



ORIGINAL

Building Bright Minds: A Comprehensive Study on Developmentally Appropriate Practices for Enhancing Elementary Students' Mental Health

Desarrollar mentes brillantes: un estudio exhaustivo sobre prácticas apropiadas para el desarrollo destinadas a mejorar la salud mental de los estudiantes de primaria

Minsih¹  , Anatri Destya¹ , Alfi Laila² , Mohd Hanafi Mohd Yasin³ , Imam Mujahid⁴ , Helzi¹ 

¹Universitas Muhammadiyah Surakarta Indonesia, Department of Elementary Education, Surakarta, Indonesia.

²Universitas Nusantara PGRI Kediri Indonesia, Department of Elementary Education, Kediri, Indonesia.

³Universiti Kebangsaan Malaysia, Faculty of Education.

⁴Universitas Islam Negeri Raden Mas Said Surakarta, Department of Guidance and Counseling, Surakarta, Indonesia.

Cite as: Minsih, Destya A, Alfi L, Mohd Yasin MH, Mujahid I, Helzi. Building Bright Minds: A Comprehensive Study on Developmentally Appropriate Practices for Enhancing Elementary Students' Mental Health. Salud, Ciencia y Tecnología. 2025; 5:1085. <https://doi.org/10.56294/saludcyt20251085>

Submitted: 03-04-2024

Revised: 21-07-2024

Accepted: 16-11-2024

Published: 01-01-2025

Editor: Dr. William Castillo-González 

Corresponding author: Minsih 

ABSTRACT

Introduction: quality learning is essential to achieve national education goals. However, current practices often neglect students' mental health needs, and focus more on academic achievement.

Objective: the purpose of this study was to analyze the need to develop a Developmentally Appropriate Practices (DAP) learning model that specifically targets the mental health of elementary school students.

Method: this study used a qualitative case study design approach, involving 30 teachers and 3 mental health professionals from Surakarta city. Data were collected through in-depth interviews with educators and mental health professionals, as well as classroom observations. Data were analyzed thematically to identify relevant patterns and themes related to the development of the DAP learning model. Interview guides and observation sheets were used as research instruments.

Results: the findings revealed three main problems: 1) lack of attention to mental health aspects in the curriculum and learning practices, with an exclusive focus on academic performance; 2) lack of trained personnel to address mental health needs in schools; and 3) students face challenges in adapting to academic and social demands, which can lead to stress and mental health problems. The DAP learning model can improve the mental health of elementary school students by integrating emotional, social, and academic aspects, thereby fostering a supportive environment that increases students' sense of connectedness and confidence in learning.

Conclusion: the development of the Developmentally Appropriate Practices (DAP) learning model is essential to address the mental health needs of elementary school students. By incorporating emotional and social dimensions into educational practices.

Keywords: Learning Model; Developmentally Appropriate Practices; Students' Mental Health; Learning to Prioritize Students' Potential.

RESUMEN

Introducción: el aprendizaje de calidad es esencial para alcanzar las metas nacionales de educación. Sin embargo, las prácticas actuales a menudo descuidan las necesidades de salud mental de los estudiantes y se centran más en el rendimiento académico.

Objetivo: el propósito de este estudio fue analizar la necesidad de desarrollar un modelo de aprendizaje de Prácticas apropiadas para el desarrollo (DAP) que se dirija específicamente a la salud mental de los estudiantes de la escuela primaria.

Método: este estudio utilizó un enfoque de diseño de estudio de caso cualitativo, en el que participaron 30 maestros y 3 profesionales de la salud mental de la ciudad de Surakarta. Los datos se recopilaban a través de entrevistas en profundidad con educadores y profesionales de la salud mental, así como observaciones en el aula. Los datos se analizaron temáticamente para identificar patrones y temas relevantes relacionados con el desarrollo del modelo de aprendizaje DAP. Se utilizaron guías de entrevistas y hojas de observación como instrumentos de investigación.

Resultados: los hallazgos revelaron tres problemas principales: 1) falta de atención a los aspectos de salud mental en el currículo y las prácticas de aprendizaje, con un enfoque exclusivo en el rendimiento académico; 2) falta de personal capacitado para abordar las necesidades de salud mental en las escuelas; y 3) los estudiantes enfrentan desafíos para adaptarse a las demandas académicas y sociales, lo que puede generar estrés y problemas de salud mental. El modelo de aprendizaje DAP puede mejorar la salud mental de los estudiantes de la escuela primaria al integrar aspectos emocionales, sociales y académicos, fomentando así un entorno de apoyo que aumenta el sentido de conexión y la confianza de los estudiantes en el aprendizaje.

Conclusión: el desarrollo del modelo de aprendizaje de Prácticas apropiadas para el desarrollo (DAP) es esencial para abordar las necesidades de salud mental de los estudiantes de la escuela primaria, incorporando dimensiones emocionales y sociales en las prácticas educativas.

Palabras clave: Modelo de Aprendizaje; Prácticas Apropriadas Para el Desarrollo; Salud Mental de los Estudiantes; Aprender a Priorizar el Potencial de los Estudiantes.

INTRODUCTION

In the context of education in Indonesia, the curriculum is designed to develop students holistically, including academic, social, emotional, and physical abilities. Effective curriculum development that is aligned with students' needs is key to ensuring the achievement of comprehensive educational goals, covering cognitive, affective, and psychomotor aspects.^(1,2,3) Therefore, a learning model that can accommodate all aspects of student development in a balanced manner is needed. The importance of an integrated and adaptive learning model lies not only in its ability to cover various aspects of student development but also in its ability to adapt to social dynamics and technological advances that continue to develop.⁽⁴⁾ Such learning models should be able to respond to student's individual needs while facilitating collaboration and active engagement in the learning process.

Mental health in primary school students is an important aspect that often goes unnoticed. Mental health in primary school students is a very important but often overlooked aspect. As mental health significantly affects their overall well-being and academic performance, a comprehensive approach that integrates mental health education into the curriculum and classroom practices is needed.⁽⁵⁾ Research has shown that a strong foundation in mental health can lead to increased student engagement, better social skills, and better academic outcomes, highlighting the need for an educational framework that prioritizes emotional and psychological support along with academic achievement.^(6,7) In addition, implementing holistic learning models based on developmentally appropriate practices can help create an environment that supports students' mental well-being while supporting their growth and development.^(8,9) In line with the statement that curriculum is a collection of arrangements and rules for objectives, subject matter, teaching strategies, and resources that serve as a roadmap for carrying out teaching activities to fulfill federal educational objectives.^(10,11) This approach, which often involves project-based learning or problem-based learning, allows students to develop critical thinking skills, creativity, and problem-solving abilities, all of which are crucial in a changing world.^(12,13,14) Schools must create a conducive situation, and provide programs that allow students to develop their potential and abilities, quality learning, a good environment, and various other factors.⁽¹⁵⁾

Holistic Learning Model Based on Developmentally Appropriate Practices is one of the learning approaches that can be developed to achieve comprehensive educational goals. This model emphasizes active and student-centered learning that is in line with the developmental needs of early learners, by fostering not only their academic skills but also their mental and emotional well-being, thus creating an environment conducive to holistic growth^(16,17) the impact of the Holistic Learning Model Based on Developmentally Appropriate Practices is expected to improve students' mental health while supporting the achievement of national education goals.⁽¹⁸⁾ This is in line with education which aims to prepare students for the future based on their potential.⁽¹⁹⁾

The purpose of this study is to analyze the development of a holistic learning model based on Developmentally Appropriate Practices on the mental health of elementary school students. To achieve this goal, it is important to evaluate current educational practices, identify gaps in mental health support, and understand how a holistic approach can better serve the diverse needs of elementary school students, thus creating a healthier learning environment that supports both academic and emotional well-being. Stakeholders, including educators, mental health professionals, parents, and students themselves, will be critical to effectively implementing this analysis, as their insights can provide a comprehensive understanding of the various challenges that surround mental health in primary education settings.

The contribution of this research is that it provides a clear framework for developing and implementing a holistic learning model integrated with developmentally appropriate practices, which can catalyze promoting the mental health of primary school students. It is hoped that this model can help identify and address existing gaps in current mental health support, and provide solutions that can be adapted to meet the needs of diverse students.

METHOD

Type of Study

This research utilized a qualitative approach with a case study method, focusing on the mental health of primary school learners.

Population and Sample

The study population comprised educators, students, school principals, mental health professionals (including counseling teachers and school psychologists), and parents. Purposive sampling was employed to select participants who could provide valuable insights into the mental health dynamics within primary schools.

Study Variables

Key variables included the mental health status of primary school learners, current educational practices, and stakeholder perceptions regarding mental health challenges and needs.

Data Collection Methods and Instruments

Data were collected through in-depth interviews with stakeholders, classroom observations, and a systematic literature review. The instruments used included interview guides and observation sheets. The research stages included:

- 1) Conducting a systematic literature review to understand holistic learning concepts and their relationship with students' mental health.
- 2) Performing in-depth interviews with educators, mental health professionals, and parents to identify needs and challenges.
- 3) Observing classroom practices to analyze their impact on student well-being.
- 4) Ensuring data validity through technical triangulation and source triangulation.

Statistical Techniques and Procedures

The data were thematically analyzed to identify patterns and themes relevant to the development of holistic learning models and evidence-based recommendations for improving students' mental health. While this qualitative study does not apply traditional statistical techniques, thematic analysis included systematic reduction, display, and verification of data to formulate actionable recommendations.

Ethical Parameters

Ethical considerations included obtaining informed consent from all participants, ensuring confidentiality of responses, and providing participants the right to withdraw from the study at any time. Ethical approval was secured prior to data collection to safeguard the welfare of all participants involved in the research.

RESULTS

Curriculum that does not pay attention to students' mental health.

Learning practices implemented in schools focus on academic achievement alone, thus forgetting the development of students' mental, social, emotional, and skill aspects. The trend of academic achievement is still an interesting topic in coloring the school curriculum. This is as seen in the following interview in table 1.

Table 1. Interview Results

Aspect	Interview Results	Informant
School Curriculum	“In the implementation of the current curriculum, we still prioritize the academic achievements of our students first, where our school is still lagging for academic aspects, this can be seen in the results of assessments carried out periodically”.	Principal, Assessor, and 5th grade teacher
Learning Experience	“Learning prioritizes literacy and numeracy. We still don’t understand what the concept of mental health is?” “I have heard the term mental health but I don’t understand the concept and application, in practice students are more emphasized on literacy and numeracy activities”.	4th grade teacher, Principal
Learning Process	“The learning process that has been carried out so far uses the learning process as usual only more aspects of literacy and numeracy such as students reading a lot, presentations, discussions and completing sums in literacy”. “When I teach, I always advise at the beginning of the learning activity”	4th-grade teacher, and 5th-grade teacher
Learning climate-atmosphere	“The learning atmosphere is still conducive, the children are very enthusiastic about learning and I think their mental condition is healthy because if they are usually mentally unhealthy, they are always cranky and disruptive”. “Although our school is still one of the new schools implementing IKM, our school already has a good learning environment physically, well the standard. It still takes time to get better, for the psychological environment, please check with the children	2nd-grade teacher

Table 2. Observation Results

Observation Aspects	Observation Results
Learning environment	<ul style="list-style-type: none"> • The learning atmosphere is still based on material content • The learning environment has not emphasized student wellbeing and children’s mental health, it can be seen that there are students who are alone. • There are still students who strike school because they are not comfortable in school/class. • The learning atmosphere has not accommodated students’ varied abilities.
Learning Process	<ul style="list-style-type: none"> • The process only accommodates students with good academic performance • The learning process is still dominated by teachers and smart students only. • There is still minimal use of innovative learning media and teachers still only review student worksheets. • There is no mapping of children’s learning abilities, teachers have not yet done differentiated learning.
Student’s experience	<ul style="list-style-type: none"> • Many students experience high levels of stress due to heavy academic demands. • Busy exam schedules and tight deadlines. • Homework procrastination, stress, and decreased quality of assignments. Due to difficulties in managing time

Untrained Resources in Addressing Mental Health Needs.

Effectively within the school setting, leading to missed opportunities for early intervention and support systems that could improve resilience and emotional well-being among students. Furthermore, the existing stigma towards mental health issues often inhibits open discussion and support, further exacerbating the challenges students face in achieving optimal mental well-being and academic performance. Given these challenges, further research is expected to help develop more effective strategies for the integration of developmentally appropriate practices with mental health in the curriculum and school environment, so that students can benefit from a more holistic and supportive approach to learning. In addition, strategies that engage educators, mental health professionals, and parents in the development and implementation of holistic learning models will be critical to creating a school culture that supports students’ mental health holistically and sustainably. This is based on the following interview data:

Table 3. Interview Results

Aspect	Interview Description	Informant
Teacher’s condition	“I still do not understand the implementation of the Merdeka curriculum well, and I am not familiar with the concept of mental health. “Urgent things that have been recommended to the principal are related to IHT and workshops on emotional side learning that supports student mental health”. “As a counseling teacher, it is not only my obligation to maintain students’ mental health but this is the role of all school stakeholders”	5th grade teacher, Guidance and counseling teacher, School Psikolog.

Teacher's Competence	<p>"I am an old school teacher, different from today's Gen Z teachers, for me children's mental health is my learning priority. The important thing is that the children enjoy learning with me".</p> <p>"Mental health problems usually affect teenagers and adults, for me my students are fine".</p> <p>"Students may not have adequate study skills, such as effective note-taking techniques or efficient study strategies, which may hinder their ability to absorb and remember information".</p> <p>"Transitioning from more traditional teaching methods to more modern methods, such as project-based or digital learning, can make students feel uncomfortable and difficult to adapt"</p>	2nd-grade teacher
Implementation of an independent curriculum	<p>"The current implementation of the new curriculum provides flexibility for students but it is very difficult for us old people to implement it because there are many things I have to learn including digital skills".</p> <p>"I welcome this curriculum because students can be encouraged to collaborate and think critically. The implementation of the Merdeka curriculum is relevant to the mental well-being of children, where the emphasis on the Pancasila learner profile can make children have good character".</p> <p>"Some students have difficulty in understanding subject matter that is more complex or different from the previous curriculum. This affects the enthusiasm to take part in lessons"</p>	2nd, and 3th grade teacher

The interview excerpt above shows the importance of understanding and skills in addressing mental health for various professions and settings. Without adequate training, mentoring from HR-related elements can have difficulty in providing effective support.

Student Difficulty in Adapting to Academic Demands

This can lead to more serious distress and mental health issues. As the pressure to meet academic and social expectations increases, students often experience stress that can negatively impact their mental health, so effective strategies are needed to address these challenges and create a more supportive environment for students' holistic development. As the following interview results show:

Table 4. Interview Result

Aspect	Interview Description	Informant
Academic Demands	<p>"I see that some students are happy when learning projects, because it will provide space for them to explore their abilities, the opportunity to try is greater, but some children are still confused and silent, it is difficult for them to apply".</p> <p>"As a principal, I don't force children even though the school demands are quite high related to literacy and numeracy, for me when they feel happy learning".</p> <p>"but when they are demanded too much about this material, it will affect their enthusiasm for learning"</p>	4th-grade teacher Principal
Student condition	<p>"I feel that I'm mentally fine in Grade 3, but my seniors usually say that in the upper grades (5-6) the learning has to be very serious and sometimes they get stressed".</p> <p>"Yes, sometimes I enjoy learning, sometimes I get bored, and the learning atmosphere is sometimes boring".</p> <p>"I find it difficult to adjust to learning conditions that only focus on learning situations drilling questions, reviewing LKPD only".</p> <p>"I need a different atmosphere, I want a guidance counselor who understands the condition of us sixth graders"</p>	Students in Grades 2, 3 & 5-6
Loss of Motivation	<p>"Some students lose motivation to learn due to the heavy academic load, "Unsatisfactory learning outcomes seen in the school's literacy and numeracy results,</p> <p>"Lack of student interest during lessons if we are not sensitive, it will continue".</p> <p>"Students have social skills problems, such as interacting with classmates, working in groups, and good communication with peers in terms of lessons have not gone well".</p> <p>"Some students are still shy to establish interactions to complete the learning process"</p>	2 nd and 3th grade teacher
Social Skills Issues	<p>"Some students are still shy to establish interactions to complete the learning process"</p>	Learning Committee Teacher

DISCUSSION

Curriculum Implementation that Doesn't Pay Attention to Mental Health Aspects

Based on the results presented in the table, there are indications that the current curriculum and learning practices in schools focus more on academic achievement, with less attention to students' mental health aspects. Many schools still prioritize academic achievement as the main indicator of educational success, often neglecting the development of students' mental, social, emotional, and skill aspects.⁽²⁰⁾ This emphasis can neglect the holistic needs of students, which are important for their overall development.⁽²¹⁾ The lack of understanding and training on mental health among educators may hinder the integration of this aspect into the curriculum.⁽²²⁾ Teacher education on mental health is essential so that they can effectively support students' emotional and psychological needs. In line with⁽²³⁾ who stated that the implementation of the independent curriculum in driving schools is implemented in an integrated manner by emphasizing the skills aspects of students through strengthening the Pancasila profile project.

While literacy and numeracy are important parts of the curriculum, too narrow an approach can neglect important aspects of learning involving social and emotional skills.^(24,25) A more balanced approach to learning should integrate a range of skills to support students' holistic development. A conducive learning atmosphere is important, but assessment of students' mental health should be based on more objective measurement tools and more in-depth evaluation methods.^(26,27) Students' mental health is not always obvious from daily behavior and requires more systematic attention and evaluation.

Based on observations of various aspects of learning environments, teaching and learning processes, and student experiences, some significant issues need to be addressed to improve the quality of education and student well-being. Learning environments that focus only on material content and do not pay attention to student well-being can cause discomfort and stress among students.⁽²⁸⁾ Schools need to create an inclusive and supportive environment and pay attention to students' mental health. A positive learning atmosphere can increase student engagement and reduce feelings of isolation.

Teaching and learning processes that are not inclusive and do not accommodate all students' abilities can hinder the development of students who do not fall into the category of "smart" or high achievers. The use of innovative learning media and differentiated approaches is important to meet diverse learning needs and support all students effectively in classroom management.⁽²³⁾ High levels of stress among students can negatively impact their mental and academic health. It is important to create a balance between academic demands and adequate support to help students better manage their stress and time.⁽²³⁾ Interventions that focus on time management, stress reduction, and emotional support can improve students' well-being.

Untrained Resources to Address Mental Health Needs.

Results show that understanding and training related to mental health among educators is still very limited. This issue leads to missed opportunities for early intervention and support systems that can improve students' emotional well-being.⁽²⁹⁾ Lack of understanding and skills in addressing mental health can hinder the effectiveness of support provided to students. Untrained teachers may struggle to recognize signs of mental health problems or to implement strategies that can support students' emotional well-being. Adequate training in mental health is important to ensure that educators can provide effective and thorough support.⁽⁵⁾

Implementation of the new curriculum must be accompanied by appropriate training and support for teachers to successfully address these challenges. Curricula that support students' mental well-being must be matched by teachers' understanding and skills in implementing relevant new teaching methods. Continuous professional development and technical support for teachers can help them adapt and provide better support to students.⁽³⁰⁾ The stigma associated with mental health often hinders open discussion and needed support. This exacerbates the challenges students face in achieving optimal mental well-being and academic performance. Therefore, it is important to integrate mental health training in professional development for educators and develop strategies that engage the entire school community in creating a culture that supports mental health across the board.⁽³¹⁾

Students' Difficulties in Adapting to Academic Demands

Based on the data results, several factors affect students' mental health in the school environment, especially related to academic demands and learning conditions. High academic demands often add to the burden of stress for students. The emphasis on high academic achievement without regard to emotional well-being can lead to stress and decreased motivation to learn. Therefore, it is important to adopt a more holistic approach to learning that focuses not only on academic achievement but also on students' mental well-being.⁽³²⁾

This shows the importance of having an adaptive and supportive learning environment, as well as support from guidance counselors who understand students' emotional and psychological needs. The inability to adjust to monotonous learning methods or heavy academic pressure can lead to loss of motivation and mental health problems.^(33,34) Loss of motivation and social skills issues can have a significant impact on students' mental

health. To address this, schools need to integrate programs that support students' social and emotional skills and provide additional support to help them cope with academic and social stress.^(35,36)

CONCLUSIONS

The results of the analysis show that the development of a Holistic Learning Model based on Developmentally Appropriate Practices has the potential to improve the mental health of primary school students in several ways. This learning model can integrate emotional, social, and academic aspects, allowing students to feel more supported in various aspects of their lives, which in turn can increase their sense of connectedness and confidence in learning. Furthermore, this approach can assist in creating a conducive learning environment, where students feel safe to express themselves, collaborate with peers, and actively participate in their learning process. Moreover, by prioritizing developmentally appropriate practices, this model fosters a sense of community within the classroom, which is crucial for mental well-being, as peer relationships significantly affect emotional health and overall academic performance in children. Furthermore, the implementation of this holistic learning model not only focuses on meeting students' academic needs but also pays special attention to their emotional and social development, which are essential components in overcoming the negative impacts of stress and promoting optimal mental health functioning.

The findings of this study are consistent with the literature which suggests that a conducive school environment, with effective mental health programs, can greatly support students' emotional, psychological, and academic development. Schools need to implement strategies that are more inclusive and responsive to students' emotional needs to create a better learning atmosphere that supports their overall development. Thus, the development of a Holistic Learning Model based on Developmentally Appropriate Practices offers a promising approach to improving the mental health of primary school students.

REFERENCES

1. Contrino MF, Reyes-Millán M, Vázquez-Villegas P, Membrillo-Hernández J. Using an adaptive learning tool to improve student performance and satisfaction in online and face-to-face education for a more personalized approach. *Smart Learn Environ.* 2024;11(1). <https://doi.org/10.1186/s40561-024-00292-y>
2. Poerwanti JIS, Marmoah S, Supianto S, Sukarno S, Istiyati S, Mahfud H. Classroom-Based Assessment System to Improve the Quality of Learning in Malaysia and Indonesia. *Mimb Sekol Dasar.* 2023;10(3):626-42. <https://doi.org/10.53400/mimbar-sd.v10i3.61098>
3. Hidayatullah MF, Syaifullah R, Riyadi S. Evaluative Study of the Implementation of the Independent Curriculum in Physical Education Elementary School Level Using the CIPP Model. *Qalamuna.* 2024;16(2):1017-30. <https://doi.org/10.37680/qalamuna.v16i2.5718>
4. Gligorea I, Cioca M, Oancea R, Gorski AT, Gorski H, Tudorache P. Adaptive Learning Using Artificial Intelligence in e-Learning: A Literature Review. *Educ Sci.* 2023;13(12). <http://dx.doi.org/10.3390/educsci13121216>
5. Wiedermann CJ, Barbieri V, Plagg B, Marino P, Piccoliori G, Engl A. Fortifying the Foundations: A Comprehensive Approach to Enhancing Mental Health Support in Educational Policies Amidst Crises. *Healthc.* 2023;11(10). <https://doi.org/10.3390/healthcare11101423>
6. Frazier T, Doyle Fosco SL. Nurturing positive mental health and wellbeing in educational settings - the PRICES model. *Front Public Heal.* 2023;11(January). <https://doi.org/10.3389/fpubh.2023.1287532>
7. Gkintoni E, Halkiopoulou C, Dimakos I, Nikolaou G. Emotional Intelligence as Indicator for Effective Academic Achievement within the School Setting: A Comprehensive Conceptual Analysis. 2023;2:1-38. Available from: www.preprints.org
8. Budziszewska M. Promoting the student's development. A holistic perspective. *The Role and Tasks of the Psychologist in a Contemporary School.* 2021. 214-226 p. <http://dx.doi.org/10.31338/uw.9788323551423.p214-226>
9. Pattiruhu CM, Makulua K, Thalib N, Elizar E, Pandia BS. Integrative Holistic Learning Strategies in Early Childhood Education. *Al-Hijr J Adullearn World.* 2023;2(4):329-49.
10. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Glob Heal.* 2018;6(11):e1196-252.

[https://doi.org/10.1016/S2214-109X\(18\)30386-3](https://doi.org/10.1016/S2214-109X(18)30386-3).

11. Baharun H, Adhimiy S. Curriculum Development Through Creative Lesson Plan. *Cendekia J Kependidikan Dan Kemasyarakatan*. 2018;16(1):41. <https://doi.org/10.21154/cendekia.v16i1.1164>

12. Yang Y. & CW. The impact of project-based learning on critical thinking and creativity: A meta-analysis *Educ Res Rev* 30. 2020;(August). <http://dx.doi.org/10.5430/wjel.v14n5p402>

13. Yazar Soyadı BB. Creative and Critical Thinking Skills in Problem-based Learning Environments. *J Gift Educ Creat*. 2015;2(2):71-71. <https://doi.org/10.18200/JGEDC.2015214253>

14. Isnani T. Implementation of Project-Based Learning Approach in Improving Critical Thinking Skills of Elementary School Students. *J Ar Ro'is Mandalika*. 2023;3(1):47-55. <http://dx.doi.org/10.59613/armada.v3i1.2844>

15. Makhambetova A, Zhiyenbayeva N, Ergesheva E. Personalized learning strategy as a tool to improve academic performance and motivation of students. *Int J Web-Based Learn Teach Technol*. 2021;16(6). <http://dx.doi.org/10.4018/IJWLTT.286743>

16. Mookkiah M, Prabakaran V. Holistic Education in the Present Scenario [Internet]. Vol. 1. 2023. 1-166 p. Available from: <https://www.researchgate.net/publication/369562481>

17. Che Mat N, Jamaludin KA. Effectiveness of Practices and Applications of Student-Centered Teaching and Learning in Primary Schools: A Systematic Literature Review. *Int J Acad Res Progress Educ Dev*. 2024;13(3). <http://dx.doi.org/10.6007/IJARPED/v13-i3/21733>

18. Parker R, Thomsen BS, Berry A. Learning Through Play at School - A Framework for Policy and Practice. *Front Educ*. 2022;7(February):1-12. <https://doi.org/10.3389/educ.2022.751801>

19. Catalina DE, Priyanti N. Holistic Learning for Young Learners - Is It Possible and What Can Christian Teachers Do To Make It Happen? *Polyglot J Ilm*. 2022;18(1):33. <http://dx.doi.org/10.19166/pji.v18i1.3886>

20. Goyal S, Worrell FC. The Association of Social Emotional Constructs and Academic Motivation with Academic Achievement in Adolescents. *J Educ Dev Psychol*. 2022;12(2):118. <http://dx.doi.org/10.5539/jedp.v12n2p118>

21. Zamanzadeh V, Jasemi M, Valizadeh L, Keogh B, Taleghani F. Effective factors in providing holistic care: A qualitative study. *Indian J Palliat Care*. 2015;21(2):214-24. <https://doi.org/10.4103/0973-1075.156506>

22. Semchuk JC, McCullough SL, Lever NA, Gotham HJ, Gonzalez JE, Hoover SA. Educator-Informed Development of a Mental Health Literacy Course for School Staff: Classroom Well-Being Information and Strategies for Educators (Classroom WISE). *Int J Environ Res Public Health*. 2023;20(1). <https://doi.org/10.3390/ijerph20010035>

23. Minsih M, Fuadi D, Rohmah ND. Character Education Through an Independent Curriculum. *AL-ISHLAH J Pendidik*. 2023;15(1):597-602. <https://journal.staihubbulwathan.id/index.php/alishlah/article/view/2812/1461>

24. Singh D, Chand SP, Kumar KK, Ali R. Effectiveness of literacy and numeracy in commerce subjects among secondary schools in Fiji. *J Educ Learn*. 2023;17(3):447-54. <https://doi.org/10.11591/edulearn.v17i3.20873>

25. Griffin P, Care E. Educational Assessment in an Information Age. *Assessment and Teaching of 21st Century Skills*. 2015. 293-310 p. <https://www.springer.com/series/13475?srsId=AfmBOoqrMSsFdJYki1gbrNmumDZCzWWqwbQzzJs7UfV71MiuWJh2gHrQ>

26. Feigenberg LF, Watts CL, Buckner JC. The School Mental Health Capacity Instrument: Development of an Assessment and Consultation Tool. *School Ment Health*. 2010;2(3):142-54. <http://dx.doi.org/10.1007/s12310-010-9041-6>

27. Lyon AR, Ludwig K, Wassa JK, Bergstrom A, Hendrix E, McCauley E. Determinants and Functions of Standardized Assessment Use among School Mental Health Clinicians: A Mixed Methods Evaluation. *Adm Policy Ment Heal*. 2016;43(1):1-20. <https://doi.org/10.1007/s10488-015-0626-0>
28. Riva E, Freeman R, Schrock L, Jelacic V, Ozer CT, Caleb R. Student Wellbeing in the Teaching and Learning Environment: A Study Exploring Student and Staff Perspectives. *High Educ Stud*. 2020;10(4):103. <http://dx.doi.org/10.5539/hes.v10n4p103>
29. McGorry PD, Mei C. Early intervention in youth mental health: Progress and future directions. *Evid Based Ment Health*. 2018;21(4):182-4. <https://doi.org/10.1136/ebmental-2018-300060>
30. Rajendran J, Santhi VJ, Chauhan RK, Singh L, Varghese L. The Impact of Continuous Professional Development on Teacher Retention and Performance. *J Harbin Eng Univ*. 2023;44(8):1348-56. <https://harbinengineeringjournal.com/index.php/journal/article/view/1058>
31. IICBA U. Training Guide 2023-2 Strengthening Mental Health and Psychosocial Support for Pre- and in-Service Teachers in Africa. International Institute for Capacity Building in Africa. 2023. <https://www.iicba.unesco.org/sites/default/files/medias/fichiers/2023/10/UNESCO-IICBA%20MHPSS%20for%20Teachers%20Training%20Guide%2C%2005-Oct-2023.pdf>
32. Miseliunaite B, Kliziene I, Cibulskas G. Can Holistic Education Solve the World's Problems: A Systematic Literature Review. *Sustain*. 2022;14(15). <https://doi.org/10.3390/su14159737>
33. Nguyen MT, Phan MK. The Impact of Academic Pressure on the Mental Health of Vietnamese Students. *Soc Sci Humanit J*. 2024;8(08):4721-32. <https://doi.org/10.18535/sshj.v8i08.1290>
34. Pham Thi TD, Duong NT. Investigating learning burnout and academic performance among management students: a longitudinal study in English courses. *BMC Psychol*. 2024;12(1):1-15. <https://doi.org/10.1186/s40359-024-01725-6>
35. Wei P. The impact of social support on students' mental health: A new perspective based on fine art majors. *Front Psychol*. 2022;13. <https://doi.org/10.3389/fpsyg.2022.994157>
36. Chitrakar N, P.M. DN. Frustration and its influences on Student Motivation and Academic Performance. *Int J Sci Res Mod Sci Technol*. 2023;2(11):01-9. <http://dx.doi.org/10.59828/ijrmst.v2i11.158>

FINANCING

The authors are grateful to HIT (Hibah Integrasi Tridarma) for funding this research through the Research 2024. The authors are also grateful to LRI Universitas Muhammadiyah Surakarta for support.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Minsih, Anatri Destya, Alfi Laila.

Data curation: Minsih, Anatri Destya, Alfi Laila, Mohd Hanafi Mohd Yasin.

Formal analysis: Minsih, Anatri Destya, Alfi Laila, Mohd Hanafi Mohd Yasin.

Acquisition of funds: Minsih, Anatri Destya, Alfi Laila, Imam Mujahid, Helzi.

Research: Minsih, Anatri Destya, Alfi Laila.

Methodology: Minsih, Anatri Destya, Alfi Laila, Mohd Hanafi Mohd Yasin.

Project management: Minsih, Anatri Destya, Alfi Laila.

Resources: Minsih, Anatri Destya, Alfi Laila, Mohd Hanafi Mohd Yasin, Imam Mujahid, Helzi.

Software: Imam Mujahid, Helzi.

Supervision: Minsih.

Validation: Minsih, Anatri Destya, Alfi Laila.

Display: Imam Mujahid, Helzi.

Drafting - original draft: Minsih, Anatri Destya, Alfi Laila.

Writing - proofreading and editing: Minsih, Anatri Destya, Alfi Laila, Imam Mujahid, Helzi.