

## Emotional Skills with Homogeneity Psycho Cognition Strategy: A Study of Physical Education in Elementary Schools

### Habilidades Emocionales con Estrategia de Psicocognición de Homogeneidad: Un Estudio de Educación Física en Escuelas Primarias

\*Albertus Fenanlampir, \*\*John Rafafy Batlolona, \*\*\*Siti Divinubun, \*\*\*\*Marleny Leasa,

\*Universitas Pattimura (Indonesia), \*\* Universitas Pattimura (Indonesia), \*\*\* Universitas Pattimura (Indonesia), \*\*\*\*Universitas Pattimura (Indonesia)

**Abstract.** The emotional skills of elementary school students in physical education subjects are still minimal, due to a lack of training by teachers. Therefore, a deeper exploration in this research was carried out to reveal this. This quasi-experimental research aims to determine the effect of learning strategies on students' emotional skills in physical education learning in elementary schools. The results of the research show that there is an effect of learning strategies on the emotional skills of elementary school students. So, emotional skills are determined by the learning strategies. Further test results show that the HPC strategy can encourage students' higher emotional skills compared to conventional learning. The research results show that psychocognitive homogeneity supported by student collaboration can foster adequate emotional skills in all students. Another factor is reduced or limited interaction between students and the learning environment, exacerbated by the economic burden which causes emotional problems for parents and has an impact on children's emotions. Therefore, homogeneity psycho cognition can be recommended in physical education learning to improve the emotional skills of elementary school students.

**Key words:** Emotional Skills; HPC; Physical education; Elementary schools

**Resumen.** Las habilidades emocionales de los estudiantes de primaria en las materias de educación física aún son mínimas, debido a la falta de capacitación de los docentes. Por lo tanto, se llevó a cabo una exploración más profunda en esta investigación para revelar esto. Esta investigación cuasiexperimental tiene como objetivo determinar el efecto de las estrategias de aprendizaje sobre las habilidades emocionales de los estudiantes en el aprendizaje de educación física en escuelas primarias. Los resultados de la investigación muestran que existe un efecto de las estrategias de aprendizaje en las habilidades emocionales de los estudiantes de primaria. Así, las habilidades emocionales están determinadas por las estrategias de aprendizaje. Otros resultados de pruebas muestran que la estrategia HPC puede fomentar mayores habilidades emocionales en los estudiantes en comparación con el aprendizaje convencional. Los resultados de la investigación muestran que la homogeneidad psicocognitiva apoyada por la colaboración de los estudiantes puede fomentar habilidades emocionales adecuadas en todos los estudiantes. Otro factor es la interacción reducida o limitada entre los estudiantes y el entorno de aprendizaje, agravada por la carga económica que causa problemas emocionales a los padres y repercute en las emociones de los niños. Por lo tanto, la psicocognición de homogeneidad puede recomendarse en el aprendizaje de educación física para mejorar las habilidades emocionales de los estudiantes de primaria.

**Palabras clave:** Habilidades emocionales; HPC; Educación física; Escuelas primarias

---

Fecha recepción: 31-01-24. Fecha de aceptación: 19-03-24

Albertus Fenanlampir  
fenanlampir29@gmail.com

### Introduction

In the worldwide, 10-20% of children and adolescents experience behavioral problems and mental disorders (Adjorlolo, Anum, & Huang, 2022). The number of children with social-emotional needs is increasing. Emotional competence describes the ability to be aware of one's feelings, express them, and control them independently (Binagwaho & Senga, 2021). Identifying and understanding the emotions of others is also described as emotional competence (Grund & Holst, 2023). Physical education and sports are closely related to the emotional skills of primary school children (Dyson, Howley, & Wright, 2021). It follows the opinion that physical activity is related to stress handling and the level of emotional skills that are important to interact with others (Remskar, Western, Osborne, Maynard, & Ainsworth, 2024). The importance of an athlete being capable exercising control over his emotions in connection with sports practice. Emotions in relation to sporting success present the individual optimally (Ubago-Jiménez, González-Valero, Puertas-Molero, & García-Martínez, 2019). Personal and social development

is one of the main and most frequently cited goals of European physical education programs throughout the world (Opstoel et al., 2020). Better emotional skills are seen in players in physical activities/sports performed by groups (teams) compared to individual physical activities/sports (Lorca, 2023). Regular physical activity in childhood is essential for maintaining a healthy weight and brings many other physiological and psychosocial benefits (Granero-Jiménez, López-Rodríguez, Dobarrio-Sanz, & Cortés-Rodríguez, 2022). Vigorous physical activity provides psychological benefits such as reduced depressive symptoms, more positive mood states, reduced anxiety levels, and improved self-esteem in adults and adolescents (Wang, 2022). Acquiring good emotional skills provides an opportunity for success not only physically but also in the context of everyday life (Malinauskiene & Malinauskas, 2021).

Several studies in Brazil show that emotional skills have a positive impact on a person's health, learning, and affective and professional abilities (Barbosa, Melo-Silva, & Lessa, 2023). Emotional skills have a high impact on depression and obesity (Bräuninger & Rössli, 2023). Emo-

tional skills was chosen as a general term covering other terms related to emotional skills. A lack of interaction and emotional skills is often a part of mental and social problems for early adolescents (Gonçalves et al., 2019). In Finland, the term emotional skills is used daily by rehabilitation professionals and is commonly used in official rehabilitation reports and documents (Salokivi, Salanterä, & Ala-Ruona, 2022). The term "emotional skills" is commonly used in everyday language, but many other terms are also used in the research context. The terms often overlap, and finding a theory-based definition that can be applied to help construct a music therapy assessment tool. Inconsistencies in using these terms necessitated further exploration to develop clear definitions that met scientific requirements (Wigelsworth, Humphrey, Kalambouka, & Kalambouka, 2010).

Individual emotional skills (emotional awareness and emotional management) are one of the aspects consistently highlighted as critical to group functioning, and recent research suggests that the collection of the emotional skills of individual team members can provide a meaningful picture of the emotional skills of the group as a whole (Collins, Jordan, Lawrence, & Troth, 2016). Research reveals that high emotional skills have a positive impact on behavior management. Emotional skills form the basis for cognitive and social skills, and emotional development in childhood has an essential influence on a person's entire life (Öztürk Samur, 2015; Sri, Febriyanti, Ferdita, & Rosyida, 2023). An individual's level of emotional skills depends on one's genes, family environment, socialization, and personal and educational experiences (Harris, Anderson, & Visconti, 2022). Emotional competence is an important factor that encourages students' positive attitudes in developing welfare and development (Schoon, 2021). Students with adequate emotional skills may necessary for involvement in school. The group of students with increased learning well-being showed a simultaneous increase in intrapersonal emotional competence (Salmelaro, Upadyaya, Vinni-laakso, & Hietaj, 2021). The importance of emotional skills in students' achievement of life goals such as school performance, psychological well-being, health and other life outcomes is becoming increasingly clear. For example, improving learning is a primary goal of Educational Psychology, with cognitive skills setting the stage that it is theoretically possible for students to achieve (Stormont, Thompson, Herman, & Reinke, 2017). However, non-cognitive factors such as social and emotional skills also have a big influence on student performance, even more than cognitive skills and the complex interactions between emotional skills in physical education. Therefore, physical education researchers are interested in various topics such as (Barker, Nyberg, & Larsson, 2020).

Potential contributions of emotional skills to conceptual goals and specific thinking. Kayili Erbay (2019) claims that there is ample evidence of the positive impact of emotional skills activities on students' thinking and learning

outcomes for students in general and those with disabilities, particularly in the critical areas of reading, problem-solving, inquiry, and writing. Physical education is a subject matter area where emotional skills can be easily integrated into physical education classes. Physical education learning activities require students to work with partners and in groups where positive relationships are built and maintained (Olive, McCullick, Tomporowski, Gaudreault, & Simonton, 2021). Metacognitive processes in each of these areas are relevant to physical education. Physical education learning is an essential part of studies related to emotional skills (Oh & Lee, 2023). It means that the impact on the development of emotional skills in teaching is directly related to the process and achievement of maximum learning outcomes. Emotional skills play a role in regulating cognitive activity in problem-solving (Ciotto & Gagnon, 2018). Emotional development is an influence or event from the individual's inner and outer worlds, whether pleasant for him or not. Emotional development, which aligns with cognitive, language, and social development, means that the child is aware of his emotions, recognizes himself, recognizes his competence and shortcomings, and expresses and supervises his emotions inappropriately. To be an influential member of society, one needs to realize his/her socio-emotional development according to his/her age ability (Arikan, 2020).

Education in the contemporary era is a different process and dynamic than in the past. In the 21st century, education aims to prepare learners to succeed and contribute positively as good citizens. According to Greenstein (2012), educational competencies in this era consist of 4 components, namely: 1) thinking skills, 2) work (communication and collaboration), 3) information and technology literacy as tools for work, 4) citizenship, life skills, and personal responsibility for living in the world. Thinking skills include creative thinking, critical thinking, problem-solving, and metacognition. Along with that, students are encouraged to become *self-regulated* learners (Varveris, Saltas, & Tsiantos, 2023).

Elementary students with great potential in their future roles and responsibilities must have their emotional skills empowered. Directing and shaping them into active and independent learners who diligently learn individually and classically is beneficial. Empowering emotional skills needs to be done so that learners become independent learners (Barker et al., 2020). Emotional skills are empowered through the implementation of learning models and strategies. Learning practices in elementary schools until now show that the potential of emotional skills has yet to be maximized in the learning process. It can be seen by the unavailability of data or information about students' emotional skills in Ambon City. Various reports, especially research, refer to emotional intelligence in physical education learning (Fenanlampir & Mutohir, 2021). These facts indicate that emotional skills need to be grown, trained, and fostered in physical education learning in elementary schools. Teachers' emotional skills impact the

quality of their teaching (Izquierdo, 2023).

One way to equip students with several values is to apply learning models or strategies with great potential to develop emotional skills. If students are empowered with emotional skills, they can automatically manage their learning and improve their learning outcomes and thinking skills. Fenanlampir et al. (2021) found that learning strategies have great potential in fostering emotional skills. One that he has used is homogeneity psycho cognition (HPC). The learning strategy considered appropriate to apply is based on a constructivist approach, such as the HPC strategy. HPC is based on the idea that learning is not just a process of memorizing concepts or facts but a process of interaction between individuals and their environment. HPC can also develop higher-order thinking skills such as critical thinking, problem-solving, finding and using learning resources, independent learning, and developing cooperative working skills (Batlolona & Kalean, 2023). HPC involves thinking activities to solve problems and correlates with learners' cognitive functions. HPC has the potential to empower metacognitive skills. The use of HPC has revealed various advantages, although there are some disadvantages. HPC is more time-consuming when compared to conventional strategies (Batlolona & Kalean, 2023). In addition, curriculum guides and textbooks contain only some example problems or the necessary assessment tools (Manuaba, No, & Wu, 2022). It can result in students or even teachers needing help posing problems related to learning materials. HPC requires much material and makes students have to find more information. Students also sometimes need help solving problems due to a lack of prior knowledge of the topic and a lack of interest in reading. HPC is based on the homogeneous grouping of students, especially regarding cognition, thus helping students improve each other's confidence, emotions, and cognition. HPC can encourage students to work in homogeneous groups with more enthusiasm with more enthusiasm, use relevant strategies, and be more humanistic in learning so that there are no more severe problems in learning (Leasa et al., 2023). Through HPC, students' emotional skills are expected to improve. In HPC, students are highly valued, respected, and treated humanistically in learning. It is expected to impact students' enjoyment and comfort of learning to encourage a better learning process, which also impacts the development of emotional skills. As a new learning strategy, little information reveals the potential of HPC in emotional skills, especially in elementary school students, so research that examines the potential of HPC is essential. Based on this rationalization, related to the advantages and weaknesses of HPC and the absence of data related to the emotional skills of elementary school students, especially in physical education learning, this study analyzed the effect of HPC learning strategies on emotional skills in physical education students in elementary schools.

## Method

### Research design

This type of research is correlational for the contribution of emotional skills to elementary school students' learning through the application of HPC strategies. The emotional skills instrument is a questionnaire consisting of 25 questions. Emotional skills consist of self-awareness, self-regulation, motivation, empathy, and building relationships with others (Goleman, 1998). In addition, the instrument has been tested on several elementary school students in Ambon with a validity of 0.611 and a reliability of 0.963 (Leasa, Corebima, & Suwono, 2017).

### Population and Sample

The population in this study were elementary school students in grades 4, 5, and 6 in Central Maluku Regency, especially in the Teluk Elapaputih sub-district. Meanwhile, the samples were determined to relate to the stage of research. The sample size was 90 students (Girl 43, Boys 47), who were determined randomly.

### Research instrument

Instruments in research development were: 1) Quantitative data measurement instruments consist of pretest and posttest questions to measure cognitive learning outcomes (theory). The test questions are developed based on the subject, grade level, and theme/sub-theme temporarily taught. 2) emotional skills in the form of questionnaires given at the end of physical education learning. The emotional skills instrument was validated by three professors in the fields of educational psychology, physical education and elementary school teacher education from Pattimura University and Surabaya State University.

### Research procedure

The research data was collected through the following activities. 1) Giving an essay-shaped test of emotional skills after treatment with the HPC strategy in the experimental and control groups. 2) Observe the lesson plan's implementation using an observation sheet and give a checklist (✓) on the appropriate statement. 3) Giving a questionnaire of students' responses to their respective lectures in classes that use the HPC strategy and with conventional only.

### Data analysis techniques

The research data were analyzed with One-Way ANOVA using SPSS 16.00 for Windows operation. Before hypothesis testing, several pre-requisite tests according to the research interests were carried out first.

## Results

The research results section describes the results related to the statistical analysis test results. This study examines the effect of learning strategies (HPC, conventional)

on emotional skills in physical education subjects. The research was conducted by giving full authority to physical education teachers to conduct learning for students. The pre-requisite test results indicate that the data is normally distributed (0.788) and homogeneous at 0.572.

Table 1.  
ANOVA Test of Emotional Skills based on Learning Strategy

Sources	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	867.630	1	867.630	5.673	0.019
Within Groups	13458.838	88	152.941		
Total	14326.468	89			

The ANOVA test results in Table 1 show that the significance value = 0.019 (smaller than 0.05). Thus, H<sub>0</sub> is rejected, and H<sub>a</sub> is accepted, it means there is a significant effect of learning strategy on emotional skills. The magnitude of the difference in emotional skills in the two treatment classes is shown through the Least Significance Difference (LSD) test in Table 2.

Table 2.  
LSD Test Results of Emotional Skills Differences based on Learning Strategy Treatment

Learning Strategy	Mean	LSD notation
Conventional	95.23	a
Homogeneity Psycho Cognition (HPC)	101.44	b

The data in Table 2 shows that students' emotional learning skills significantly differ with the treatment of HPC and conventional learning strategies. The highest emotional skills were found in the HPC class. It means that HPC significantly contributes to students' emotional skills compared to HPC and conventional learning strategies. Generally, hypothesis testing results prove differences in emotional skills in treating HPC and conventional strategies. In another sense, the learning model significantly affects emotional skills. The results of the LSD test on each dependent variable also found that the highest emotional skills were in learning with HPC. Other information obtained that conventional learning less promotes students' emotional skills.

## Discussion

HPC has a strategic role in encouraging students to be aware of their learning process. HPC is a learning strategy that triggers automation in learning. HPC refers to a learning environment where teacher-provided problems encourage students' competence in learning. In other words, learning can be triggered by the need to solve problems rather than the need and desire to improve specific skills that can improve performance. During problem-solving, students first interpret the problem, gather the required information, identify possible solutions, evaluate options, and present conclusions. In HPC learning, which is an example of student-centered learning, learning occurs in small groups, accompanied by a tutor who acts as a facilitator or guide; authentic problems are presented before the learning sequence begins, and problems are used as a tool to acquire relevant knowledge and problem-

solving skills and new information is acquired through self-directed learning. In HPC, this process involves students' active control over their cognitive processes. In other words, learning involves activating emotional skill processes (Åsebø, Løvoll, & Krumsvik, 2022). The results of this study are consistent with elementary school students in Vietnam being relatively well educated and trained in emotional skills to achieve academic goals and become better citizens. This finding is consistent with previous findings research, which found that families, teachers, and educators pay attention to and improve students' emotional skills competencies, such as collaboration skills, empathy skills, emotion management skills, and problem solving skills, to encourage holistic development of students (Le, Dao, Thi, & City, 2022).

The learning autonomy experienced in HPC in controlling one's learning progress encourages many students to conceptualize, plan, and bridge the gap between what they already know and what they need. Students are intrinsically motivated, so they can realize cognitive processes and engage in emotional skills sequentially to develop critical lifelong skills. It is in line with the findings of other researchers who found that the learning objective is to encourage students to be reflective and critical, demonstrate consistent motivation to be aware, curious, confident, tolerant, thoughtful when weighing options, and intellectually honest when evaluating the perspectives of others (Leisterer & Jekauc, 2019). The components of students' emotional skills can be shown in Figure 1.

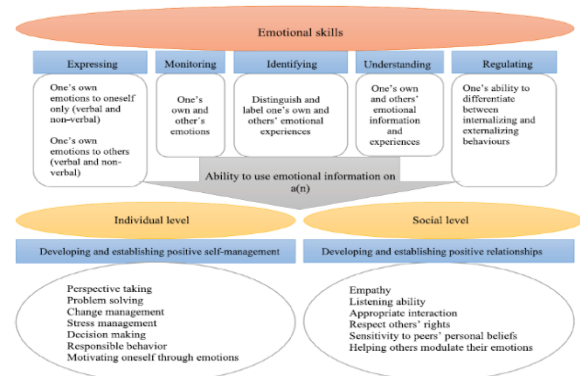


Figure 1. Components of early adolescent emotional skills (Salokivi et al., 2022)

Based on this research, the critical emotional skills are (a) expressing, (b) monitoring, (c) identifying, (d) understanding, (e) organizing, along with (f) the ability to use emotional information at the social level to develop and build positive relationships and at the individual level to develop and build positive self-management. The above five skills are considered foundational skills, while the ability to use emotional information at the individual and social levels is more of an implication of these foundational skills. It includes several subdomains presenting the diversity of skills needed in positive relationships and self-management. These basic skills and their implications present an overview of emotional skills in early adoles-

cents in literary research up to 2018.

Other findings reveal that the HPC strategy has a significant effect in empowering emotional skills. In learning with HPC, students are trained to think deeply and make meaning through knowledge construction. Although cognitively more demanding, most students felt that in the learning process, being given problem-solving tasks made them reflect on problems more deeply, analytically, and from different angles of reasoning in trying to address problems and make decisions. It confirms that learning prioritizes students' role and participation in memorizing material and testing the memorized concepts in learning with HPC. In that dimension, deep thinking is developed in students, impacting their learning styles (Batlolona & Klean, 2023).

HPC strategies also play an essential role in promoting motivation, emotional skills, and learning styles. The HPC learning strategy makes students less afraid and forced to learn because they have a sense of continuity and equality with their classmates. This foundation revives students' self-confidence that was lost or buried due to being around different students and encourages the development of self-confidence, especially in students with low cognitive abilities (McGowan, Chandler, & Gerde, 2023). Children with strong emotional skills are more likely to produce quality work and maintain friendships, starting by building a positive attitude with the teacher, participate in class activities, and be positive involved in learning. Of course emotional skills in childhood have been tied for an important life at 20 to 30 years then, including job and financial security, such as as well as physical and mental health (Jones, Barnes, Bailey, & Doolittle, 2017). This strategy emphasizes students' freedom, choice, motivation, self-determination, and personal goals (DeRobertis & Bland, 2021). Implementing humanism is done by providing students with a safe learning environment based on the warmth of empathy and acceptance of different points of view from the teacher. Teachers act as facilitators while students control their learning. The learning process can be done individually or in collaboration with other students. The theory allows face-to-face interaction in small groups and lets students take responsibility for the learning process. The positive impact of its implementation allows students to acquire academic, personal, and life skills through understanding and seeing the world holistically.

## Conclusion

Based on the test results, it is concluded that there are differences in emotional skills in learning with HPC and conventional strategies. The results of further testing with show that the highest emotional skills is in learning with HPC. Suggestions that can be conveyed from the results of this study are: 1) The learning environment that supports learning with the HPC model needs to be pursued by schools. 2) Teachers can use HPC strategies to promote students' emotional skills. 3) To develop emotional skills

in the context of HPC needs to be trained in a more guided manner and implemented continuously in learning. As for future suggestions It is necessary to conduct a more specialized study to explore the use of HPC strategies in extended learning to get more information about motivation, emotional skills, and learning styles in physical education and other thematic learning in elementary schools.

## Acknowledgements

This research is part of the Research Grant of the Faculty of Teacher Training and Education, Pattimura University, Indonesia. Decision Letter Number 2242/UN13.1.3/SK/2023, with group members Prof. Dr. Albertus Fenanlampir, S.Pd., M.Pd, AIFO, Siti Divinubun, M.Pd and John R. Batlolona, S.Pd., M.Pd.

## References

- Adjorlolo, S., Anum, A., & Huang, K. Y. (2022). Adverse life experiences and mental health of adolescents in Ghana: a gendered analysis. *International Journal of Adolescence and Youth*, 27(1), 444–456. <https://doi.org/10.1080/02673843.2022.2123714>
- ARIKAN, N. (2020). Effect of Sport Education Model-Based Social-Emotional Learning Program on Emotional Intelligence. *International Education Studies*, 13(4), 41. <https://doi.org/10.5539/ies.v13n4p41>
- Åsebo, E. K. S., Løvoll, H. S., & Krumsvik, R. J. (2022). Students' perceptions of visibility in physical education. *European Physical Education Review*, 28(1), 151–168. <https://doi.org/10.1177/1356336X211025874>
- Barbosa, D., Melo-Silva, L. L., & Lessa, J. P. A. (2023). Social and Emotional Skills: The Effects of a Career Education Intervention. *Psicologia - Teoria e Prática*, 25(3), 1–23. <https://doi.org/10.5935/1980-6906/eptpe14759.en>
- Barker, D., Nyberg, G., & Larsson, H. (2020). Joy, fear and resignation: investigating emotions in physical education using a symbolic interactionist approach. *Sport, Education and Society*, 25(8), 872–888. <https://doi.org/10.1080/13573322.2019.1672148>
- Batlolona, J. R., & Klean, A. (2023). The Effect of Homogeneity Psycho Cognition Strategies on Students' Understanding of Physics Concepts in Static Fluid Topics. *Jurnal Pendidikan Fisika Indonesia*, 19(1), 89–100. <https://doi.org/10.15294/jpfi.v19i1.40325>
- Binagwaho, A., & Senga, J. (2021). Children and adolescent mental health in a time of COVID-19: A forgotten priority. *Annals of Global Health*, 87(1), 1–5. <https://doi.org/10.5334/aogh.3330>
- Bräuninger, I., & Rösli, P. (2023). Promoting social-emotional skills and reducing behavioural problems in children through group psychomotor therapy: A randomized controlled trial. *Arts in Psychotherapy*, 85, 1–9. <https://doi.org/10.1016/j.aip.2023.102051>

- Ciotto, C. M., & Gagnon, A. G. (2018). Promoting Social and Emotional Learning in Physical Education. *Journal of Physical Education, Recreation and Dance*, 89(4), 27–33. <https://doi.org/10.1080/07303084.2018.1430625>
- Collins, A. L., Jordan, P. J., Lawrence, S. A., & Troth, A. C. (2016). Positive affective tone and team performance: The moderating role of collective emotional skills. *Cognition and Emotion*, 30(1), 167–182. <https://doi.org/10.1080/02699931.2015.1043857>
- DeRobertis, E. M., & Bland, A. M. (2021). Humanistic and Positive Psychologies: The Continuing Narrative After Two Decades. *Journal of Humanistic Psychology*, 1–33. <https://doi.org/10.1177/00221678211008353>
- Dyson, B., Howley, D., & Wright, P. M. (2021). A scoping review critically examining research connecting social and emotional learning with three model-based practices in physical education: Have we been doing this all along? *European Physical Education Review*, 27(1), 76–95. <https://doi.org/10.1177/1356336X20923710>
- Fenanlampir, A., Leasa, M., & Batlolona, J. R. (2021). The development of homogeneity psycho cognition learning strategy in physical education learning. *International Journal of Evaluation and Research in Education*, 10(3), 1047–1059. <https://doi.org/10.11591/IJERE.V10I3.21713>
- Fenanlampir, A., & Mutohir, T. C. (2021). Emotional intelligence and learning outcomes: Study in physical education. *Journal Sport Area*, 6(3), 304–314. [https://doi.org/10.25299/sportarea.2021.vol6\(3\).6836](https://doi.org/10.25299/sportarea.2021.vol6(3).6836)
- Gonçalves, S. F., Chaplin, T. M., Turpyn, C. C., Niehaus, C. E., Curby, T. W., Sinha, R., & Ansell, E. B. (2019). Difficulties in Emotion Regulation Predict Depressive Symptom Trajectory from Early to Middle Adolescence. *Child Psychiatry and Human Development*, 50(4), 618–630. <https://doi.org/10.1007/s10578-019-00867-8>
- Granero-Jiménez, J., López-Rodríguez, M. M., Dobarrío-Sanz, I., & Cortés-Rodríguez, A. E. (2022). Influence of Physical Exercise on Psychological Well-Being of Young Adults: A Quantitative Study. *International Journal of Environmental Research and Public Health*, 19(7), 1–14. <https://doi.org/10.3390/ijerph19074282>
- Grund, J., & Holst, J. (2023). Emotional competence: The missing piece in school curricula? A systematic analysis in the German education system. *International Journal of Educational Research Open*, 4, 1–9. <https://doi.org/10.1016/j.ijedro.2023.100238>
- Harris, V. W., Anderson, J., & Visconti, B. (2022). Social emotional ability development (SEAD): An integrated model of practical emotion-based competencies. *Motivation and Emotion*, 46(2), 226–253. <https://doi.org/10.1007/s11031-021-09922-1>
- Izquierdo, A. (2023). Pre-Service Teachers' Personal Traits and Emotional Skills: A Structural Model of General Mental Ability. *SAGE Open*, 13(4), 1–12. <https://doi.org/10.1177/21582440231204179>
- Jones, S. M., Barnes, S. P., Bailey, R., & Doolittle, E. J. (2017). Promoting Social and Emotional Competencies in Elementary School. *The Future of Children*, 27(1), 49–72.
- Kayili, G., & Erbay, F. (2019). A comparison of preschool children's communication and emotional skills on the basis of their cognitive tempos. *Early Child Development and Care*, 189(4), 625–634. <https://doi.org/10.1080/03004430.2017.1336168>
- Le, D. M., Dao, O. T., Thi, T., & City, D. (2022). Identifying social-emotional skills among students in Vietnam: a cross-sectional study. *International Journal of Education and Practice*, 10(3), 277–286. <https://doi.org/10.18488/61.v10i3.3140>
- Leasa, M., Corebima, A. D., & Suwono, H. (2017). Emotional intelligence among auditory, reading, and kinesthetic learning styles of elementary school students in Ambon-Indonesia. *International Electronic Journal of Elementary Education*, 10(1), 83–91.
- Leasa, M., Fenanlampir, A., Pelamonia, J., Talakua, M., & Likumahwa, H. (2023). Contribution of metacognition awareness to critical thinking skills with pbl model and hpc strategy: A food digestion system study. *Biosfer: Jurnal Pendidikan Biologi*, 16(2), 467–480.
- Leisterer, S., & Jekauc, D. (2019). Students' emotional experience in physical education—a qualitative study for new theoretical insights. *Sports*, 7(1), 1–15. <https://doi.org/10.3390/sports7010010>
- Lorca, M. M. (2023). Assessing emotional, empathic and coping skills in Spanish undergraduates in Health Sciences and Social Sciences. *Retos*, 47, 126–137.
- Malinauskiene, V., & Malinauskas, R. (2021). Predictors of adolescent depressive symptoms. *International Journal of Environmental Research and Public Health*, 18(9), 1–13. <https://doi.org/10.3390/ijerph18094508>
- Manuaba, I. B. A. P., No, Y., & Wu, C. C. (2022). The effectiveness of problem based learning in improving critical thinking, problem-solving and self-directed learning in first-year medical students: A meta-analysis. *PLoS ONE*, 17(11), 1–12. <https://doi.org/10.1371/journal.pone.0277339>
- McGowan, A. L., Chandler, M. C., & Gerde, H. K. (2023). Infusing Physical Activity into Early Childhood Classrooms: Guidance for Best Practices. *Early Childhood Education Journal*, 1–18. <https://doi.org/10.1007/s10643-023-01532-5>
- Oh, D., & Lee, K. (2023). Humanities-Oriented Physical Education for Social and Emotional Learning. *Journal of Physical Education, Recreation and Dance*, 94(3), 17–23. <https://doi.org/10.1080/07303084.2022.2156940>
- Olive, C., McCullick, B. A., Tomporowski, P.,

- Gaudreault, K. L., & Simonton, K. (2021). Effects of an after-school program focused on physical activity and social-emotional learning. *Journal of Youth Development*, 15(6), 292–305. <https://doi.org/10.5195/JYD.2020.889>
- Opstoel, K., Chapelle, L., Prins, F. J., De Meester, A., Haerens, L., van Tartwijk, J., & De Martelaer, K. (2020). Personal and social development in physical education and sports: A review study. *European Physical Education Review*, 26(4), 797–813. <https://doi.org/10.1177/1356336X19882054>
- Öztürk Samur, A. (2015). A study on the relationship between externalising behaviours and emotional skills of 60–72-month-old children. *Early Child Development and Care*, 185(1), 75–83. <https://doi.org/10.1080/03004430.2014.905549>
- Remskar, M., Western, M. J., Osborne, E. L., Maynard, O. M., & Ainsworth, B. (2024). Effects of combining physical activity with mindfulness on mental health and wellbeing: Systematic review of complex interventions. *Mental Health and Physical Activity*, 26, 1–16. <https://doi.org/10.1016/j.mhpa.2023.100575>
- Salmela-aro, K., Upadaya, K., Vinni-laakso, J., & Hietaj, L. (2021). Adolescents' Longitudinal School Engagement and Burnout Before and During COVID-19 — The Role of Socio-Emotional Skills. *Journal of Research on Adolescence*, 31(3), 796–807. <https://doi.org/10.1111/jora.12654>
- Salokivi, M., Salanterä, S., & Ala-Ruona, E. (2022). Scoping review and concept analysis of early adolescents' emotional skills: Towards development of a music therapy assessment tool. *Nordic Journal of Music Therapy*, 31(1), 63–88. <https://doi.org/10.1080/08098131.2021.1903977>
- Schoon, I. (2021). Towards an Integrative Taxonomy of Social-Emotional Competences. *Frontiers in Psychology*, 12, 1–9. <https://doi.org/10.3389/fpsyg.2021.515313>
- Sri, E., Febriyanti, I., Ferdita, E., & Rosyida, E. (2023). The Effect of Pacotera Gymnastics on The Psychology of Home- Schooling Students. *JOSSAE (Journal of Sport Science and Education)*, 7(1), 74–82.
- Stormont, M. A., Thompson, A. M., Herman, K. C., & Reinke, W. M. (2017). *The Social and Emotional Dimensions of a Single Item Overall School Readiness Screener and its Relation to Academic Outcomes*. 42(2), 67–76. <https://doi.org/10.1177/1534508416652070>
- Ubago-Jiménez, J. L., González-Valero, G., Puertas-Molero, P., & García-Martínez, I. (2019). Development of emotional intelligence through physical activity and sport practice. A systematic review. *Behavioral Sciences*, 9(4), 1–10. <https://doi.org/10.3390/bs9040044>
- Varveris, D., Saltas, V., & Tsiantos, V. (2023). Exploring the Role of Metacognition in Measuring Students' Critical Thinking and Knowledge in Mathematics: A Comparative Study of Regression and Neural Networks. *Knowledge*, 3(3), 333–348. <https://doi.org/10.3390/knowledge3030023>
- Wang, C. (2022). The role of physical activity promoting thinking skills and emotional behavior of preschool children. *Psicologia: Reflexao e Critica*, 35(1), 1–8. <https://doi.org/10.1186/s41155-022-00223-1>
- Wigelsworth, M., Humphrey, N., Kalambouka, A., & Kalambouka, A. (2010). A review of key issues in the measurement of children's social and emotional skills. *Educational Psychology in Practice*, 26(2), 173–186. <https://doi.org/10.1080/02667361003768526>

#### Datos de los/as autores/as y traductor/a:

Albertus Fenanlampir	fenanlampir29@gmail.com	Autor/a
John Rafafy Batlolona	johanbatlolona@gmail.com	Autor/a
Siti Divinubun	sitidivin4@gmail.com	Autor/a
Marleny Leasa	marlenyleasa3@gmail.com	Autor/a
Defry Azhari	defryazhariiii@gmail.com	Traductor/a