseline design across behaviors to identify the effectiveness of a PMI on writing skills for the student with ASD in three areas of writing skills (i.e., subject-verb agreement, capitalization/spelling, punctuation). The results of the present study showed that PMI yielded significant improvements in academic achievement for the target student. This study suggests that further studies replicate the current study with an intensive focus on other academic skills, such as reading comprehension and mathematics.

Keywords: autism spectrum disorder, inclusive education, peer tutoring, writing skills, multiple-baseline design

Introduction

Peer-Mediated Intervention (PMI) is an effective strategy that has been found to enhance social skills deficits and academic performance in students with autism spectrum disorder ASD (Hart & Banda, 2018). It is a concept that has its roots in the regular education initiative of the mid-1980s and instructional approaches such as Multi-Tiered Systems of Support (MTSS), which have the shared goal of creating an inclusive general education (GE) setting where children with special needs are educated alongside their typical peers (Hart, & Banda, 2018; Leach & Helf, 2016). The amendment of the Individuals with Disabilities Education Act ([IDEA], 2004) directs that student with disabilities, including ASD, should be educated in GE classrooms with their typical peers to the maximum extent possible (McCurdy & Cole, 2014). Research has shown that peer-tutoring intervention is an effective strategy to improve children and adolescents' academic and life skills (Hart &

Banda, 2018, Fetko, Collins et al. 2013, Odluyurt et al. 2014). However, less attention has been given to its implications for the development of writing skills. This research aimed to investigate the effectiveness of PMI on writing skills in inclusive classrooms for a student with ASD.

Writing Skills of Students with ASD

Writing is an important tool for learning and communication, but it is especially challenging for students with special needs, particularly in the area of constructing well-formed sentences. The writing skills of these students are generally less syntactically complex, and their sentences often contain grammatical errors (Saddler et al., 2008). Such individuals tend to produce writing with capitalization, punctuation, and spelling errors and the overall quality of their writing tends to be lower than that of their typical peers. Therefore, it is important to support these students in overcoming this challenge through proven strategies that incorporate evidence-based practices. Whitby et al. (2009) stated that written expression is identified as a deficit for many students in the category of High Functioning Autism and 60% of these individuals may present with writing learning disabilities. (The category of "high functioning autism" best correlates with the current category of Level 1 ASD as described in the *Diagnostic and Statistical Manual of Mental Disorders-5* (American Psychiatric Association, 2013.) Although there might be less concern about social and behavioral impairments for high-functioning students with ASD, these characteristics of ASD must still be considered when developing supports for these students so that they can achieve to their greatest academic potential. Thus, teachers need to match interventions to the unique academic profile of the student to increase their success. Furthermore, it has been shown that students with Levels 1 and 2 (high- and moderate-functioning) autism spectrum disorder exhibit significantly better performance in academic tasks when external support is provided to them (Whitby et al., 2009).

Asaro-Saddler and Bak (2014) noted some characteristics of children with ASD that may affect their ability in writing essays. These characteristics include: (a) lack of Theory of Mind, a characteristic that causes them to have difficulty understanding that others might think differently than they do; (b) having weak central coherence, meaning difficulty distinguishing between important and unimportant details that impairs the ability to incorporate meaningful supporting concepts into writing; (c) limited interest or over-focus on only certain topics that could impair the ability to choose a topic for writing assignments that others will find interesting; (d) lack of self-regulation skills, which can impair the ability to create an outline, be flexible in constructing an essay, and impact the ability to self-monitor during the writing process; and (e) social skills and social communication deficits that might carry-over to their writing process. Since so many of these issues can relate to limited interactions with others, settings where socialization occurs in a structured environment like the GE classroom can support students with ASD across skillsets, including writing. Thus, peer-mediated intervention approaches create a unique and powerful opportunity to provide support to students diagnosed with ASD, especially those diagnosed as at Level 1.

Effectiveness of Peer-Mediated Intervention for Students with ASD

Due to the progress made in the past few decades regarding mainstreaming and inclusion, many students with ASD, emotional behavioral disorders, and multiple developmental disabilities are now educated in inclusive GE classrooms; however, researchers have found there continues to be a lack of appropriate accommodations for these students (Carter et al., 2015). As a result, these students with special needs may struggle in their academic performance and may need substantial support to meet their academic potential. One evidence-based method that has been found effective is peer-mediated intervention (PMI) (Heron et al., 2006). This practice involves cooperative teaching involving a high-ability student (the tutor) and a student with, for example, ASD (the tutee) who is struggling. This

practice is grounded in the early 20th century psychologist Vygotsky's (1978) theory of the Zone of Proximal Development which describes how children learn, and his related concept of the More Knowledgeable Other (MKO), where a child's exposure to and interactions with an individual (a peer or adult) who has greater understanding of a concept leads to the child then being able to comprehend the idea on their own. In PMI, the tutor (MKO peer) guides the tutee (the child with disabilities) through the assignment under the supervision of a teacher. PMI creates a social interaction between children with a variety of cognitive abilities to promote the optimal education for students with disabilities through an interactive and collaborative learning activity (Ayvazo & Aljadeff-Abergel, 2014). McCurdy and Cole (2014) identified several advantages to such interventions, such as: (a) peer supporters are available across a variety of school settings and are willing to assist their peers with educational and behavioral tasks, naturally affecting each other's behavior. (b) Peers are present across multiple school settings, which promotes maintenance and generalization of positive behavior change. (c) The behavior of the peer mediators gives cues to the child with special needs to remind them of the appropriate behaviors learned during the intervention process. Additionally, peer mediators effectively meet the students' needs, allowing the teacher to spend more time teaching and programming for all students' educational needs. Finally (d), using peer mediators in classroom interventions provides students with increased opportunities to receive feedback and modify behaviors, resulting in a higher level of attention, cognitive response, and social gains.

Carter et al. (2005) cited PMI as an effective intervention and alternative to traditional teaching strategies as it creates opportunities for more efficient instruction for students with moderate and severe disabilities within the GE classroom. While Carter et al. (2015) noted that there are challenges in providing students with disabilities meaningful access to the GE curriculum in an inclusive setting, the authors stated that PMI can be a practical, promising support to deliver the full range of the curriculum through shared learning opportunities. PMI has been shown to provide increased accessibility to interesting curricular content, raised expectations for performance, and established new and positive social relationships among students of a diversity of abilitites (Carter et al., 2015).

Ayvazo and Aljadeff-Abergel (2014) described class-wide PMI as an evidence-based practice that naturally encourages interactions between peers and holds promise for the education of learners at risk for low academic achievement. PMI may also improve social skills in children with Autism by engaging neurotypical peers as social models to stimulate social interactions and reactions (Chang & Locke, 2016). Determining the way in which peers provide support to students with disabilities using this strategy, especially at school level, would indicate the fidelity of implementation and offer substantial insights to the high achieving school students who work cooperatively with SWDs within inclusive classrooms (Carter et al. 2011).

Numerous studies have shown the efficacy of PMI, whether within-group or in individual settings (e.g., Bowman-Perrott et al., 2013; Hart & Banda, 2018; Matthews et al., 2018). For example, Vukelich et al. (2013) stated that typical students who tutor their peers have benefited substantially more than their untutored peers. Furthermore, many researchers have investigated the outcomes of students who were tutored in one-on-one PMI and found those who had received such tutoring outperformed their classmates

who had not received such tutoring (Ayvazo & Aljadeff-Abergel, 2014; Haas et al. 2020). This indicates that regardless of whether they have disabilities, under well-structured and organized conditions, all low-performing students can learn effectively through PMI. Even though the intervention has been employed in many inclusive settings to help low academic achievers improve their academic outcomes (Haas et al.,2020), few studies were found regarding peer-mediated intervention specifically with regard to writing skills. This study therefore endeavored to address this gap in the research by focusing on a PMI in the specific context of an under-achieving student with ASD struggling with writing skills to determine whether the intervention could improve his writing skills through a process that could be delivered in the inclusive GE classroom.

Research Questions

The literature review led to the following Research Question: (a) What is the effectiveness of a peer-mediated intervention on writing skills in students with autism spectrum disorder in inclusive classrooms?, and (b) Would this increase of writing skills behaviors be maintained when the PMI was withdrawn?

Design and Procedure

This study utilized a multiple baseline design across behaviors. The multiple baseline design across behaviors assesses participants who demonstrates three or more behaviors that functionally similar but independent **(**Richards, Taylor, & Ramasamy, 2014**).** This design aimed to assess the use of PMI (the independent variable) to improve writing skills in the three areas (dependent variables) of: (a) subject-verb agreement, (b) capitalization, and (c) punctuation. The multiple baseline design across behaviors was selected as the participant had multiple challenging behaviors that functional similarity as well as the effects of the independent variable could not be reversed.

The study's PMI followed the procedural recommendations of Jameson McDonnell et al. (2008), which state it is important to provide individual training sessions, a written manual, and verbal feedback to peer tutors. In addition, Jameson et al. note the peer tutor should be trained quickly and efficiently for the accurate performance of the technique in the designated setting, in this case an inclusive GE classroom. The study comprised three phases:

1. Phase I - Baseline: The first phase involved collecting baseline data on the tutee over several days during 40-min sessions for each of the three target behaviors to observe the natural behavior and assess the typical class performance of the target student (the tutee). This was accomplished by tracking the student with ASD's academic performance on the standard classroom writing exercises assigned during the sessions (designated A on Fig. 1). During this phase, no interaction occurred nor were services provided to the target student to observe his natural behavior and assess his typical class performance.
2. Phase II - Intervention: The second phase was the implementation of the PMI (designated B on Fig. 1), which occurred during 40-min sessions over days of Intervention phase of each behavior. During the intervention phase, the student with ASD completed and was evaluated on standard academic tasks involving reading, writing, and spelling under two conditions: (a) Active Peer Tutoring, one of the adult supervisors (the teacher or the main researcher) evaluated the tutee's work and tracked their scores on the rubric for comparison with the scoring/coding of the tutor.
3. Phase III – Maintenance: The third phase (designated C on Fig. 1) was to measure the maintenance of any improvement obtained from the

PMI after the intervention ended. This was conducted by the main researcher for 40-min sessions over two days.

Setting

The study took place at a nonprofit school located in Pennsylvania in the United States. The school provides a safe and intellectually stimulating environment that will empower students to become innovative thinkers, creative problem-solvers, and inspired learners prepared to thrive in the 21st century. The study was conducted in an inclusive seventh-grade English GE classroom that included students with and without disabilities.

Participants

The target population for this study was 7th grade middle school English Language Arts (ELA) teachers, 7th grade middle school students diagnosed with ASD and potential peer participants. Recruitment of the teacher, student with ASD and the peer tutor for this study were selected by consulting with the principal and interviewing a seventh-grade English teacher at their middle school (see Table 1).

Table 1

Study Participant Demographics

Participant	Gender	Age	Grade	Race/Nationality	Type of Disability
Tutor	Male	14	7	White American	None
Tutee	Male	13	7	White American	ASD – Level 1*

The participants were as follows: 1) A student participant with ASD, a 13-year-old male diagnosed with ASD who has an individualized educational plan (IEP), 2) A 14-year-old peer tutor was selected by the interviewed ELA teacher based on his academic achievement and ability/willingness to help the tutee in writing activities. Both students were interviewed regarding their willingness to participate and to explain the structure of the study. Written permission/consent to participate was obtained from both students and their parents. To safeguard student anonymity, no names or quotes have been disclosed. Both participants are fluent in reading and speaking; however, the tutee's writing skills needed to be improved

Measurement and Data Analysis

Instrument: Rubric

The primary measurement instrument of the study was a self-developed rubric (See appendix … for rubric) used to record the tutee's writing errors in the three categories during each of the phases of the study (baseline, intervention, maintenance) (see Table 2 for an example). The rubric was adapted from the Pennsylvania core standards writing (citation), and tutors support intervention for specific use with students with ASD. Additionally, to ensure that any change in performance was not attributable to factors other than experimental variables, the researcher and classroom teacher observed the target student in the classroom during writing activities without any reinforcements. The procedure used to record the three types of errors on the rubric is called "event recording". The tutor was trained in how to assist his peer, how to mark his tutee's errors directly on the

student's work, and how to record those errors on the rubric. These were the only requests that were made of the student participants.

Table 2

Rubric of Seventh-Grade Writing

Grammar Usage/Mechanics	Code	Example of Mistake	Example of Correction
Subject-verb agreement (tense and grammar usage)	SV	I goes	I go.
Capitalization and spelling	Sp	my name is eric.	My name is Eric.
Punctuation	P	What is your name.	What is your name?

Data Collection

The participant was assessed based on the number of non-accurate sentence structures (grammar usage and mechanics) including, (a) subject-verb agreement and verb tense and usage, (b) spelling and capitalization, and (c) punctuation. Throughout the intervention, errors were recorded by the main researcher, the classroom teacher, and the peer tutor using the rubric. The peer tutor provided editing by underlining and coding the frequency of the mistakes that the tutee made based on the rubric provided. After the peer tutor intervention, the number of sentence structure errors were recorded to assess the effects of the intervention, which consisted of writing and spelling activities focused on academic performance to encourage desirable outcomes for the target student.

Data Analysis

Dependent variables for the study were characteristics of writing performance, specifically subject-verb agreement, capitalization and spelling, and punctuation. Behaviors that were tracked and coded included the number of times the student wrote the words and sentences accurately during classroom exercises. It was also required that the target student exhibited correct sentence structure free of grammatical errors. To analyze the data, a graph was constructed with the X-intercept indicating the sessions of the day and the Y-intercept indicating the number of errors in each area the target student made during the session. SSD utilized the visual to analyze its data and consider level, trend and verbality to assume the effectiveness of the independent

Reliability & Treatment fidelity

To confirm the scoring and coding of the peer tutor, an adult (either the main researcher or the classroom teacher) acting as an independent observer conducted frequency counts of each of the three target behaviors along with the tutor for 25% of the sessions; 95% agreement was achieved. In addition, the researchers observed the interactions between the participants to analyze the tutor's implementation of the intervention to ensure that the intervention was delivered correctly. This helped ensure participant response and procedural fidelity (Essig et al., 2023).

Results

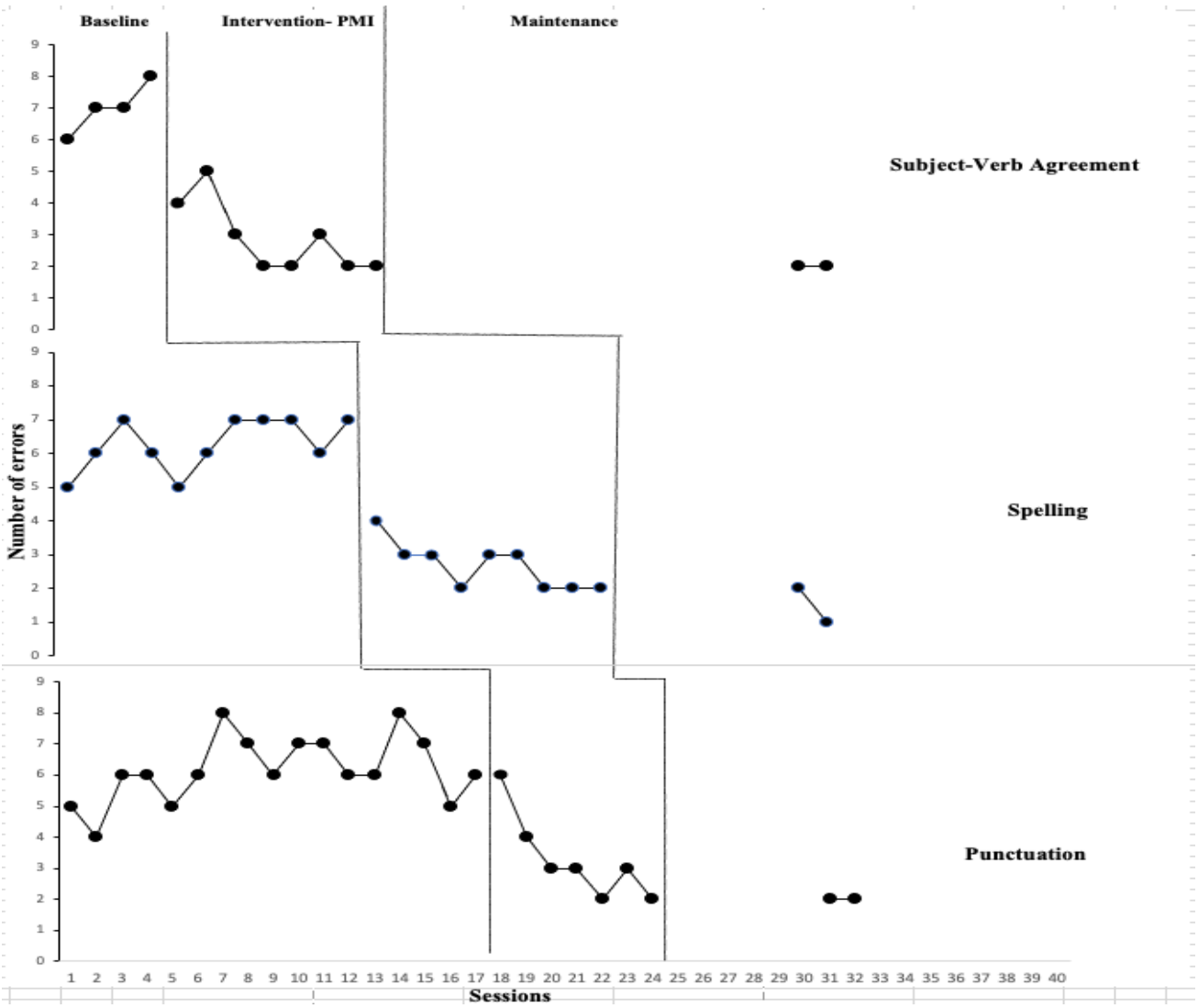
Behavior 1: Subject-Verb Agreement

To establish a baseline, observations for subject-verb agreement behavior were conducted for a period of 40 min daily for four sessions. The target student's

baseline for Subject-Verb Agreement mistakes was in the range of 6–8 errors (*M* = 7). After the 8 days of the intervention (five 40-min sessions), performance in this category was in the range of 2 to 5 errors (*M* = 2.9) errors. Finally, during the maintenance phase, which was conducted 20 days later and comprised 40-min sessions over 2 days in the GE classroom, the target behavior occurred twice in each session (*M* = 2). Comparing the means of errors in the baseline and the intervention phases, the target student showed a substantial improvement in the area of subject-verb agreement (see Fig. 1).

Figure 1

Graph of the Study Data



Behavior 2: Capitalization

To establish a baseline, observations for capitalization and were conducted during class time for a period of 40- min daily for 11 sessions. The baseline for frequency of spelling mistakes was in the range of 5–7 errors (*M* = 6). After presenting the intervention, which comprised 9 days of 40-min sessions, the level of spelling errors was in the range of 2–4 errors (*M* = 2.7). In the maintenance phase, which was conducted after 10 sessions and lasted for 2 days in the GE classroom, the capitalization and

spelling behavior occurred in the range of 1–2 (*M* = 1.5). Comparing the means of errors prior to peer-mediated intervention and post-intervention, the student showed an improvement in the area of capitalization and spelling (see Fig. 1).

Behavior 3: Punctuation

Baseline data were recorded during class time for a period of 40 min daily for 17 sessions. During 17 sessions of the baseline, the frequency of punctuation behavior was in the range of 4–8 (*M* = 6; see Table 3).

Table 3

Findings Baseline and Intervention

Behaviors	Baseline		Intervention		Maintenance	
	Errors' range	*Mean*	Errors' range	*Mean*	Errors' range	*Mean*
Subject-verb agreement	6-8	7	2-5	2.9	2-2	2
Capitalization	5-7	6	2-4	2.7	1-2	1.5
Punctuation	4-8	6	2-6	3.2	2-2	2

After delivering the intervention, which lasted over 7 days for eight 40-min sessions, the range of errors in punctuation performance was 2–6 (*M* = 3.2). In the maintenance phase, which conducted a week after the termination of the intervention and lasted for 2 days in the GE classroom, punctuation errors ranged from 2–2 (*M* = 2). Comparing the means of errors prior to PMI and post-intervention, the student showed an improvement in the area of punctuation (see Fig. 1).

Table 4

Varied Errors Observed in Target Student With ASD

Dependent Variable: Writing skills; three behaviors of the same function
Subject-verb agreement
Capitalization
Punctuation

Note. No errors occurred for the student in singular/plural noun agreement and verb tense and usage.

There were no errors that occurred in singular/plural noun agreement and verb tense and usage for the target student. These findings indicate that the student is fluent in spoken word agreement in terms of common verbal usage and singular/plural noun agreement, both of which occur naturally when speaking aloud. In contrast, the errors occurred specifically during the task of writing and consisted of grammatical and semantic techniques that are more profound when observing the written word.

Summary of Findings and Discussion

This study aimed to evaluate peer-mediated strategies to support a student with autism spectrum disorder in improving his writing skills, an area previous unexplored by the research. The researchers developed a measurement tool based upon the according to the core writing curriculum of 7th grade in Pennsylvania, focusing on grammar usage, semantic mechanics, and punctuation. Before the intervention, the student with ASD exhibited low writing ability with a high range of errors. After the PMI, the student

showed reduced errors and was able to maintain this improved writing ability after the intervention was withdrawn. However, this study presents a lack of transferability and generalization across settings.

This study was undertaken to investigate the following research questions (a) What is the effectiveness of a peer-mediated intervention on writing skills in students with autism spectrum disorder in inclusive classrooms? (b) Would peer-mediated intervention be maintained when the intervention is withdrawn? It is essential to note that, for this study, effectiveness is perceived: How students consider that their skillsets can motivate or demotivate their writing experiences on task initiation and completion, remaining on-task, self-regulation and goal setting (Skar et al., 2023).

In cases where the use of PMI has proven to be effective, what factors can be found to be the most relevant to their success? To start with, addressing the first question, the visual assessment of data shows that the peer-mediated intervention on writing skills for the student with autism caused an immediate decrease in mistakes in the student's writing skills. In addition, the peer-mediated intervention maintained the student's writing skills. Thus, the finding indicated the effectiveness of the peer-mediated intervention in improving the student with ASD's writing skills.

It should be noted that the number of errors in all three areas of the target student (subject-verb agreement, capitalization punctuation) were considerably reduced in the maintenance phase, which indicates the PMI maintained effectiveness with the student. The frequency of the various types of errors that occurred were also of note. The rate of error was greatest in spelling and capitalization with punctuation next in frequency and subject-verb agreement showing the fewest number of occurrences. Carter et al. (2011) widely recommended the use of peer support strategies to contribute to the social and academic participation of students with disabilities in inclusive education schools. It is indicated that substantial and significant increases in the occurrence of peer interaction can occur when students with disabilities are educated in peer support environments and with a one-on-one paraprofessional (Carter et al., 2011).

Peer-mediated intervention has been established by the research as effective (Hart & Banda, 2018, Fetko et al., 2013, Odluyurt, et al., 2014). Its advantages to both peer tutors and target students have both academic and social benefits. Employing an intervention where the role of the tutor is taken by a peer student allows adaptation of classroom activities to enable student participation, provides instruction related to IEP goals, offers frequent feedback directly to the student with disabilities, implements relevant behavior intervention plans, and promotes communication between students with disabilities and their peers (Carter et al., 2005).

Social Validity

After the intervention, the main researcher conducted brief individual interviews with the peer tutor, the tutee, and the classroom teacher to obtain information from each regarding their opinion of the process and the intervention. Each reported satisfaction with the intervention. The teacher stated that the intervention helped her to focus on other students and granted the responsibility to students with high academic accomplishments. The satisfaction ratings of the tutor and tutee indicated a positive reaction and high-level motivation toward this intervention. The teacher and students also reported that all students experienced augmented validation within the classroom post-intervention. Jameson et al. (2008) emphasized that the peer-delivered embedded instructional package has a positive impact on the

social validity of the procedures and outcomes. Therefore, the peer tutor, the student with high academic success, was able to adopt the role of instructor, validating his previous efforts and establishing his skill in this position. The target student, the student with ASD, was exposed to the one-on-one tutor dynamic that the teacher had previously been unable to provide due to time constraints and obligations to the other students in the classroom. These one-on-one settings enabled the target student to get the help and peer encouragement he needed to succeed in the inclusive classroom. Finally, the teacher was able to focus more on the class who was previously given less attention and validation due to the teacher's previous increased obligations to the student with ASD.

Conclusions and Future Directions

Many types of work accomplishments the tutees performed with peer tutoring support included repetition of the dictation of the teacher's spelling tests and consistent writing with minor grammatical errors, such as completed sentences, and sentence structure. The results of this study show the effectiveness of using peer tutoring support, specifically in the area of improving writing skills in this one, single instance. Both students involved expressed satisfaction with using this strategy and stated they would use it again in other subjects and classes. The tutor reported that this strategy not only improved the writing abilities of the students with ASD but also improved his own writing skills through the process of supporting his peer by helping him recognize the specific conventions used when writing. Both participants also reported that the intervention helped to foster a friendship between the tutor and tutee. In addition, the study emphasized the importance of using the rubric as the measurement tool to evaluate the writing, which made both students more aware and able to recognize the strategies in their own writing. Furthermore, the success of the intervention confirms that inclusion of students with disabilities, and specifically autism spectrum disorder in GE classroom settings is not only appropriate but beneficial to students with and without disabilities. For the purpose and available resources of this study a multiple baseline design across behaviors was used. In addition, it would be useful to investigate PMI for other types of academic skills, such as reading comprehension and mathematics, since the data collected in such research could provide information that more accurately shows the benefits of peer-mediated interventions across a variety of groups and academic areas. Due to these various limitations, replication is needed to include, for example, genres of writing, such as opinion essays and story writing.

References

American Psychiatric Association. (2013). Autism spectrum disorder. In *Diagnostic and statistical manual of mental disorders* (5th ed.).

Haas, A., Vannest, K., Thompson, J., Fuller, M., & Wattanawongwan, S. (2020). Peer mediated instruction and academic outcomes for students with Autism Spectrum Disorders: A comparison of quality indicators. *Mentoring and Tutoring: Partnership in Learning, 25*(5), 625–642. DOI: 10.1080/13611267.2020.1859330

Asaro-Saddler, K., & Bak, N. (2014). Persuasive writing and self-regulation training for writers with autism spectrum disorders. *The Journal of Special Education*, *48*(2), 92–105.

https://doi.org/10.1177/0022466912474101

Ayvazo, S., & Aljadeff-Abergel, E. (2014). Classwide peer tutoring for elementary and high school students at risk: Listening to students' voices. *Support for Learning*, *29*(1), 76–92. https://doi.org/10.1111/1467-9604.12047

Bicakci, M., & Olçay, S. (2019). Effect of Peer Delivered Social Stories on the Crossing Skills of Primary School Students with Developmental Disabilities. *Eğitim ve Bilim*, *44*, 257–278. https://doi.org/10.15390/EB.2019.8168

Bowman-Perrott, L., Davis, H., Vannest, K., Williams, L., Greenwood, C., & Parker, R. (2013). Academic benefits of peer tutoring: A meta-analytic review of single-case research. *School Psychology Review*, *42*(1), 39–55. https://doi.org/10.1080/02796015.2013.12087490

Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and Practice for Persons With Severe Disabilities, 30*(1), 15–25. https://doi.org/10.2511/rpsd.30.1.15

Carter, E. W., Moss, C. K., Asmus, J., Fesperman, E., Cooney, M., Brock, M. E., Lyons, G., Huber, H. B., & Vincent, L. B. (2015). Promoting inclusion, social connections, and learning through peer support arrangements. *TEACHING Exceptional Children*, *48*(1), 9–18. https://doi.org/10.1177/0040059915594784

Carter, E. W., Moss, C. K., Hoffman, A., Chung, Y. C., & Sisco, L. (2011). Efficacy and social validity of peer support arrangements for adolescents with disabilities. *Exceptional Children*, *78*(1), 107–125. https://doi.org/10.1177/001440291107800107

Chang, Y. C., & Locke, J. (2016). A systematic review of peer-mediated interventions for children with autism spectrum disorder. *Research in autism spectrum disorders*, *27*, 1–10. https://doi.org/10.1016/j.rasd.2016.03.010

Essig, L., Rotta, K., & Poling, A. (2023). Interobserver agreement and procedural fidelity: An odd asymmetry. *Journal of applied behavior analysis*, *56*(1), 78–85. https://doi.org/10.1002/jaba.961

Fetko, E. E., Collins, B. C., Hager, K. D., & Spriggs, A. D. (2013). Embedding science facts in leisure skill instruction conducted by peer tutors. *Education and Training in Autism and Developmental Disabilities*, 400-411.

Finlay, C., Kinsella, W., and Prendeville, P. (2022). The professional development needs of primary teachers in special classes for children with autism in the republic of Ireland. *Prof. Dev. Educ.* 48, 233–253. doi: 10.1080/19415257. 2019.1696872

Hart, S. L., & Banda, D. R. (2018). Examining the effects of peer mediation on the social skills of students with autism spectrum disorder as compared to their peers. *Education and Training in Autism and Developmental Disabilities*, *53*(2), 160–175. https://eric.ed.gov/?id=EJ1179174

Heron, T. E., Villareal, D. M., Yao, M., Christianson, R. J., & Heron, K. M. (2006). Peer tutoring systems: Applications in classroom and specialized environments. *Reading & Writing Quarterly*, *22*(1), 27–45. https://doi.org/10.1080/10573560500203517

Hodges, H., Fealko, C., and Soares, N. (2020). Autism spectrum disorder: Definition, epidemiology, causes, and clinical evaluation. *Transl. Pediatr.* 9, S55– S65. doi: 10.21037/tp.2019.09.09

Jameson, J. M., McDonnell, J., Polychronis, S., & Riesen, T. (2008). Embedded, constant time delay instruction by peers without disabilities in general education classrooms. *Intellectual and Developmental Disabilities*, *46*(5), 346–363. https://doi.org/10.1352/2008.46:346-363

Kalambouka, A., Farrell, P., Dyson, A., & Kaplan, I. (2017). The impact of placing pupils with special education needs in mainstream schools on the achievement of their peers. *Educational Research*, *49*(4), 365–382. https://doi.org/10.1080/00131880701717222

Leach, D., & Helf, S. (2016). Revisiting the regular education initiative: Multi-tiered systems of support can strengthen the connection between general and special education. *Journal of the American Academy of Special Education Professionals*, 116-124. https://eric.ed.gov/?id=EJ1129699

Matthews, N. L., Orr, B. C., Warriner, K., DeCarlo, M., Sorensen, M., Laflin, J., & Smith, C. J. (2018). Exploring the effectiveness of a peer-mediated model of the PEERS curriculum: A pilot randomized control trial. *Journal of Autism and Developmental Disorders*, *48*(7), 2458–2475. https://doi.org/10.1007/s10803-018-3504-2

McCurdy, E. E., & Cole, C. L. (2014). Use of a peer support intervention for promoting academic engagement of students with autism in general education settings. *Journal of Autism and Developmental Disorders*, *44*(4), 883–893. https://doi.org/10.1007/s10803-013-1941-5

Morris, S., O'Reilly, G., & Nayyar, J. (2021). Classroom-based peer interventions targeting autism ignorance, prejudice and/or discrimination: A systematic PRISMA review. *International Journal of Inclusive Education*. https://doi.org/10.1080/13603116.2021.1900421

Odluyurt, S., Tekin Iftar, E., & Ersoy, G. (2014). Effects of School Counselor Supervised Peer Tutoring in Inclusive Settings on Meeting IEP Outcomes of Students with Developmental Disabilities. *Education and Training in Autism and Developmental Disabilitites*, *49*, 415–428.

Richards, S. B., Taylor, R. L., & Ramasamy, R. (2014). *Single subject research: Applications in educational and clinical settings* (2nd ed.). Belmont, CA: Wadsworth, Cengage Learning.

Saddler, B., Behforooz, B., & Asaro, K. (2008). The effects of sentence-combining instruction on the writing of fourth-grade students with writing difficulties. *The Journal of Special Education*, *42*(2), 79–90. https://doi.org/10.1177/0022466907310371

Skar, G. B., Graham, S., & Huebner, A. R. (2023). Efficacy for writing self-regulation, attitude toward writing, and quality of second grade students' writing. *Frontiers in psychology*, *14*, 1265785. https://doi.org/10.3389/fpsyg.2023.1265785

Vukelich, C., Justice, L. M., & Han, M. (2013). Impact of supplemental tutoring configurations for preschoolers at risk for reading difficulties. *Child & Youth Care Forum*, *42*(1), 19–34). https://doi.org/10.1007/s10566-012-9184-8

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

Whitby, P. J. S., Travers, J. C., & Harnik, J. (2009). Academic achievement and strategy instruction to support the learning of children with high-functioning autism. *Beyond Behavior, 19*(1), 3–9.