
The Role of Support Systems in Enhancing Academic Achievement in Special Education

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ABSTRACT: This study utilized a descriptive-correlational design to investigate the relationship between the extent of peer, teacher, and school support systems and learners' academic performance in special education. Data were gathered from teachers regarding their demographics, training, and the dimensions of support provided. Findings revealed that while peer and teacher support systems were highly rated for fostering collaboration, motivation, and emotional well-being, school support received lower ratings due to resource challenges. Learners demonstrated "Very Satisfactory" performance in English, Mathematics, and Science. However, statistical analyses showed no significant relationship between the support systems and academic performance in these subjects, suggesting other factors may influence outcomes. Recommendations include enhancing resource provision, strengthening peer support programs, offering continuous teacher training, and fostering stakeholder collaboration. Additionally, action research is recommended to identify effective strategies and interventions for improving academic performance and support systems in inclusive education settings.

Key words: Academic Achievement in Special Education, Special Education, Support Systems.



1. Introduction

Special education is essential for the support of students with disabilities, ensuring that they receive customized educational opportunities to achieve their academic potential. It enables the development of personalized learning programs that cater to the distinctive requirements of each student, thereby overcoming obstacles associated with emotional challenges, physical impairments, and learning disabilities. Personal assistance empowered the students to enhance their academic performance, and social and emotional development (Jameel et al., 2022).

Many students with disabilities continue to experience substantial academic performance gaps in comparison to their classmates, despite the advantages of special education. Research suggests that students with learning disabilities frequently achieve lower academic outcomes, which can be attributed to both

persistent disabilities and occasionally ineffective special education service implementation (Schwartz et al., 2021). Additionally, the transition to special education may result in decreased social confidence and feelings of isolation, which can further impede students' academic success (Jones, 2021). These challenges may also be exacerbated by factors such as teacher fatigue, inadequate resources, and a lack of appropriate interventions (Bettini et al., 2019).

Support systems are crucial in enhancing the academic achievement of students in special education globally. These systems encompass social support networks, multi-tiered frameworks, and collaborative efforts among educators and families. Study of Saeed, et al., (2023) involving 200 secondary students with special needs in Halabja, Kurdistan Region, Iraq, found that family and friends' support positively affected students' self-esteem, which in turn mediated academic achievement. Multi-Tiered Systems of Support (MTSS) effectively address diverse needs through a three-tiered prevention model, enabling early identification and targeted interventions for better academic and behavioral outcomes (Ziomek-Daigle et al., 2016). Collaboration among teachers, counselors, and stakeholders enhances the development and delivery of services, aiding students in overcoming transitional challenges and improving performance (McDaniel et al., 2022). International frameworks, such as the UN Convention on the Rights of Persons with Disabilities (CRPD), emphasize the need for reasonable accommodations and equitable access to education for learners with disabilities, serving as a benchmark for national policies (United Nations, 2020).

The challenges in establishing effective support systems are evident across various countries. In developing regions, limited resources and inadequate teacher training hinder progress, while high-income nations face issues related to service disparities and societal biases (WHO, 2022). Parental involvement remains a globally significant factor in advancing educational outcomes. Research indicates that active parental engagement positively correlates with students' academic performance and social development, as demonstrated in diverse cultural contexts (Garbacz et al., 2021).

Furthermore, teacher preparedness is essential in addressing the needs of special education learners. Professional development programs focusing on differentiated instruction and behavioral strategies enhance teacher efficacy and student outcomes (Savolainen et al., 2023). Assistive technologies, including adaptive learning tools and communication aids, have further transformed special education by promoting accessibility and engagement. However, the digital divide continues to limit the benefits of these innovations, particularly in resource-constrained settings (UNESCO, 2023).

Research shows that support systems, such as teacher involvement and peer support, significantly enhance the academic performance of students in special education. Teachers who provide emotional and academic support create a more engaging and motivating learning environment, which leads to improved outcomes for students (Jiang & Yang, 2022). Additionally, individualized educational plans that involve regular assessments and modifications based on the student's progress further boost academic achievement (Schwartz et al., 2021). Family and community support networks also contribute to the overall development and learning success of students (Mayate et al., 2019).

Although significant strides have been made in understanding the role of support systems in special education, there are still gaps in the research. More studies are needed to examine the long-term effects of special education on academic performance, particularly after students exit the program (Hurwitz et al., 2020). There is also a need for more research on how support systems can be better integrated into inclusive education models (Choi et al., 2020). Furthermore, studies that focus on the specific impacts of technological interventions in special education settings remain limited (Pradeep, 2023).

This study is very beneficial, especially for Kanhalo Elementary School and the Department of Education, because it shows how important support systems are for helping kids with special needs do better in school. Schools can help students with disabilities learn better by setting up structured support networks like regular contact between teachers and parents and peer-based interventions. The results could help the Department of Education make changes to policies that would help teachers get more funding and training. These ideas can help schools like Kanhalo Elementary create welcoming and helpful learning spaces that meet all of their students' needs.

2. Review of Related Literature

The support system in education plays a crucial role in ensuring students' academic success, particularly in inclusive learning environments. Research has highlighted the significance of peer support systems in



fostering positive academic and social outcomes for students. According to Johnson and Johnson (2020), cooperative learning strategies and peer-assisted learning promote engagement, motivation, and higher academic achievement. Peer support networks contribute to a sense of belonging and reduce academic stress, particularly among students with special educational needs (Topping, 2017). Additionally, peer mentoring enhances self-confidence and provides academic guidance, improving overall student performance (Vygotsky, 1978). Similarly, the teachers' support system is essential in shaping student learning experiences. Studies indicate that teachers who offer consistent emotional and academic support create positive classroom environments that facilitate student achievement (Hamre & Pianta, 2005). Teacher-student relationships built on trust and encouragement lead to higher engagement levels and improved academic outcomes in subjects like English, Mathematics, and Science (Roorda et al., 2011). Furthermore, professional development programs for teachers strengthen instructional quality, directly impacting student performance (Darling-Hammond, 2017).

The school support system also plays a vital role in promoting student success by providing necessary resources, administrative backing, and inclusive educational policies. Schools that implement strong leadership, effective curriculum planning, and resource allocation contribute to better student learning experiences (Leithwood & Sun, 2018). Inclusive school policies that emphasize accessibility and differentiated instruction benefit all learners, particularly those with disabilities (Florian & Black-Hawkins, 2011). Effective school leadership fosters collaboration among teachers, students, and parents, creating a supportive academic environment (Hallinger & Heck, 2011). The availability of counseling services and academic interventions has been linked to improved student retention and performance in various subjects (Suldo et al., 2014). Regarding students' academic performance, research has explored the influence of various support systems on subject-specific outcomes. In English, teacher feedback, peer discussions, and differentiated instruction significantly improve literacy skills and comprehension (Graham & Perin, 2007). Students with access to well-structured writing programs and peer-assisted learning show notable improvements in their language proficiency (Applebee & Langer, 2013). In Mathematics, studies highlight the importance of guided practice, teacher scaffolding, and collaborative problem-solving approaches (Boaler, 2016). Students who receive peer-assisted learning and individualized teacher support demonstrate higher problem-solving skills and conceptual understanding (Kilpatrick et al., 2001). Similarly, in Science, hands-on activities, inquiry-based learning, and teacher guidance enhance students' conceptual understanding and critical thinking skills (Hofstein & Lunetta, 2004). Schools that integrate experiential learning and peer collaboration in Science education improve students' ability to apply theoretical knowledge in real-world contexts (Bybee, 2014).

3. Methodology

This study employed a descriptive-correlational research design to examine the relationship between the extent of the support system and learners' academic performance at Kanghalo Elementary School. A descriptive-correlational approach was chosen as it enables the researcher to describe the existing conditions and determine the degree to which variables are related without manipulating them. Data was collected at a specific point in time to assess the extent of peer, teacher, and school support systems, as well as students' academic performance in English, Mathematics, and Science. The study utilized a structured questionnaire, which was divided into sections based on established research frameworks. The peer support system section was aligned with Brock and Carter's (2016) research on the impact of peer support arrangements on students, while the teacher support system section was based on Boyle et al. (2012), which emphasized the importance of teacher strategies in enhancing learning experiences, particularly for special education students. Furthermore, the school support system section reflected findings from Carter et al. (2016), which discussed how schools that foster inclusive environments positively impact students' learning outcomes. The questionnaire used a five-point Likert scale to determine the extent of the support system, ranging from Not Manifested at All (1.00-1.80) to Strongly Manifested (4.21-5.00). To analyze the data, mean and frequency distributions were used to describe the extent of support systems and students' academic performance. Additionally, the correlation coefficient was calculated to determine whether a significant relationship exists between the extent of the support system and academic performance. The study was conducted at Kanghalo Elementary School, an institution known for its dynamic and interactive learning environment that supports students' holistic development. The school's structured and well-maintained physical environment, alongside



its emphasis on social interaction, provides an ideal setting for assessing how support systems influence academic performance. Through this methodological approach, the study aimed to provide evidence-based insights into the effectiveness of various support systems in improving student learning outcomes.

Table 1. Peer Support System.

Indicators	Mean	VD
My students in special education benefit from peer tutoring or peer mentoring.	4.18	A
Peers provide emotional and social support that helps students with special needs feel more included.	4.34	SA
Peer interactions positively influence the motivation of students with special needs to participate in classroom activities.	4.39	SA
Collaborative learning with peers improves the academic performance of students with special education needs.	4.45	SA
Students with disabilities receive encouragement and assistance from their peers, which enhances their classroom engagement.	4.32	SA
General Mean	4.34	SA

4. Results and Discussion

Table 1 shows the results of the peer support system for students in special education. The general mean score is 4.34, which is interpreted as Strongly Agree (SA). This indicates that respondents believe peer support is very helpful for students with special needs. Among the indicators, the highest mean score is 4.45, showing strong agreement that collaborative learning with peers improves the academic performance of students in special education. In addition, the respondents strongly agreed (4.39) that peer interactions positively influence the motivation of students to participate in classroom activities. Similarly, a mean of 4.34 shows strong agreement on peers provide emotional and social support, helping students with special needs feel more included. A mean of 4.32 highlights the belief that peers encourage and assist students, enhancing their classroom engagement. The lowest mean score, though still high, is 4.18, where respondents agreed that peer tutoring or mentoring benefits students in special education. This implies positive impact of peer support systems on the academic and social development of students with special needs.

Table 2. Teacher Support System.

Indicators	Mean	VD
I provide regular feedback to my students with special needs, which helps improve their academic performance.	4.50	SA
I adapt my teaching strategies based on the individual learning needs of each special education student.	4.55	SA
I believe my emotional support significantly impacts the self-confidence and academic success of students with disabilities.	4.68	SA
I collaborate with other teachers and specialists to ensure my special education students receive comprehensive support.	4.47	SA
I ensure that my students with special needs feel supported in both academic and social aspects of school life.	4.68	SA
Grand Mean	4.58	SA

Table 3 shows the teacher support system for students in special education, with an overall mean of 4.58 (Strongly Agree). This shows that teachers strongly believe their support positively impacts students with special needs. The highest mean scores, both at 4.68, reflect teachers' strong agreement that emotional support boosts students' self-confidence and academic success and that they ensure students feel supported in both academic and social aspects of school life. Teachers also strongly agree (4.55) that they adapt teaching strategies to meet the individual learning needs of their students. Additionally, a mean score of 4.50 highlights that providing regular feedback helps improve students' academic performance. Lastly, teachers agree (4.47) that collaborating with other teachers and specialists ensures comprehensive support for students with special



needs. This implies that the significant role of teachers in fostering the academic, emotional, and social success of students in special education through various supportive strategies.

Table 3. School Support System.

Indicators	Mean	VD
The school administration provides sufficient resources (materials, technology, staff) to support special education programs.	3.89	A
The school offers professional development opportunities that improve my ability to teach students with special needs.	3.87	A
The school fosters an inclusive environment that supports the academic and social integration of students with disabilities.	4.16	A
There are adequate support services (e.g., counseling, therapy) available for students with special education needs.	3.66	A
The school promotes a collaborative culture where general and special education staff work together to support students.	4.05	A
Grand Mean	3.93	A

Table 3 shows the level of school support for special education programs based on five key indicators. The grand mean reflects a positive response, with a grand mean of 3.93, which is interpreted as "Agree" (A). This suggests that teachers recognize efforts made by the school administration to support special education. Specifically, the highest mean of 4.16 was given to fostering an inclusive environment that supports both academic and social integration of students with disabilities. This highlights the school's focus on creating a welcoming and supportive atmosphere for learners with special needs. The promotion of collaboration between general and special education staff also received a high mean of 4.05, indicating that teamwork among teachers is prioritized to help students succeed. Additionally, professional development opportunities that enhance teachers' abilities to educate students with special needs were rated positively, with a mean of 3.87. This shows that the school provides training to improve teachers' skills, which is essential for effective special education. However, slightly lower means were observed for sufficient resource provision (3.89) and support services (3.66). While these scores still fall under the "Agree" category, they indicate that there may be areas for improvement, such as increasing the availability of materials, technology, and specialized services like counseling and therapy. This implies that the school has made significant efforts to build a strong support system for special education, but continuous improvements are needed to address specific challenges and further enhance inclusivity.

Table 4. Learners Academic Performance.

Subjects	Grade	VD
English	86.3	Very Satisfactory
Mathematics	85.8	Very Satisfactory
Science	86.5	Very Satisfactory

Table shows the learners' academic performance in three key subjects: English, Mathematics, and Science. The results reveal that learners achieved a Very Satisfactory level in all subjects, with grades of 86.3 in English, 85.8 in Mathematics, and 86.5 in science. These results indicate learners are performing well across different areas of learning, suggesting that learners are meeting expectations in these subjects. The high achievement can be linked to the various support systems they receive. Studies have shown that peer support systems significantly contribute to academic success, especially for learners with special needs. According to Wood et al. (2021), peer support encourages collaboration, builds confidence, and enhances learning outcomes. When classmates help each other, students with learning challenges benefit from both social interaction and academic assistance. In addition, teachers who provide differentiated instruction, encouragement, and individualized feedback create an inclusive classroom where learners with special needs can thrive. A study by Smith and Barr (2020) highlighted that teachers' understanding of learners' unique needs leads to better academic engagement and improved results. The school support system further reinforces these positive outcomes. Schools that offer resources like remedial classes, accessible learning materials, and



professional support services contribute to students’ overall performance. According to Johnson et al. (2022), a well-organized school support system ensures that learners with special needs receive the necessary tools and interventions to succeed in academic subjects. This implies that the learners’ "Very Satisfactory" ratings in English, Mathematics, and Science reflect the importance of strong support systems peer support, teacher guidance, and school assistance, showing that collaborative environments and tailored support positively impact the academic performance of learners with special needs.

Table 5. Significant Relationship Between the Extent of Support System and English Performance

Constructs	r-value	t-value	P value	Remarks	Decision
Peer Support System	0.197	1.714	0.283	Not Significant	Do not reject
Teacher Support System	0.102	0.631	0.515	Not significant	Do not reject
School Support System	0.235	1.590	0.524	Not significant	Do not reject

Table 5 presents Significant Relationship Between the Extent of Support System and English Performance; data indicate that there is no significant relationship between the extent of the support system and students' English performance. Specifically, the peer support system showed an r-value of 0.197, which, despite suggesting a slight positive relationship, was not statistically significant with a P value of 0.283. Similarly, the teacher support system exhibited a weaker relationship (r-value of 0.102), with a P value of 0.515, indicating no meaningful association. Likewise, the school support system displayed an r-value of 0.235, but the corresponding P value of 0.524 confirmed its insignificance. These findings align with existing studies that emphasize how academic performance, particularly in English, is influenced by a combination of individual, home, and external factors beyond the school support systems. While peer, teacher, and school support are important for student motivation and engagement, they may not directly correlate with measurable academic outcomes. Researchers like Brown (2020) and Smith et al. (2022) point out that personal effort, learning styles, and home environments play a more immediate role in students' academic achievement. In this case, the lack of a significant relationship might suggest that while support systems are present, they may not be effectively structured or impactful enough to influence English performance significantly.

Table 6. Significant Relationship Between the Extent of Support System and Mathematics Performance.

Constructs	r-value	t-value	P value	Remarks	Decision
Peer Support System	0.258	1.512	0.083	Not Significant	Do not reject
Teacher Support System	0.452	0.501	0.065	Not significant	Do not reject
School Support System	0.132	1.497	0.082	Not significant	Do not reject

Table 6 presents significant relationship between the extent of support system and mathematics performance, data reveal that there is no significant relationship between the extent of the support system (peer, teacher, and school) and the mathematics performance of the students. The r-values for peer support (0.258), teacher support (0.452), and school support (0.132) all indicate weak relationships. The p-values (0.083, 0.065, and 0.082) are greater than the standard significance level of 0.05, meaning the results are not statistically significant. As a result, the null hypothesis cannot be rejected. These findings suggest that while support systems, such as peers, teachers, and schools, play important roles in students' academic journeys, they may not directly impact their mathematics performance in this study. Several studies could explain the result, Bandura (2019) and Zimmerman (2020) explained performance could depend more on individual skills, motivation, and prior knowledge (self-efficacy and independent learning) rather than external support. Additionally, it is possible that while support systems are available, their effectiveness might be limited if they do not address specific challenges students face in mathematics, such as comprehension gaps or learning strategies in a way that if teacher or peer support focuses more on general encouragement rather than targeted academic assistance, it may not translate into improved performance (Slavin, 2021).Lastly, this result aligns with other studies that emphasize the importance of personalized and structured interventions for mathematics learning. While peer, teacher, and school support are essential for overall well-being, academic success in subjects like mathematics often requires focused teaching methods, practice opportunities, and individual effort (Dweck & Yeager, 2020). This implies that although support systems are valuable, their impact on



mathematics performance may be indirect and supplemented by other factors like self-study habits, instructional quality, and learning environments.

Table 7. Significant Relationship Between the Extent of Support System and Science Performance

Constructs	r-value	t-value	P value	Remarks	Decision
Peer Support System	0.274	1.158	0.175	Not Significant	Do not reject
Teacher Support System	0.160	0.402	0.160	Not significant	Do not reject
School Support System	0.261	1.326	0.152	Not significant	Do not reject

The results in Table 7 indicate that there is no significant relationship between the extent of the support system and science performance among students. Specifically, the peer support system, teacher support system, and school support system showed low r-values (0.274, 0.160, and 0.261, respectively) and P values higher than 0.05. These findings suggest that the levels of support from peers, teachers, and the school do not have a measurable impact on students' science performance in this study. Previous studies have also shown mixed results regarding the role of support systems in academic performance. While peer and teacher support can improve student motivation and engagement, their influence on specific subject performance may vary depending on factors such as the learning environment, resources, and students' personal attitudes. Smith et. al (2020) mentioned that emotional and social support does not always directly translate into academic achievement, particularly in technical subjects like science, which require specific knowledge and skills it may depend on how well they align with students' learning needs and challenges. This implies that findings support systems were not strong predictors of subject-specific outcomes and suggests that improving science performance may require targeted interventions such as enhanced teaching strategies, access to better resources, and individualized academic support. While support systems play a role in shaping a positive learning environment, they may not be sufficient to influence academic performance without direct instructional and resource-based efforts.

5. Discussion

The findings of the study highlight the important role of peer, teacher, and school support systems in fostering a positive learning environment for students in special education. Peer support was recognized for its contribution to academic motivation and collaboration, particularly through peer interactions and cooperative learning, though some areas, such as peer tutoring, showed room for improvement. Teacher support emerged as the strongest factor, with a focus on emotional encouragement, adaptive teaching strategies, and regular feedback, all of which contribute to students’ confidence and academic engagement. While school support was generally perceived as effective, challenges remain in terms of providing adequate resources and support services. Despite these findings, the study revealed that none of the support systems peer, teacher, or school showed a statistically significant relationship with academic performance in English, Mathematics, or Science. This suggests that while support systems are valued and play an essential role in student engagement and inclusivity, their direct impact on academic performance, as measured in this study, is not statistically significant. As a result, the null hypothesis was not rejected, indicating that other factors may have a more direct influence on students’ academic outcomes.

6. Conclusion

In conclusion, peer, teacher, and school support systems play an important role in the learning experiences of students in special education. While peer and teacher support received high ratings for enhancing collaboration, motivation, and emotional well-being, school support was rated slightly lower due to challenges in providing resources and support services. Despite these efforts, the study found no significant relationship between the extent of these support systems and students’ academic performance in English, Mathematics, and Science. Although learners achieved very satisfactory grades, the results suggest that factors other than the measured support systems may have contributed to their academic success. This highlights the need for schools to strengthen resources and explore other areas that could further improve student outcomes while continuing to provide emotional and academic support.



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