

Article

Diverse Learners, Inclusive Practices: Approaches to Teaching Special Education

Sharon Sarabia

Lilibeth Pinili

Kaitlin Marie Opingo

Randy Mangubat

Corresponding Author: sharonsarabia@gmail.com

Abstract: This study explores the impact of health and well-being on students' academic performance, focusing on three main areas: Physical Health Support, Mental Health and Emotional Support, and Social Well-Being and Peer Relationships. The findings show that the school provides strong support in Physical Health, with high ratings indicating effective access to healthcare services and accommodation of medical needs. In the area of Mental Health and Emotional Support, while the overall feedback is positive, there is slightly less consensus on the effectiveness of managing stress and anxiety, which received a lower mean score. However, resources for emotional difficulties and a supportive mental health environment are rated highly. Social Well-Being and Peer Relationships are well-supported, with the school fostering positive peer interactions and inclusive practices. Despite these positive assessments, analysis of academic performance in English, Mathematics, and Science found no statistically significant relationship between health and well-being factors and academic outcomes. Low r-values and p-values exceeding significance thresholds suggest these factors do not directly influence academic performance in this study. This indicates a need to explore additional factors that may impact academic success.

Keywords: Special Education, Academic performance, English, Mathematics, Science performance

Introduction

Special education is a critical part of the educational system, designed to meet the unique needs of students with disabilities by providing tailored instruction and resources that promote academic, social, and emotional success (Hermanto & Pamungkas, 2023). These programs are essential for fostering inclusivity and ensuring equal opportunities for all students, regardless of their individual challenges (Zai et al., 2020). Beyond academic achievement, special education significantly supports the social and emotional development of students with disabilities, helping them build self-esteem, social skills, and a sense of belonging, which are crucial for their well-being (Altinay



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Aksal et al., 2016). Inclusive educational environments, where students with and without disabilities learn together, promote mutual understanding and respect, leading to a more inclusive society (LaBarbera, 2017). Effective support for special education, including sufficient resources and trained educators, leads to better academic outcomes, higher graduation rates, and improved well-being for students with disabilities (Dipaola et al., 2017). Individualized instruction bridges learning gaps and promotes personal growth, further enhancing the academic success of students (Farooq Zai et al., 2020).

Special education faces several challenges, including the need for adequate health support, effective implementation of Individualized Education Programs (IEPs), and ensuring teachers have the necessary expertise. Health services play a crucial role in managing medical conditions that impact learning, particularly for students requiring specialized care during school hours (Hernandez et al., 2023). The effectiveness of IEPs depends heavily on their quality and customization to meet individual student needs, yet teachers often face challenges in the IEP evaluation process due to gaps in knowledge, skills, and motivation (Wong & Rashid, 2022). Additionally, teacher expertise and ongoing professional development are vital for delivering high-quality instruction, especially in using systematic and student-centered strategies (Sweigart & Collins, 2017). Evidence-based instructional methods such as direct instruction, peer tutoring, and differentiated instruction have also been shown to significantly improve learning outcomes for students with disabilities (Ismail & Majid, 2020).

The connection between appropriate support and student academic performance in special education settings is well-documented. When students receive tailored instruction, adequate resources, and personalized attention through Individualized Education Programs (IEPs), their academic outcomes improve significantly (Räty et al., 2019). Schools that foster a supportive and inclusive environment enable students with disabilities to thrive academically and socially, leading to better long-term outcomes (Love et al., 2020). Smaller class sizes and individualized support allow for more one-on-one interaction between students and teachers, addressing specific learning needs and challenges, which leads to better academic performance (Wong & Rashid, 2022). A study demonstrated that students in smaller inclusive classes made more significant academic gains, particularly those with special educational needs, than those in separate settings (Love et al., 2020).

Further research is needed to understand how to provide effective teacher training, ensure adequate resources, create optimal classroom environments, and address the health needs of students with disabilities. Teacher training is a critical area, with research highlighting the need for targeted professional development to ensure

effective collaboration between general and special educators (Uçak & Demirok, 2022). Ensuring adequate resources and addressing health support needs in special education is also essential, as gaps in resources can hinder students' educational success. Future research should focus on developing evidence-based practices to improve IEP quality, investigating effective teacher training programs, and identifying the best ways to allocate resources, as well as examining how classroom environments and health services can better support students with disabilities (Hernandez et al., 2023).

Methodology

This study employed a descriptive research method to investigate the factors affecting the academic performance of students at Ormoc City SPED Integrated School, within the Ormoc City Division. A structured questionnaire, informed by the works of Gargiulo & Bouck (2020), Yell et al. (2013), Vaughn et al. (2020), Ainscow & Sandill (2010), Loreman (2017), and Glanz et al. (2015), was used to explore key themes such as students health and well-being. Data was collected from anonymous surveys completed by parents, with responses measured on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." Statistical analysis, using a significance level of 0.05, was conducted to evaluate the relationships between these factors and academic performance. The study followed the INPUT-PROCESS-OUTPUT (IPO) framework, emphasizing the inputs (key factors), processes (data collection and analysis), and outputs (findings and recommendations). The findings from the study were used to develop an intervention plan aimed at fostering a globally competitive learning environment in special education.

Results and Discussion

Table 1. Physical Health Support

| Physical Health Support | Mean | VD |
|--|------|----|
| The school provides adequate access to healthcare services (e.g., school nurse, regular health check-ups). | 4.67 | SA |
| Students have access to nutritious meals and snacks during the school day. | 4.20 | A |
| The school promotes physical activity and exercise through various programs. | 4.17 | A |
| The school accommodates students' medical needs (e.g., medication administration, medical equipment). | 4.87 | SA |
| The school ensures a safe and healthy physical environment (e.g., cleanliness, safety protocols). | 4.67 | SA |
| Grand Mean | 4.52 | SA |

The data presented in Table 1 regarding Physical Health Support within the school indicates a very positive assessment across various aspects of student health and well-being. The highest mean score of 4.87 ("Strongly Agree") pertains to the school's accommodation of students'

medical needs, such as medication administration and the provision of medical equipment. This suggests that the school is highly effective in ensuring that students with medical needs are well supported. Similarly, the school's provision of adequate access to healthcare services and maintenance of a safe and healthy physical environment both received high mean scores of 4.67 ("Strongly Agree"). These scores indicate that the school excels in providing essential healthcare services, such as access to a school nurse and regular health check-ups, as well as ensuring a clean and safe environment for students. The availability of nutritious meals and the promotion of physical activity and exercise were also rated positively, with mean scores of 4.20 and 4.17, respectively (both "Agree"). These results reflect that while these areas are well-regarded, there is slightly less satisfaction compared to the other aspects of physical health support. Overall, with a grand mean of 4.52 ("Strongly Agree"), the data suggests that the school is highly effective in supporting students' physical health and well-being, particularly in accommodating medical needs and maintaining a healthy environment.

Table 2. Mental Health and Emotional Support

| Mental Health and Emotional Support | Mean | VD |
|--|------|----|
| The school provides access to mental health professionals (e.g., counselors, psychologists). | 3.77 | A |
| Students receive support for managing stress and anxiety. | 3.33 | A |
| The school offers programs to promote social-emotional learning (SEL). | 4.07 | A |
| There are resources available for students experiencing emotional difficulties. | 4.77 | SA |
| The school fosters a supportive and understanding environment for mental health. | 4.23 | SA |
| Grand Mean | 4.03 | A |

The data in Table 2 reflects the school's approach to mental health and emotional support, indicating an overall positive assessment with some variation across different aspects. The highest mean score of 4.77 ("Strongly Agree") is associated with the availability of resources for students experiencing emotional difficulties, suggesting that the school is highly effective in providing the necessary support for students who face emotional challenges. The school's efforts to foster a supportive and understanding environment for mental health also received a strong mean score of 4.23 ("Strongly Agree"), indicating that the school environment is perceived as conducive to addressing and supporting students' mental health needs. Additionally, the availability of programs to promote social-emotional learning (SEL) was rated positively with a mean score of 4.07 ("Agree"), reflecting the school's commitment to integrating SEL into its educational framework. Access to mental health professionals, such as counselors and psychologists, received a slightly lower mean score of 3.77 ("Agree"), indicating that

while access is generally adequate, there may be room for improvement in this area. The lowest mean score of 3.33 ("Agree") pertains to the support provided for managing stress and anxiety, suggesting that this is an area where the school could focus more efforts to better meet student needs. Overall, with a grand mean of 4.03 ("Agree"), the data indicates that the school is doing a commendable job in supporting students' mental health and emotional well-being, particularly in providing resources for those experiencing emotional difficulties and fostering a supportive environment. However, there are opportunities for enhancing support, especially in areas related to managing stress and anxiety and improving access to mental health professionals.

Table 3. Social Well-Being and Peer Relationship

| Social Well-Being and Peer Relationship | Mean | VD |
|--|------|----|
| The school promotes positive peer interactions and friendships. | 4.80 | SA |
| Students have opportunities to participate in social activities and clubs. | 4.13 | A |
| Anti-bullying policies and programs are effectively implemented. | 3.80 | A |
| The school encourages inclusive practices to ensure all students feel accepted. | 4.80 | SA |
| There are initiatives to foster a sense of community and belonging among students. | 4.20 | A |
| Grand Mean | 4.35 | SA |

The data in Table 3 provides insights into the school's effectiveness in fostering social well-being and peer relationships, indicating a generally strong performance in this area. The highest mean scores of 4.80 ("Strongly Agree") are associated with the promotion of positive peer interactions and friendships, as well as the encouragement of inclusive practices to ensure that all students feel accepted. These scores suggest that the school is highly successful in creating a positive social environment where students feel connected and included. The school's initiatives to foster a sense of community and belonging among students received a mean score of 4.20 ("Agree"), indicating that these efforts are well-regarded, though there may still be opportunities to further enhance the sense of community within the school. Opportunities for students to participate in social activities and clubs also received a positive rating with a mean score of 4.13 ("Agree"), reflecting the school's commitment to providing avenues for social engagement outside of the classroom. However, the area of anti-bullying policies and programs, while still rated positively with a mean score of 3.80 ("Agree"), received the lowest score in this table. This suggests that while anti-bullying measures are in place, there may be room for improvement in their implementation or effectiveness. Overall, with a grand mean of 4.35 ("Strongly Agree"), the data indicates that the school is very effective in promoting social well-being and fostering positive peer relationships.

Table 4. Learners Academic Performance

| Subject | Grade | VD |
|-------------|-------|-------------------|
| English | 82.78 | Satisfactory |
| Mathematics | 85.85 | Very Satisfactory |
| Science | 85.88 | Very Satisfactory |

The data in the table outlines the academic performance of learners across three subjects: English, Mathematics, and Science. The grades indicate varying levels of achievement, with English receiving a grade of 82.78, which is classified as "Satisfactory." This suggests that while students are meeting basic expectations in English, there may be room for improvement. In contrast, both Mathematics and Science received higher grades, 85.85 and 85.88 respectively, both classified as "Very Satisfactory." These scores indicate that learners are performing well in these subjects, exceeding basic expectations and demonstrating a stronger grasp of the material. Overall, the data suggests that learners are performing adequately in English and excelling in Mathematics and Science, highlighting these areas as particular strengths in their academic performance.

Table 5. Significant Relationship Between the Extent of Clarity and Specificity of Goals to English Performance

| Constructs | r-value | t-value | P value | Remarks | Decision |
|--|---------|---------|---------|-----------------|---------------|
| Physical Health Support | 0.191 | 1.031 | 0.312 | Not Significant | Do not reject |
| Mental Health and Emotional Support | -0.150 | -0.801 | 0.430 | Not significant | Do not reject |
| Social Well-being and Peer Relationships | 0.180 | 0.966 | 0.342 | Not significant | Do not reject |

The data in Table 5 analyzes the relationship between various influential factors Physical Health Support, Mental Health and Emotional Support, and Social Well-being and Peer Relationships and students' academic performance in English. The results indicate that none of these factors have a statistically significant relationship with English performance. Physical Health Support shows an r-value of 0.191 and a t-value of 1.031, with a p-value of 0.312. Although the positive r-value suggests a slight positive correlation between physical health support and English performance, the p-value is above the significance threshold of 0.05, indicating that this relationship is not statistically significant. Therefore, the null hypothesis is not rejected, implying that physical health support does not have a significant impact on English performance in this context. Mental Health and Emotional Support presents a negative r-value of -0.150 and a t-value of -0.801, with a p-value of 0.430. Despite the negative correlation suggested by the r-value, the p-value indicates that this relationship is

not statistically significant. Consequently, the null hypothesis is not rejected, suggesting that mental health and emotional support do not significantly influence English academic performance. Social Well-being and Peer Relationships, with an r-value of 0.180 and a t-value of 0.966, also does not show a statistically significant relationship, as indicated by its p-value of 0.342. While there is a slight positive correlation, it is not strong enough to be considered statistically significant, leading to the decision to not reject the null hypothesis. This implies that social well-being and peer relationships do not have a significant effect on English performance. In summary, the data indicates that Physical Health Support, Mental Health and Emotional Support, and Social Well-being and Peer Relationships do not have significant relationships with students' performance in English. This suggests that other factors, possibly outside the scope of this analysis, may be more influential in determining students' success in English.

Table 6. Significant Relationship Between the extent of Quality of Instructional strategies to Mathematics

| Constructs | r-value | t-value | P value | Remarks | Decision |
|--|---------|---------|---------|-----------------|---------------|
| Physical Health Support | 0.186 | 1.002 | 0.325 | Not Significant | Do not reject |
| Mental Health and Emotional Support | -0.287 | -1.587 | 0.124 | Not significant | Do not reject |
| Social Well-being and Peer Relationships | 0.243 | 1.325 | 0.196 | Not significant | Do not reject |

The data in Table 6 examines the relationship between various influential factors Physical Health Support, Mental Health and Emotional Support, and Social Well-being and Peer Relationships and students' academic performance in Mathematics. The analysis reveals that none of these factors show a statistically significant relationship with Mathematics performance. Physical Health Support has an r-value of 0.186 and a t-value of 1.002, with a p-value of 0.325. Although the r-value suggests a slight positive correlation between physical health support and Mathematics performance, the p-value is above the significance threshold of 0.05, indicating that this relationship is not statistically significant. As a result, the null hypothesis is not rejected, suggesting that physical health support does not significantly impact students' performance in Mathematics. Mental Health and Emotional Support presents a negative r-value of -0.287 and a t-value of -1.587, with a p-value of 0.124. The negative r-value suggests an inverse relationship, meaning that as mental health and emotional support decrease, Mathematics performance might slightly increase, or vice versa. However, the p-value indicates that this relationship is not statistically significant, leading to the decision to not reject the null hypothesis. This suggests that mental health and emotional support do

not have a significant influence on Mathematics performance. Social Well-being and Peer Relationships shows an r-value of 0.243 and a t-value of 1.325, with a p-value of 0.196. While there is a slight positive correlation, the p-value is not low enough to establish statistical significance. Therefore, the null hypothesis is not rejected, implying that social well-being and peer relationships do not significantly affect Mathematics performance. In summary, the data suggests that Physical Health Support, Mental Health and Emotional Support, and Social Well-being and Peer Relationships do not have significant relationships with students' academic performance in Mathematics. Other factors not examined in this analysis may play a more critical role in influencing students' success in this subject.

Table 7. Significant Relationship Between the Extent of Influential Factors of the academic performance to Science Performance

| Constructs | r-value | t-value | P value | Remarks | Decision |
|--|---------|---------|---------|-----------------|---------------|
| Physical Health Support | -0.043 | -0.228 | 0.822 | Not significant | Do not reject |
| Mental Health and Emotional Support | -0.025 | -0.132 | 0.896 | Not significant | Do not reject |
| Social Well-being and Peer Relationships | -0.168 | -0.900 | 0.376 | Not significant | Do not reject |

The data in Table 7 explores the relationship between various influential factors Physical Health Support, Mental Health and Emotional Support, and Social Well-being and Peer Relationships and students' academic performance in Science. The analysis indicates that none of these factors have a statistically significant relationship with Science performance. Physical Health Support has an r-value of -0.043 and a t-value of -0.228, with a p-value of 0.822. The negative r-value suggests a very weak inverse correlation between physical health support and Science performance, but the high p-value indicates that this relationship is not statistically significant. Consequently, the null hypothesis is not rejected, suggesting that physical health support does not significantly impact students' performance in Science. Mental Health and Emotional Support shows an r-value of -0.025 and a t-value of -0.132, with a p-value of 0.896. This extremely low r-value indicates virtually no correlation, and the p-value confirms that the relationship is not statistically significant. Therefore, the null hypothesis is not rejected, implying that mental health and emotional support do not have a significant influence on science performance. Social Well-being and Peer Relationships present an r-value of -0.168 and a t-value of -0.900, with a p-value of 0.376. Although the negative r-value suggests a weak inverse relationship, the p-value is too high to establish statistical significance. As a result, the null hypothesis is not rejected, indicating

that social well-being and peer relationships do not significantly affect Science performance.

Discussion

The assessment of the influential factors of academic performance related to health and well-being indicates strong support across various domains. In Physical Health Support, the school excels, with particularly high ratings for providing adequate access to healthcare services and accommodating students' medical needs, indicating a positive results. In the area of Mental Health and Emotional Support, while generally positive, there is slightly less agreement, particularly in the support for managing stress and anxiety, which received a lower mean score. However, the availability of resources for students experiencing emotional difficulties and the fostering of a supportive environment for mental health are rated highly. Lastly, Social Well-Being and Peer Relationships are also strongly supported, with the school promoting positive peer interactions and inclusive practices. These findings suggest that the school provides a robust support system for the physical, mental, and social well-being of its students, which is likely to positively influence their academic performance. The analysis of the relationship between health and well-being factors and learners' academic performance in English, Mathematics, and Science shows that none of the examined factors had a statistically significant impact on academic outcomes in any of the subjects. The *r*-values across all constructs and subjects were low, and the *p*-values were well above the threshold for significance, leading to the decision not to reject the null hypothesis in each case. This suggests that, within the context of this study, these aspects of health and well-being do not have a measurable direct influence on learners' academic performance in English, Mathematics, or Science. While the school's support systems are positively evaluated, they do not appear to significantly correlate.

Conclusion

The findings indicate that while the school provides a strong and well-regarded support system for the physical, mental, and social well-being of its students, these factors do not have a statistically significant direct impact on academic performance in English, Mathematics, or Science within the context of this study. Despite the positive evaluations of health and well-being support, including access to healthcare services, mental health resources, and the promotion of positive peer relationships, these aspects do not appear to correlate strongly with academic outcomes. This suggests that while health and well-being are crucial for overall student development, other factors may play a more critical role in directly influencing academic achievement in these subjects.

References

- Ainscow, M., & Sandill, A. (2010). Developing inclusive education systems: The role of organizational cultures and leadership. *International Journal of Inclusive Education*, 14(4), 401-416. <https://doi.org/10.1080/13603110802504903>
- Altinay Aksal, F., Altinay Gazi, Z., & Dagli, G. (2016). Technology-supported learning for lifelong learning. *Journal of Educational Technology & Society*, 19(2), 103-114.
- Dipaola, M. F., Tschannen-Moran, M., & Walther-Thomas, C. (2017). School principals and special education: Creating the context for academic success. *Focus on Exceptional Children*, 43(6), 1-11.
- Farooq Zai, S., & Haider, A. (2020). Education unveiled: A comprehensive study of special education practices. *International Journal of Special Education Studies*, 45(1), 99-116.
- Gargiulo, R. M., & Bouck, E. C. (2020). *Special education in contemporary society: An introduction to exceptionality* (6th ed.). SAGE Publications.
- Glanz, J., Rimer, B. K., & Lewis, F. M. (2015). *Health behavior and health education: Theory, research, and practice* (4th ed.). Jossey-Bass.
- Hernandez, J. A., Smith, K. M., & Singh, R. P. (2023). Hybrid learning environments and student well-being: Case study during COVID-19. *Journal of Educational Research and Development*, 48(3), 58-72.
- Ismail, Z., & Majid, M. (2020). Implementation of individualized education programs and curriculum adaptations for students with disabilities. *International Journal of Special Education Research*, 29(2), 120-132.
- LaBarbera, R. (2017). The comparison of teacher and caregiver perspectives on inclusive education. *Journal of Educational Studies*, 36(2), 44-59.
- Loreman, T. (2017). *Pedagogy for inclusive education: Inclusive education for all learners*. Routledge.
- Love, A. M., & Young, A. T. (2020). Teacher self-efficacy in teaching students with autism in inclusive settings. *Journal of Autism and Developmental Disorders*, 50(5), 1670-1681.
- Räty, H., Kasanen, K., & Laine, L. (2019). Documenting support measures in IEPs for students with disabilities. *European Journal of Special Education Research*, 38(3), 152-169.
- Sweigart, C. A., & Collins, B. C. (2017). Supporting the needs of beginning special education teachers. *Journal of Special Education Leadership*, 30(1), 25-33.

- Uçak, E., & Demirok, M. (2022). Examining the effectiveness of an educational program developed for special educators. *International Journal of Inclusive Education*, 27(1), 94-110.
- Vaughn, S., Gersten, R., & Chard, D. J. (2020). Evidence-based practices: Research to practice in special education. *Journal of Special Education Studies*, 53(1), 8-19.
- Wong, M. E., & Rashid, A. (2022). Challenges in implementing Individualized Education Programs in inclusive classrooms. *Journal of Special Education*, 45(3), 225-240.
- Yell, M. L., Shriner, J. G., & Katsiyannis, A. (2013). *The law and special education* (4th ed.). Pearson Education.