



Exploring the Use of Perma Model in Teaching Physical Education Towards the Holistic Development of Senior High School Students

Faith Majella Therese A. Pureza¹, Darwin D. Ofrin, EdD²

^a Senior High School Teacher, St. Joseph Academy of Sariaya, Quezon, Sariaya, Quezon, 4322, Philippines

^b Associate Professor V, Laguna State Polytechnic University, San Pablo Laguna, 4000, Philippines

ABSTRACT

Physical education (PE) plays a vital role in school life as it promotes the overall development of students by addressing their emotional, social, and psychological needs along with students' physical fitness. It is critical for Senior High School students in managing social pressures, academic expectations and the transition to adulthood. This applies that the PERMA model, which emphasizes positive emotions, engagement, relationships, meaning, and accomplishment, explore the use in teaching Physical Education (PE) towards the holistic development such as social, emotional, physical, cognitive, and lifelong values of St. Joseph Academy of Sariaya, Quezon Grade 11 Senior High School students. A quantitative correlational research design was used to explore the relationship of PERMA in PE with the students' holistic development. It was found that students are generally viewing themselves as functioning at a "normal" level across all PERMA components of well-being. All the five components of PERMA were identified as significant correlates of all five domains of students' holistic development, and so as the Meaning and Accomplishment component shown as the strongest correlation among the components of PERMA model. Therefore, the researchers recommend that the Senior High School Physical Education curriculum may incorporate the PERMA model and may be more focused on integrating Meaning and Accomplishment as aspects of holistic development.

Keywords: Physical Education, PERMA Model, positive emotions, engagement, relationships, meaning, accomplishment, holistic development, social, emotional, physical, cognitive, lifelong values, curriculum.

1. Introduction

In a rapidly changing environment, the well-being of senior high school students is more recognized as a critical factor in their academic achievement and success, personal improvement, navigating academic pressures, the social dynamics, the transition into adulthood, and the overall quality of life. Among the various components of school life of the students, the role of schools must extend beyond mere academic instruction and be tasked with supporting and fostering the holistic development of students, encompassing their overall well-being of students. Physical Education (PE) has been recognized as an essential part of holistic development in educational settings, traditionally focused on physical fitness and skill development. However, contemporary perspectives on education emphasize the importance of addressing the broader dimensions of well-being, including psychological, emotional, and social aspects (Seligman, 2011).

In educational research, the focus on adolescents' pursuit of well-being—especially that of senior high school learners—has received more attention. The present study establishes that physical activity plays an important role in improving not only motor skills but also mental and emotional health. Therefore, social competence is the key concept for students' success and satisfaction in their lives, as well as for their interpersonal effectiveness, social competence, relationship quality, academic performance, and the positive outcomes that exist for students (Bailey et al., 2009). Physical education enables the students to have a chance to perform physical tasks, and literature has indicated that physical activity exert benefits on students such as; reducing symptoms of anxiety and depression, improving self-esteem and enhancing mood (Biddle & Asare, 2011).

In the context of senior high school students, who are at the developmental stage characterized by physical, emotional, and social changes, the role of Physical Education is particularly significant. Physical Education emphasizes physical activity, skills development, and promoting physical fitness that gives unique opportunities to enhance the dimensions of flourishing.

2. Objectives of the study

This study aims to explore the use of the PERMA model for the holistic development of senior high school Physical Education students. This can also provide an opportunity to reconsider the role of Physical Education through integration of PERMA in curriculum as a subject that focuses only on physical activity; instead, it can become the means for students' all-round personal development including physical, emotional, social, and mental aspects

3. Methodology

3.1 Research Design

This study utilized a quantitative correlational research design. Creswell, (2014) defined correlational research as determining the relationship between two or more variables without manipulating them. They further argued that the quasi-experimental designs are often used to evaluate the effectiveness of a treatment or an educational intervention. This design allows for a nuanced understanding and exploration of how the PERMA model can be used to develop the students holistically. Thus, this design was deemed appropriate for this study.

3.2 Respondents of the Study

The population of the study consisted of Grade 11 Senior High School students from St. Joseph Academy of Sariaya, Quezon. The selected students, aged 16 to 18 years, were enrolled in a Physical Education program as part of their academic curriculum. This population is chosen where students in the school are at the developmental stage where physical, social, and emotional changes are prominent. A stratified random sampling method was utilized to ensure a diverse and representative sample of the population. The selected 116 students served as respondents of the study: 14 students from ABM Strand, 22 students from HUMSS Strand, and 80 students from STEM Strand.

3.3 Research Procedures

The study was divided into four phases. In the first phase of the study, the researcher sent letters to the appropriate authorities. These letters request the necessary permission to conduct the research and provide detailed information about the study. The school directress and principal received a letter for authorization, and the research was conducted in school premises and gauged the students' PERMA. It served as the basis to utilized application in teaching before and after the lesson. The PERMA Profiler, is a 15-item scale based on Martin Seligman's five components of well-being. This questionnaire was administered with the use of pen and paper.

In the second phase of the study, the students were informed of the purpose, procedure, and their right to withdraw at any time. The respondents were asked to answer the validated PERMA Profiler.

In the third phase, the researcher gathered data during the PE class periods and study periods. The researcher ensured that all students understand the survey instructions and remain present to answer to clarify any questions or concerns of the students about the survey.

In one grading period, the PERMA Model components were designed and integrated into the lessons using an Adaptive Teaching Guide aligned with the Most Essential Learning Competencies (MELCS) of the Senior High School Curriculum. This framework is utilized by Private Senior High Schools to assist students and simultaneously promote their flourishing among Grade 11 Senior High School students at St. Joseph Academy of Sariaya, Quezon. During the learning contact and the implementation of the three lessons, there were group activities that consist of either written works or performance tasks.

Lastly, in the fourth phase, the students completed the validated survey-based questionnaire using pen and paper and the PERMA Profiler. The data was subjected to statistical analysis and determined the level of PERMA before and after the three lessons. This assessed the effectiveness of using the PERMA Model in lesson integration and evaluated the level of holistic development achieved through the model.

3.4 Research Instruments

The researcher used the following instruments in the conduct of the study. The level of PERMA of the senior high school students, the PERMA-Profiler by Butler and Kern. It was a 15-item scale to assess the well-being based on the five components of PERMA Model such as Positive Emotions, Engagement, Relationships, Meaning, and Accomplishment (Butler and Kern, 2016).

To measure the holistic development of the respondents the validated survey-based questionnaire was administered. There were 25-item questions was validated by the experts that measured the five dimensions of holistic development. This includes the social, emotional, physical, cognitive, and lifelong values. It was utilized with a 4-point Likert scale format that spans from 1 ("Strongly Disagree") to 4 ("Strongly Agree") to find out the agreement/disagreement of the respondents.

3.5 Statistical Treatment of Data

In this study, descriptive statistics was used to calculate the mean to determine the PERMA levels among senior high school students before the integration of PERMA model-based lessons, as well as the level of holistic development based on a survey questionnaire. The Pearson Correlation Coefficient (r) was used to determine the relationship between the PERMA Model and the holistic development of Grade 11 Senior High School students.

4. Results and Discussion

This chapter presents tables including the findings of the study along with their corresponding interpretations which aimed to explore the use of the PERMA Model in teaching Physical Education (PE) towards the holistic development of St. Joseph Academy of Sariaya, Quezon Grade 11 Senior High School students.

Part I. Perceived Level of PERMA among Grade 11 Senior High School Physical Education Students

TABLE 1.

Respondents' Perceived Level of PERMA in terms of Positive Emotions

Indicators	Mean	SD	VI (PERMA)
1. In general, how often do you feel joyful?	7.54	1.90	Normal functioning
2. In general, how often do you feel positive?	7.28	1.80	Normal functioning
3. In general, to what extent do you feel contented?	7.50	1.94	Normal functioning
Overall	7.44	1.61	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 1 shows the respondents' perceived level of PERMA in terms of positive emotions. Based on Dr. Peggy Kern's interpretation guide, all indicators received mean scores within the range of 6.5 to 7.9, which falls under the "Normal functioning" category.

Among the three indicators, indicator 1 received the highest mean score, suggesting that students experience joy at a moderate level, and there is still room for growth in their positive emotional experiences. On the other hand, indicator 2 receives the lowest mean score, indicating that while students generally feel positive emotions, the frequency is slightly lower compared to other indicators.

Overall, the mean score for all indicators combined is 7.44, suggesting that, on average, students are functioning well in terms of positive emotions. However, as described in Dr. Kern's guide, this level reflects a moderately low positive experience, implying that motivation is needed to further enhance and sustain positive emotional well-being.

To support this, Howells et al. (2018), found that students who regularly participate in physical education significantly had a higher level of positive emotions and lower levels of negative emotions compared to the students who participated less frequently. Therefore, promoting physical activity in adolescents who currently participate in the lowest levels of physical activity should be a priority for policymakers, teachers, and parents. Teachers could provide classroom lesson physical activity breaks in order to improve school engagement (Owen et al., 2011).

TABLE 2.

Respondents' Perceived Level of PERMA in terms of Engagement

Indicators	Mean	SD	VI (PERMA)
1. How often do you become absorbed in what you are doing?	7.32	1.60	Normal functioning
2. In general, to what extent do you feel excited and interested in things?	8.03	1.74	High functioning
3. How often do you lose track of time while doing something you enjoy?	7.93	1.75	Normal functioning
Overall	7.76	1.30	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 2 displays the respondents' perceived level of PERMA in terms of engagement. Indicator 1 and indicator 3 have a mean score within the range of 6.5 to 7.99, which falls under the "Normal Functioning" category. While the mean score of indicator 2 is within the range of 8.0 to 8.99, which falls under the "High functioning" category.

Among the three indicators, the highest mean score was observed in indicator 2, pertaining to what extent they feel excited and interested in things. This indicates that students demonstrate a high level of engagement, with a better chance for sustained positive experiences in this area. However, indicator 1 received the lowest mean score. This suggests that while students are generally engaged, motivation may be beneficial to further enhance their sense of involvement and enthusiasm.

The overall average engagement of the respondents is 7.76 (SD = 1.61), which also falls under “Normal Functioning.” This suggests that, on average, students experience a moderately low positive experience with engagement, and motivation is needed to help elevate their engagement to a higher level of functioning.

Supporting this, Kern et al. (2015) argue that generating engagement requires opportunities for students to be immersed in doing something physical. They report that involvement in PE promotes students’ skill development as well as increases their sense of community and competence, especially when activities are engaging, enjoyable, and fun.

TABLE 3.

Respondents’ Perceived Level of PERMA in terms of Relationships

Indicators	Mean	SD	VI (PERMA)
1. To what extent do you receive help and support from others when you need it?	7.15	2.25	Normal functioning
2. To what extent do you feel loved?	7.60	2.15	Normal functioning
3. How satisfied are you with your personal relationships?	7.55	2.11	Normal functioning
Overall	7.43	1.90	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 3 presents the respondents’ perceived level of PERMA in terms of relationships. The mean of all the indicators falls within the range of 6.5 to 7.9, corresponding to the “Normal functioning” category.

The highest mean score among the three indicators was observed in indicator 2, which pertains to what extent do they feel loved. This shows that students generally feel emotionally connected and valued by others, and further development in relationship quality may enhance well-being. While indicator 2 received the lowest mean score. This implies that students generally receive support but may not consistently feel that support is readily available.

The overall mean score of 7.43 (SD = 1.90) of the indicators falls within the “Normal functioning.” This suggests that students’ relationships are functioning well. However, in line with the PERMA Profiler interpretation, it reflects a moderately low positive experience in terms of relationships, and motivation is needed to strengthen interpersonal connections and increase the depth of positive relational experiences.

The study of Mercer et al. (2020) reviewed the impact of PE on the PERMA model and discovered that team sports and collaborative spending in PE classes assist students build meaningful peer relationships, increasing their social well-being. In summary, the study revealed that positive relationships formed within Physical Education settings help students establish a stronger sense of community and support, both in and outside of their school context.

TABLE 4.

Respondents’ Perceived Level of PERMA in terms of Meaning

Indicators	Mean	SD	VI (PERMA)
1. In general, to what extent do you lead a purposeful and meaningful life?	7.86	1.80	Normal functioning
2. In general, to what extent do you feel that what you do in your life is valuable and worthwhile?	7.84	1.83	Normal functioning
3. To what extent do you generally feel you have a sense of direction in your life?	7.54	2.10	Normal functioning
Overall	7.75	1.73	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 4 shows the respondents’ perceived level of PERMA in terms of meaning. All indicators have a mean which falls within the range of 6.5 to 7.9, classified as “Normal functioning.”

The indicator 1, which states, to what extent they lead a purposeful and meaningful life, got the highest mean scores among all indicators. This indicates that students generally perceive their lives as meaningful, though not at the highest level of positive experience. On the other hand, indicator 3 got the lowest mean score. This shows that students moderately experience life direction and purpose.

Overall, the mean score of indicators is 7.75 (SD = 1.73) that falls within the “Normal functioning.” This means that students are generally functioning well in finding meaning in their lives. However, this reflects a moderately low positive experience implying that there is still room for improvement, and more motivation may enhance their sense of purpose and direction.

Alamdri et al. (2024), found that PERMA education initiative helps the senior citizens to find their meanings and meaning of life, builds the positive social relationship, increases the social interaction and leads to social support. To support this, Bustos et al. (2019) described how physical activity can improve people’s self-concept and facilitate psychological well-being in adolescents, as physical perceptions and preoccupation with their bodies can lead to a stronger sense of meaning and purpose.

TABLE 5.

Respondents’ Perceived Level of PERMA in terms of Accomplishment

Indicators	Mean	SD	VI (PERMA)
1. How much of the time do you feel you are making progress towards accomplishing your goals?	7.34	1.65	Normal functioning
2. How often do you achieve the important goals you have set for yourself?	7.46	1.74	Normal functioning
3. How often are you able to handle your responsibilities?	7.53	1.74	Normal functioning
Overall	7.44	1.39	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 5 displays the respondents’ perceived level of PERMA in terms of accomplishment. This shows that the mean of all indicators falls within the range of 6.5 to 7.9, which corresponds to “Normal functioning.”

The indicator 3, which is about handling their responsibilities, got the highest mean score. This suggests that students generally feel capable of managing their tasks and obligations effectively. However, the indicator with the lowest mean is indicator 1, this indicates that there is a fair level of perceived goal progress, yet not optimal.

The overall mean score of indicators is 7.44 (SD = 1.39) which falls within the “Normal functioning.” However, in line with the PERMA Profiler interpretation, this represents a Moderately Low Positive Experience, indicating that students generally feel accomplished but could benefit from more motivation or support to further enhance their sense of achievement and goal fulfillment.

In support of this, Loturco et al. (2022) concluded that incorporating evidence-based physical activity programs into the classroom setting yields significant improvements in academic achievement among students. Along the same lines, a study by the International Journal of Physical Education, Fitness and Sports found that students who are regularly involved in the Physical Education classes exhibit better academic performance than those who do not have access to Physical Education programs.

Table 6.

Summary Table on Perceived Level of PERMA among Grade 11 Senior High School Physical Education Students

PERMA Model Components	Mean	SD	Interpretation
Positive emotions	7.44	1.61	Normal functioning
Engagement	7.76	1.30	Normal functioning
Relationships	7.43	1.90	Normal functioning
Meaning	7.75	1.73	Normal functioning
Accomplishment	7.44	1.39	Normal functioning
Overall	7.56	1.59	Normal functioning

Legend: 9 and above Very high functioning, 8.0 – 8.9 High functioning, 6.5 – 7.9 Normal functioning, 5.0 – 6.4, Sub-optimal functioning, below 5 Languishing

Table 6 provides a summary of the perceived levels of well-being using the PERMA model. This indicates that overall, the Grade 11 Senior High School students perceive themselves to be functioning normally in all five domains of PERMA.

Engagement is the highest among all five dimensions, which implies that students are highly engaged in their experiences that reflects how absorbed or involved students feel in every activity. This suggests that participation in Physical Education classes may be associated with maintaining a balanced and healthy well-being. All of the PERMA dimensions fall within the “Normal functioning” and none of them fall within “Suboptimal functioning” or “Languishing” nor do they reach the “Very functioning”, but still, they remain within a healthy, stable range.

The results from the Table 6 show that students are not reaching extremely high levels of flourishing, they are certainly benefiting from an environment that supports engagement, positive emotions, meaningful activities, and social connection. This means the schools may be encouraged to prioritize the Physical Education programs as part of a holistic approach to student’s wellness.

Part II. Perceived Effect of the PERMA Model among Grade 11 Senior High School Physical Education Students’ Holistic Development

TABLE 7.

Respondents’ Perceived Effect of PERMA in terms of Social Development

Indicators	Mean	SD	VI
1. Improved my ability to work with others in a team.	3.53	0.61	Strongly Agree
2. Joining in different Physical Education programs and activities helps me to familiarize with other people, make new friends and increase my confidence and responsibilities.	3.53	0.58	Strongly Agree
3. Assisted me to build positive relationships with my classmates and teachers during Physical Education activities.	3.58	0.55	Strongly Agree
4. Helped me encourage and motivate my peers/classmates during Physical Education activities.	3.52	0.55	Strongly Agree
5. Made me feel supported by my classmates when participating in Physical Education activities.	3.47	0.61	Agree
Overall	3.52	0.42	Strongly Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

Table 7 describes the perceived effect of the PERMA model in terms of social development of the students. The data show that the mean scores of indicators 1, 2, 3, and 4 ranged from 3.50 to 4.00, which corresponds to “Strongly Agree” as an interpretative level. This means that students consistently perceived the PERMA model as highly effective in improving their social development.

The indicator 3, which states that the PERMA Model assisted the students to build positive relationships with their classmates and teachers during PE activities, was the highest mean score. It indicates that students experienced PERMA as being an effective tool to develop positive relationships, to enhance their ability to work collaboratively, to build confidence and sense of responsibility with their classmates and teachers in the context of Physical Education fairly consistently and strongly. The indicator 5 had the lowest mean of all indicators, yet it falls under the “Agree” range, still reflecting a positive perception. This suggests that not all the Grade 11 Senior High School students consistently feel supported by their classmates during Physical Education activities and possibly due to differences in group dynamics, competitive environment, or individual sense of inclusivity. The sense of support is present, but it may not be as strongly felt as other social indicators.

Lastly, the overall mean score of 3.52 (SD = 0.42) supports that the students are in strong agreement of the positive impact of PERMA model towards the social well-being and interpersonal relationships of the students from Physical Education.

Supporting this, according to Lui et al. (2023) physical education contributes to children's socialization as mainly presents games, organized content, and physical activities as a means of social skills and positive development, self-confidence development, and positive peers’ development. Therefore, physical education classes are very essential for improving the students’ interaction in the school.

TABLE 8.

Respondents' Perceived Effect of PERMA in terms of Emotional Development

Indicators	Mean	SD	VI
1. Helped me to have positive emotions, such as joy and excitement.	3.72	0.47	Strongly Agree
2. Helped me to manage my negative emotions, frustrations, stress, or disappointments.	3.36	0.64	Agree
3. Gave me a sense of accomplishment every time I achieve my goals in any given activity.	3.53	0.57	Strongly Agree
4. Strengthened my confidence, especially my physical abilities.	3.52	0.61	Strongly Agree
5. Minimized my stress and let me become emotionally balanced.	3.43	0.66	Agree
Overall	3.51	0.44	Strongly Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

Table 8 presents the perceived effect of the PERMA model in terms of emotional development of the students. The indicators 1, 3, and 4 have mean scores between 3.50 to 4.00, which are interpreted as “Strongly Agree” and indicators 2 and 5 have a mean score between 2.50-3.49, which are interpreted as “Agree”. This reveals a generally high level of agreement among students regarding the emotional benefits of the PERMA model.

The indicator 1, which pertains to positive emotions such as joy and excitement has the highest mean score. It suggests that students significantly and consistently felt that PERMA helped enhance their emotional state, particularly by cultivating positive feelings during the activities in the Physical Education subject, which likely contributed to more enjoyable and engaging learning experiences. Meanwhile, the lowest mean score was observed in indicator 2 and 5. Indicator 2, which pertains to managing negative emotions, frustrations, stress, or disappointments has the lowest mean score. It indicates that emotional challenges are more complex and may not be fully addressed through physical education activities. The students may find it difficult to manage negative emotions, hence the moderate agreement. Similarly, indicator 5, which pertains to minimizing stress and achieving emotional balance, suggests while the PERMA Model helps in reducing stress at some point, the result may vary among the students such as depending on the support they receive from others, or their personal relationships. This implies that while these indicators had the lowest mean, it still falls under the “Agreement” range, which means that students generally perceive PERMA as having a meaningful and beneficial effect in emotional regulation.

Overall, the mean score of 3.51 (SD = 0.44) affirms that the students strongly agree that the PERMA model positively influenced not only the joy and engagement, but also their overall emotional well-being. Moreover, highest impact areas include promoting positive emotions, confidence, and a sense of accomplishment. The lower mean score for managing negative emotions and minimizing stress suggest areas where PERMA’s emotional support could be strengthened by integrating more targeted coping strategies or mental health support.

Wu & Jiang (2024) stated the participation in sports would effectively reduce the degree of anxiety, depression, and other negative emotions among teenagers. The suitable sports will enhance the teenagers' mental health dramatically and give them positive effects for their mental health development. The benefits of team sports are more numerous: they give children and youth more opportunities to grow up both physically and socially. Through opportunities to interact with peers in various sports or physical activities consisting of other students most importantly it gives students social skills through the interactions.

TABLE 9.

Respondents' Perceived Effect of PERMA in terms of Physical Development

Indicators	Mean	SD	VI
1. Developed my health-related fitness such as flexibility, body composition, muscular strength and endurance, and cardiovascular endurance.	3.58	0.58	Strongly Agree
2. Led me to regularly engage in physical activities inside and outside the school premises.	3.40	0.66	Agree
3. Helped me to improve my overall physical fitness.	3.40	0.57	Agree
4. Taught me the importance of regular physical activity to maintain a healthy lifestyle.	3.69	0.48	Strongly Agree
5. Helped me to form a lifetime exercise habit and enhanced my classroom engagement and involvement.	3.34	0.63	Agree
Overall	3.48	0.45	Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

Table 9 shows the perceived effect of the PERMA model in terms of physical development of the students. The mean score of indicators 1 and 4 is at a range of 3.50 to 4.00 which fall under the verbal interpretation of "Strongly Agree", which highlighted that students more clearly see the immediate benefits of improved physical fitness and the importance of regular physical activity. While indicators 2, 3, and 5 which fall under the verbal interpretation of "Agree". This indicates the students are encouraged to participate in physical activities, the regularity and consistency may vary, possibly due to time constraints or self-motivation. Additionally, the students' level of agreement on the physical benefits of the PERMA model is considered an average level and requires more reinforcement and time.

The indicator 4, which states the importance of regular physical activity to maintain a healthy lifestyle, got the highest mean score. This implies that students highly value the role of the PERMA model in promoting awareness and understanding of long-term health practices, and in particular the benefit of continued physical activity. However, indicator 5 had the lowest mean score, indicating that despite of having the lowest mean, it's still falls into the "Agreement" range. Specifically, while students believe there could be long-term habits and engagement built around PERMA, this aspect may need further reinforcement or support.

The overall mean score of 3.48 (SD = 0.45) indicates that, in general, students agree on PERMA model on the positive contribution of physical development, encompassing both immediate physical fitness gains and the formation of sustainable healthy lifestyle practices, particularly by emphasizing the importance of physical activity and enhancing health-related fitness. The PERMA is perceived as a beneficial framework for physical development, with strong potential to support lifelong healthy habits if further strengthened and tailored to individual needs.

The findings of Yuan et al. (2022) show that significant differences exist in the level of physical effort and in its three aspects: intensity, time and frequency of the activity, as well as the assessment of positive feelings, in favor of male students achieving better results than female students. This study brought forth useful approaches for students and schools, contributing to enhancing the physical exercise and mental health of sub-junior high school students. It also demonstrates the necessity of focusing on the physical habits of primary education inhabitants more.

TABLE 10.

Respondents' Perceived Effect of PERMA in terms of Cognitive Development

Indicators	Mean	SD	VI
gain new skills and techniques.	3.47	0.60	Agree
apply strategies that will improve my performance during sports or physical activities.	3.52	0.55	Strongly Agree
sis on the need to reflect on my performance and work on improving my weaknesses.	3.51	0.54	Strongly Agree
y cognitive skills and decision-making and have good academic performance, especially ipate in sports and physical activities.	3.56	0.56	Strongly Agree
lize how important it is to set fitness or performance goals for myself.	3.70	0.48	Strongly Agree
Overall	3.55	0.40	Strongly Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

The perceived effect of the PERMA model with regard to the cognitive development of the students is described in Table 10. This shows that 4 out of 5 indicators were range 3.50 to 4.00 which reflects under the category of "Strongly Agree". This illustrates that PERMA is viewed by students to have a positive and relevant impact on their cognitive development.

The highest mean score was observed in indicator 5, which pertains to the importance of setting fitness and performance goals. The students recognized that PERMA also helps in goal-setting behavior as it forms part of the metacognition and long-term success in both academic and non-academic settings. However, the mean for indicator 1 was the lowest, and fall under the "Agree" range. This means, there is a generally positive perception, just slightly less strong compared to the indicators.

Finally, a mean score of 3.55 (SD = 0.40) means that the students, on average, strongly agree that PERMA model contributes to their cognitive development.

Physical education helps anywhere from health and well-being to cognitive performance of an individual by helping them do better in studies and what is important in life. Sufficient levels of regular physical activity will lead to better academic outcomes, as increased focus, memory, and cognitive functioning all contribute to overall flourishing (Hillman et al., 2009).

TABLE 11.

Respondents' Perceived Effect of PERMA in terms of Lifelong Values

Indicators	Mean	SD	VI
1. Showed me the importance of maintaining a healthy lifestyle throughout my life.	3.78	0.43	Strongly Agree
2. Emphasized to me the value of perseverance and dedication.	3.73	0.48	Strongly Agree
3. Enlightened me about demonstrating sportsmanship by respecting the rules of each game and playing fairly during physical activities and even in other areas of my life.	3.80	0.40	Strongly Agree
4. Taught me the importance of discipline and hard work.	3.76	0.50	Strongly Agree
5. Made me committed to maintain a healthy and active lifestyle.	3.59	0.59	Strongly Agree
Overall	3.73	0.37	Strongly Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

Table 11 displays the perceived effect of PERMA in terms of lifelong values of the students. The mean of all indicators ranged between 3.50 – 4.00, interpreted as “Strongly Agree”, indicating that students’ responses remained consistently high on PERMA-based long-term benefits.

The highest mean score is from indicator 3, about demonstrating sportsmanship, respecting the rules of each game, and showing fairness at all times in physical activities and in broader life contexts. This shows that students recognized the value of discipline and integrity, emphasizing PERMA’s impact on **moral and ethical behavior** both on and off the field. On the other hand, indicator 5 has the lowest mean. This indicator still falls in the “Strongly Agree” category but, like any other indicator, this one reflects a slightly lower level of personal commitment to maintaining long-term health, perhaps indicating a need for continued reinforcement of this particular value through practice and mentorship. The lower mean and higher variability in the commitment to an active lifestyle may suggest an area for reinforcement.

In general, students indicated that they strongly agree with a mean score of 3.73 (SD = 0.37) that PERMA is highly effective in nurturing lifelong values among students, particularly in areas like self-discipline, perseverance, sportsmanship, and health awareness. These results illustrate that the PERMA framework plays a role not just in students’ immediate well-being, but is also foundational for leading meaningful, responsible, and fulfilling lives. Furthermore, this suggests that integration of PERMA in physical education has potential as a transformative tool that may be effective in promoting holistic personal development.

In the study of Chico et al. (2023), they explored the influence of Physical Education challenge worksheet learning on students’ basic psychological needs, motivational regulation, and engagement, and compared it with traditional classroom instruction. It was concluded that the use of challenge-based learning is an effective methodological strategy for achieving adaptive behavioral, learning and motivational outcomes by students as part of Physical Education.

Table 12.

Summary Table on Perceived Effect of the PERMA Model among Grade 11 Senior High School Physical Education Students’ Holistic Development

Holistic Development Domains	Mean	SD	Interpretation
Social	3.52	0.42	Strongly Agree
Emotional	3.51	0.44	Strongly Agree
Physical	3.48	0.45	Agree
Cognitive	3.55	0.40	Strongly Agree
Lifelong Values	3.73	0.37	Strongly Agree
Overall	3.56	0.42	Strongly Agree

Legend: 3.50 – 4.00 Strongly Agree, 2.50 – 3.49 Agree, 1.50 – 2.49 Disagree, 1.00– 1.49 Strongly Disagree

Table 12 presents the perceived effect of the PERMA model on the holistic development of Grade 11 Senior High School students, focusing on five developmental domains such as social, emotional, physical, cognitive, and lifelong values.

The overall mean score of 3.56 with the SD of 0.42 indicates that students strongly agree that the PERMA Model positively contributes to their holistic development. Among the five domains, the lifelong values with the highest mean score, suggesting that the PERMA Model is particularly effective in inculcating values such as discipline, perseverance, respect, gratitude, responsibility, and patience that extend beyond classroom setting. The cognitive development also has a high mean score, indicating that the model supports the students in enhancing their critical thinking skills. Similarly, the social, and emotional domains were rated strongly, reflecting students’ positive experiences in building good relationships, managing emotions, and feeling

emotionally supported by their classmates through Physical Education activities. Though the physical domain with the lowest mean score falls under the “Agree”, still rated positively. This may imply that although the PERMA Model supports physical development at some point, possibly increased motivation and engagement in physical activities must be needed such as lifetime exercises.

Overall, the results demonstrate that students perceive the PERMA Model as a positive approach in Physical Education that supports not only physical well-being but also social, emotional, cognitive, and lifelong values that will foster a truly holistic educational experience.

Part III. Effective Use of the PERMA Model in Senior High School Physical Education for Holistic Development

The PERMA model can be effectively applied in Senior High School Physical Education by fostering positive psychological experiences to promote students' holistic development. Based on the findings, students provided high ratings for all aspects of the model (Positive Emotions ($M = 7.44$), Engagement ($M = 7.76$), Relationships ($M = 7.43$), Meaning ($M = 7.75$), Accomplishment ($M = 7.44$)), demonstrating their agreement with the positive impact of the model. These elements yielded concrete benefits in five domains of development: social ($M = 3.52$), emotional ($M = 3.51$), physical ($M = 3.48$), cognitive ($M = 3.55$), and lifetime values ($M = 3.73$). Students reported increased joy, motivation, engagement, teamwork, goal-setting, and self-discipline, which are all essential for a well-rounded education.

Thus, this further emphasizes the significance of curricular integration of the PERMA-based strategies in PE for students to gain deeper learning beforehand through the goal-directed tasks, reflective activities, cooperative game skills, and personal heroic accomplishment logs, resulting in their holistic growth in and out of the classroom. In order to optimize these goals further, an adaptive teaching guide can be employed. The importance of adapting teaching methods to suit individual student needs is underscored in this guide, as it looks to create a more personalized and engaging learning environment. This adaptive approach, integrated with the PERMA model, ensures relative growth of all types of students in a meaningful, fun, and holistic manner.

PART IV. Test of Relationship between the Respondents' Perceived Level of PERMA Model Components and Holistic Development

TABLE 11.

Test of Relationship between the Respondents' Perceived Level of PERMA Model Components and Holistic Development

PERMA Model Components	Holistic Development				
	Social	Emotional	Physical	Cognitive	Lifelong values
Positive Emotions	.252**	.301**	.195*	.196*	.226*
Engagement	0.036	0.121	0.066	0.159	0.106
Relationships	0.137	0.124	0.065	0.154	0.122
Meaning	.287**	.335**	.229*	.299**	.338**
Accomplishment	.329**	.351**	.246**	.330**	.301**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The table indicates that respondents' perceived level of positive emotions in the PERMA model has a significant relationship with holistic development in the social context ($r = .252$, $p < 0.01$). In terms of emotional holistic development, the positive emotions component also demonstrates a significant relationship ($r = .301$, $p < 0.01$). Moreover, the positive emotions component is significantly related to holistic development in terms of physical development ($r = .195$, $p < 0.05$). The positive emotions component has a significant relationship with holistic development in the context of cognitive ($r = .196$, $p < 0.05$) as well as in the area of lifelong values ($r = .226$, $p < 0.05$). This suggests that when Grade 11 students often experience and feel joy, gratitude, or optimism, and are feel contented, the students tend to interact better with others. The students handle emotional challenges more effectively, and develop strong personal values.

It describes in the table that respondents' perceived level of engagement in the PERMA model has no significant relationship with holistic development in the context of social, emotional, physical, cognitive, and lifelong values. This might be because engagement is more situational or task-specific and not deeply absorbed or involved in a task or might lose track of time while doing something to enjoy. Also, the perceived level of relationship in the PERMA model has no significant relationship with holistic development in the context of social, emotional, physical, cognitive, and lifelong values. This indicates that the quality or nature of these relationships varies that some may be supportive, others might be neutral.

Table 11 presents a significant relationship between perceived level of meaning in the PERMA model and holistic development in the social context ($r = .287$, $p < 0.01$). The meaning component also shows a strong relationship with emotional holistic development ($r = .335$, $p < 0.01$). Furthermore, the component meaning is positively associated with holistic development in the areas of physical development ($r = .229$, $p < 0.05$). The holistic development in terms of cognitive has a strong correlation with the meaning component ($r = .299$, $p < 0.01$) and for the lifelong values ($r = .338$, $p < 0.01$). This indicates that having a sense of purpose in life such as pursuing meaningful goals, and having clear life direction supports the well-rounded development.

Grade 11 students who participate well in classes and activities may gain emotional resilience, learn new skills, bond with others, and deepen their personal values.

This table demonstrates a significant correlation between perceived level of accomplishment in the PERMA model and holistic development in the social domain ($r = .329, p < 0.01$). A significant relationship is also evident between the accomplishment component and emotional holistic development ($r = .351, p < 0.01$). Additionally, the accomplishment component is significantly linked to holistic development in terms of physical development ($r = .246, p < 0.01$). In the cognitive context, holistic development also shows a significant correlation with the accomplishment component ($r = .330, p < 0.01$), as well as in lifelong values ($r = .301, p < 0.01$). This means completing challenging situations can boost their confidence, sharpen thinking skills and techniques, promote collaboration, and inspire continued self-improvement and have better physical habits like discipline, perseverance, and routine.

The PERMA model is widely used in positive psychology to measure and improve well-being in various contexts, particularly education (Seligman, 2018). "Flourishing" implies a state in which a person is functioning optimally and experience holistic development. This is seen as the highest level of psychological wellness, providing an entire sense of flourishing in different areas of life (Seligman, 2011). Flourishing also refers to a mental state in which a person experiences positive emotions on a regular basis, becomes widely involved in meaningful and purposeful activities, maintains healthy relationships, finds meaning in life, and meets personal objectives. Created as a structure to understand and assess well-being, PERMA highlights that flourishing is more than the absence of mental illness; it is the presence of emotional, psychological, and social well-being. According to Seligman (2018), each of the five aspects of PERMA contributes in a different way to the individual's well-being leading to a holistically developed life.

Part V. Aspects of Holistic Development Strongly Influenced by the PERMA Model

The results show that Accomplishment and Meaning are the most significant contributors to students' holistic development among the components of the PERMA model. Based on the test of relationships between students' perceived levels of PERMA components and the five domains of holistic development, Accomplishment revealed the highest positive correlations across all domains: social ($r = .329$), emotional ($r = .351$), physical ($r = .246$), cognitive ($r = .330$), and lifelong values ($r = .301$). Similarly, the Meaning component was highly correlated with all five of the developmental domains, particularly in emotional ($r = .335$) and lifelong values ($r = .338$). This implies that as students find meaning and relevance in their activities, it not only strengthens their immediate motivation but also fosters long-term personal growth and a deeper sense of identity.

5. Conclusions and Recommendations

5.1 Conclusions

From the findings, the following conclusions are hereby drawn:

- 1) There is a significant relationship between the level of PERMA and the holistic development of Senior High School students.
- 2) All the five components of PERMA Model are statistically significant correlates of the five domains of students' holistic development.
- 3) The components such as Meaning and Accomplishment demonstrated the strongest correlations. Furthermore, the study supports the existence of significant differences. Hence, the hypothesis is not accepted.

5.2 Recommendations

The following recommendations are proposed to further enhance students' holistic development through PERMA Model in Physical Education:

- 1) Schools may use and integrate the PERMA model into senior high school Physical Education curriculum. Activities that lead to Meaning and Accomplishment component may be emphasized as these provide the strongest correlations of holistic development.
- 2) Teachers may use an adaptive teaching guide that sits on the PERMA framework. With this, they may meet the students' needs in the great diversity that is possible in their learning styles.
- 3) For Physical Education teachers, goal setting, self-assessment and achievement tracking may take on a larger role within physical education, as it teaches students a strong sense of accomplishment. Likewise, reflective activities and values-based tasks may allow students to discover a deeper meaning within their physical education experience.
- 4) For Private Education Assistance Committee, PE teachers may receive more training workshops on positive psychology and adaptive teaching strategies to implement the PERMA model in class effectively.
- 5) For students, they may co-develop PE activities by their own needs and interests and goals. Through this, it may enhance engagement and the chance of having meaningful learning experiences.
- 6) For future researchers, future studies may investigate how the PERMA model has a lasting influence on student well-being or how it may have an impact on other contexts and educational levels to test for its generalizability.

6 Acknowledgement

The researcher would also like to express her sincere and heartfelt gratitude to all those who have supported her throughout this journey. This study would not have been possible without the encouragement, inspiration, and assistance of the following:

First and foremost, the researcher is deeply grateful to Almighty God for His abundant grace, protection, wisdom, and strength bestowed upon her throughout the entire process of this research. Every challenge faced and every milestone achieved have been a testament to His faithfulness and provision.

Dr. Mario R. Briones, President of Laguna State Polytechnic University, for his exceptional leadership, unwavering commitment to academic excellence, and allowing her to achieve higher education in this institution;

Dr. Edilberto Z. Andal, Dean of Graduate Studies and Applied Research, for his guidance and words of encouragement to continue his study;

Dr. Darwin D. Ofnin, her research adviser, for invaluable support, motivation, insightful guidance, patience, and continuous encouragement to finish her study;

Mrs. Angela L. Reginaldo, her statistician, for sharing her deep knowledge and expertise in data gathering and helping in interpreting the statistical data;

Ms. Alyza Mari F. Landig, her subject specialist, for her support, guidance, and insights that improve the subject of the study;

Dr. Teresa M. Yambao, her technical editor, for her support, insightful guidance, patience in editing, and continuous encouragement throughout this research journey.

Dr. Urizthes Dylen Ladera, Ms. Joanne Paula Lavega, Ms. Kathleen Mae Carandang, Dr. Herman Pineda, Ms. Michelle Gonzales, and Dr. Jherwin Hermosa, her research instrument validators, for their valuable critiques, insightful suggestions, and support. Their support, time, and thoughtful input helped to refine her research and expand her perspective.

Sincerest gratitude is also extended to all the sisters of Franciscan Missionaries of Mary (FMM) in Sariaya, Quezon, most especially Sr. Angelita A. Santos, FMM, St. Joseph Academy of Sariaya, Quezon Senior High School students and teachers, and to the whole community of St. Joseph Academy of Sariaya, Quezon, thank you for the prayers, moral support, and motivation. Your time, insights, and willingness to contribute made this research meaningful and possible.

To her family, Marie Belle Gracielli A. Pureza, her mama, Wilfredo A. Pureza, her papa, and her siblings, Danielle Mariztela A. Pureza, Aronn Joshua A. Pureza, Kurt Dominique A. Pureza, Kaye Anne D. Pureza, and Eoin Tate D. Pureza, thank you for their unconditional love, prayers, encouragement, emotional and financial support and for always pushing me to pursue my goals. A very special thanks for their presence and faith in my abilities and never-ending motivation have been the source of my strength.

To her friends, Andreana Grace M. Bagasina, and Germae P. Ilagan, thank you for their moral support, camaraderie and collaboration throughout this journey. The shared experiences, discussions, words of wisdom and motivation and encouragement helped her to finish and made the research manageable.

References

- Alamdari, A., Taghvaeinia, A., & Piri R., (2024). The Effectiveness of Positive Education Program Based on PERMA Model on Positive Thinking and Life Expectance in Older Adults. *Article Info.* 10. 183-198. <https://doi.org/10.22126/JAP.2024.10628.1778>
- An, H., Chen, W., Wang, C., Yang, H., Huang, W., & Fan, S. (2020). The Relationships between Physical Activity and Life Satisfaction and Happiness among Young, Middle-Aged, and Older Adults. *International Journal of Environmental Research and Public Health*, 17(13), 4817. <https://doi.org/10.3390/ijerph17134817>
- Aubert, S., et al. (2021). Relationships Between Physical Activity, Mental Health, and Well-Being in Adolescents: A Systematic Review. *International Journal of Environmental Research and Public Health*, 18(3), 1222.
- Bailey R. (2006). Physical Education and Sport in Schools: A Review of Benefits and Outcomes. *The Journal of School Health*, 76(8), 397–401. <https://doi.org/10.1111/j.1746-1561.2006.00132.x>
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & P, N. B. P. E. a. S. (2008). The Educational Benefits Claimed for Physical Education and School Sport: An Academic Review. *Research Papers in Education*, 24(1), 1–27. <https://doi.org/10.1080/02671520701809817>
- Bandura, A. (1997). Self-efficacy: The Exercise of Control. https://www.academia.edu/28274869/Albert_Bandura_Self_Efficacy_The_Exercise_of_Control_W_H_Freeman_and_Co_1997_pdf
- Becker, D. R., McClelland, M. M., Geldhof, G. J., Gunter, K. B., & MacDonald, M. (2018). Open-Skilled Sport, Sport Intensity, Executive Function, and Academic Achievement in Grade School Children. *Early Education and Development*, 29(7), 939–955. <https://doi.org/10.1080/10409289.2018.1479079>
- Bessa, C., Hastie, P., Rosado, A., & Mesquita, I. (2021). Sport Education and Traditional Teaching: Influence on Students' Empowerment and Self-Confidence in High School Physical Education classes. *Sustainability*, 13(2), 578. <https://doi.org/10.3390/su13020578>

- Bhowmick, S., Ghosh, S. S., & Biswas, B. (2023). Impact of Physical Education Curriculum on Academic Achievement of Higher Secondary School Students in India. *International Journal of Physical Education Fitness and Sports*, 1–11. <https://doi.org/10.34256/ijpefs2311>
- Biddle, S. J., & Asare, M. (2011). Physical Activity and Mental Health in Children and Adolescents: a review of reviews. *British journal of sports medicine*, 45(11), 886–895. <https://doi.org/10.1136/bjsports-2011-090185>
- Butler, J., & Kern, M. L. (2016). The PERMA-Profler: A Brief Multidimensional Measure of Flourishing. *International Journal of Wellbeing*, 6(3), 1–48. <https://doi.org/10.5502/ijw.v6i3.526>
- Casado-Robles, C., Mayorga-Vega, D., Guijarro-Romero, S., & Viciania, J. (2021). Effect of a Sport Education-based Teaching Unit in Physical Education on High School Students' Social Networks and Quantitative Sociometry Scores: A cluster randomized control trial. *Revista De Psicodidáctica (English Ed)*, 27(1), 66–75. <https://doi.org/10.1016/j.psicoe.2021.10.001>
- Cho, O. (2020). Impact of Physical Education on Changes in Students' Emotional Competence: A Meta-analysis. *International Journal of Sports Medicine*, 41(14), 985–993. <https://doi.org/10.1055/a-1192-5812>
- Chaudhary, C. (2024). Cultivating Social Values in Youth: The Positive Impact of Physical Education and Sport. *International Journal of Sports Health and Physical Education*, 6(1), 107–109. <https://doi.org/10.33545/26647559.2024.v6.i1b.113>
- Cohen, J. (2013b). Statistical Power Analysis for the Behavioral Sciences. In *Routledge eBooks*. <https://doi.org/10.4324/9780203771587>
- Cheng, C., & Lan, L. (2024). The Application of the PERMA Model in Mental Health Education in Colleges and Universities. *Informatica*, 48(14). <https://doi.org/10.31449/inf.v48i14.6127>
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New Well-being Measures: Short Scales to Assess Flourishing and Positive and Negative Feelings. *Social Indicators Research*, 97(2), 143–156. <https://doi.org/10.1007/s11205-009-9493-y>
- Ennis, C. D. (2015). Knowledge, Transfer, and Innovation in Physical Literacy Curricula. *Journal of Sport and Health Science/Journal of Sport and Health Science*, 4(2), 119–124. <https://doi.org/10.1016/j.jshs.2015.03.001>
- Espayos, J. C. (2023). PERMA-NENT!: The Developed PERMA Model-Based Psychological Wellness Program for the Students of Southbay Montessori School and Colleges Inc. *International Journal of Research Publications*, 130(1). <https://doi.org/10.47119/ijrp1001301820235351>
- Evans, J., & Davies, B. (2017). In Pursuit of Equity and Inclusion: Populism, Politics and the Future of Educational Research in Physical Education, Health and Sport. *Sport Education and Society*, 22(5), 684–694. <https://doi.org/10.1080/13573322.2017.1307176>
- Fernandes, I., Zanini, D. S., & Peixoto, E. M. (2024). PERMA-Profler for Adolescents: Validity Evidence Based on Internal Structure and Related Constructs. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1415084>
- Fernández-Bustos, J. G., Infantes-Paniagua, Á., Cuevas, R., & Contreras, O. R. (2019). Effect of Physical activity on Self-Concept: Theoretical Model on the Mediation of Body Image and Physical Self-Concept in Adolescents. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01537>
- Fredrickson, B. L. (2001). The Role of Positive Emotions in Positive Psychology: The Broaden-and-build Theory of Positive Emotions. *American Psychologist*, 56(3), 218–226. <https://doi.org/10.1037/0003-066x.56.3.218>
- Fredrickson, B. L. (2013). Positive Emotions Broaden and Build. In *Advances in Experimental Social Psychology* (pp. 1–53). <https://doi.org/10.1016/b978-0-12-407236-7.00001-2>
- Gao, Z., Lee, J. E., Zhang, T., & Stodden, D. F. (2015). Modelling Trajectories of BMI Change in Children: The Influence of PE and Physical Activity. *Journal of Sports Sciences*, 33(16), 1707–1716.
- Hallmark Public School. (2024). The Role of Physical Education in Holistic Development. <https://www.hallmarkpublicschool.com/the-role-of-physical-education-in-holistic-development/>
- Heemskerk, C., & Malmberg, L. (2023). The Effects of Sports Lessons on Emotions in the Primary School. *Current Issues in Sport Science (CISS)*, 8(2), 038. <https://doi.org/10.36950/2023.2ciss038>
- Heydari, Y., Samadi, H., & Dehghan Manshadi, M. (2020). Relationship between Level of Physical Activity with Self-Esteem, Body Image Concern and Body Appreciation in Veterans. *Iranian Journal of War and Public Health*. <https://ijwph.ir/article-1-904-en.html>
- Hogan, C. L., Catalino, L. I., Mata, J., & Fredrickson, B. L. (2014). Beyond Emotional Benefits: Physical Activity and Sedentary Behaviour Affect Psychosocial Resources Through Emotions. *Psychology and Health*, 30(3), 354–369. <https://doi.org/10.1080/08870446.2014.973410>
- Hulteen, R. M., Morgan, P. J., Barnett, L. M., Stodden, D. F., & Lubans, D. R. (2018). Development of Foundational Movement Skills: A Conceptual Model for Physical Activity Across the Lifespan. *Sports Medicine*, 48(7), 1533–1540. <https://doi.org/10.1007/s40279-018-0892-6>
- Ijaz, S. (2023). The Impact of Physical Activities on Academics Achievements and Grooming Potential among Higher Secondary School Students. *PAKISTAN LANGUAGES AND HUMANITIES REVIEW*, 7(II). [https://doi.org/10.47205/plhr.2023\(7-ii\)62](https://doi.org/10.47205/plhr.2023(7-ii)62)

- Ivanova, S., & Nenov, M. (2022). Perma Model for 21st Century Student Success Motivation. *Vocational Education*, 24(2), 170–183. <https://doi.org/10.53656/voc22-252perm>
- Kahneman, D., & Deaton, A. (2010). High Income Improves Evaluation of Life but not Emotional Well-being. *Proceedings of the National Academy of Sciences*, 107(38), 16489–16493. <https://doi.org/10.1073/pnas.1011492107>
- Karaday, E., & İlker, G. E. (2018). Predictors of Self-Esteem in Physical Education: Self-Determination Perspective. *International Journal of Psychology and Educational Studies*, 5(2), 39–47. <https://doi.org/10.17220/ijpes.2018.02.5>
- Kern, M. L. (2022). PERMAH. In Routledge eBooks (pp. 12–24). <https://doi.org/10.4324/9781003013778-3>
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2014). A Multidimensional Approach to Measure Well-being in Students: Application of the PERMA framework. *The Journal of Positive Psychology*, 10(3), 262–271. <https://doi.org/10.1080/17439760.2014.936962>
- Khalid, N. M., Senom, F., Muhamad, A. S., Mansor, N. M. F., & Saleh, N. H. (2023). Implementation of PERMA Model into Teaching and Learning of Generation Z. *International Journal of Learning Teaching and Educational Research*, 22(9), 423–441. <https://doi.org/10.26803/ijlter.22.9.23>
- Kim, J., Lee, S., Chun, S., Han, A., & Heo, J. (2016). The Effects of Leisure-time Physical Activity for Optimism, Life Satisfaction, Psychological Well-being, and Positive Affect among Older Adults with Loneliness. *Annals of Leisure Research*, 20(4), 406–415. <https://doi.org/10.1080/11745398.2016.1238308>
- Lawrie, S. I., & Mendoza, S. A. (2024). PERMA Model in the Classroom: Teaching Social Psychology through A Positive Lens. In *Edward Elgar Publishing eBooks* (pp. 15–28). <https://doi.org/10.4337/9781035327133.00010>
- Leisterer, S., & Jekauc, D. (2019). Students' Emotional Experience in Physical Education—A Qualitative Study for New Theoretical Insights. *Sports*, 7(1), 10. <https://doi.org/10.3390/sports7010010>
- Li, J., Huang, Z., Si, W., & Shao, T. (2022). The Effects of Physical Activity on Positive Emotions in Children and Adolescents: A Systematic Review and Meta-Analysis. *International Journal of Environmental Research and Public Health*, 19(21), 14185. <https://doi.org/10.3390/ijerph192114185>
- Loturco, I., Montoya, N. P., Ferraz, M. B., Berbat, V., & Pereira, L. A. (2022). A Systematic Review of the Effects of Physical Activity on Specific Academic Skills of School Students. *Education Sciences*, 12(2), 134. <https://doi.org/10.3390/educsci12020134>
- Lucretia, C. (2015). Meeting Student's Well Being and Educational Goals in Physical Education Classes. 7(1):138-143
<https://www.researchgate.net/publication/301553291MeetingStudent'sWellBeingandEducationalGoalsinPhysicalEducationClasses>
- Løvoll, H. S., Bentzen, M., & Säfvenbom, R. (2019). Development of Positive Emotions in Physical Education: Person-Centred Approach for Understanding Motivational Stability and Change. *Scandinavian Journal of Educational Research*, 64(7), 999–1014. <https://doi.org/10.1080/00313831.2019.1639818>
- Mondal, A. (2024). Holistic Community Health Development in India: An Overview. *Indian Journal of YOGA Exercise & Sport Science and Physical Education*, 34–39. <https://doi.org/10.58914/ijyesspe.2024-9.spl6>
- Ng, R., & Lin, V. (2020). Effect of Compulsory PE Courses on Body Appreciation and Psychological Aspects of University Students. *Journal of Physical Education and Sport*, 2020(6). <https://doi.org/10.7752/jpes.2020.s6433>
- Norris, E., Van Steen, T., Direito, A., & Stamatakis, E. (2019). Physically Active Lessons in Schools and their Impact on Physical Activity, Educational, Health and Cognition Outcomes: A Systematic Review and Meta-analysis. *British Journal of Sports Medicine*, 54(14), 826–838. <https://doi.org/10.1136/bjsports-2018-100502>
- Owen, K. B., Parker, P. D., Van Zanden, B., MacMillan, F., Astell-Burt, T., & Lonsdale, C. (2016). Physical Activity and School Engagement in Youth: A Systematic Review and Meta-Analysis. *Educational Psychologist*, 51(2), 129–145. <https://doi.org/10.1080/00461520.2016.1151793>
- Pan, Y., Wang, Q., Wang, S., & Peng, Y. (2024). Effects of Physical Activity on College Students' Positive Psychology. *International Journal of Fuzzy System Applications*, 13(1), 1–13. <https://doi.org/10.4018/ijfsa.345922>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination Theory and The Facilitation of Intrinsic Motivation, Social Development, and Well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066x.55.1.68>
- Sedeh, S. D., & Aghaei, A. (2024). The effectiveness of PERMA Model Education on University Students' Well-being. *Journal of Education and Health Promotion*, 13(1). https://doi.org/10.4103/jehp.jehp_840_23
- Seligman, M. E. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being*. Simon and Schuster.
- Simón-Chico, L., González-Peño, A., Hernández-Cuadrado, E., & Franco, E. (2023). The Impact of a Challenge-Based Learning Experience in Physical Education on Students' Motivation and Engagement. *European Journal of Investigation in Health Psychology and Education*, 13(4), 684–700. <https://doi.org/10.3390/ejihpe13040052>

- Suardika, I. K., & Adelina, C. (2024). Benefits of Sports Activities on Increasing Student Confidence. *International Sport Edelweiss Journal*, 1(01), 10–18. <https://doi.org/10.69543/1tekwk98>
- Syaukani, A. A., Hashim, A. H. M., & Subekti, N. (2023). Conceptual Framework of Applied Holistic Education in Physical Education and Sports: A Systematic Review of Empirical evidence. *Physical Education Theory and Methodology*, 23(5), 794–802. <https://doi.org/10.17309/tmfv.2023.5.19>
- Tomporowski, P. D., Davis, C. L., Miller, P. H., & Naglieri, J. A. (2007). Exercise and Children's Intelligence, Cognition, and Academic Achievement. *Educational Psychology Review*, 20(2), 111–131. <https://doi.org/10.1007/s10648-007-9057-0>
- Turner, J., Roberts, R. M., Proeve, M., & Chen, J. (2023). Relationship between PERMA and Children's Well-being, Resilience and Mental Health: A Scoping Review. *International Journal of Wellbeing*, 13(2), 20–44. <https://doi.org/10.5502/ijw.v13i2.2515>
- Van Boekel, M., Bulut, O., Stanke, L., Zamora, J. R. P., Jang, Y., Kang, Y., & Nickodem, K. (2016). Effects of Participation in School Sports on Academic and Social Functioning. *Journal of Applied Developmental Psychology*, 46, 31–40. <https://doi.org/10.1016/j.appdev.2016.05.002>
- World Health Organization: WHO. (2024, October 10). *Mental Health of Adolescents*. <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>
- Wortman, Devin, "The Impact of Effective Motivation Strategies on Student Engagement in Secondary Physical Education Classrooms" (2023). *Education Theses*. 9. https://docs.rwu.edu/sed_thesis/9https://docs.rwu.edu/cgi/viewcontent.cgi?article=1008&context=sed_thesis
- Wu, R., Jing, L., Liu, Y., Wang, H., & Yang, J. (2022). Effects of Physical Activity on Regulatory Emotional Self-efficacy, Resilience, and Emotional Intelligence of Nurses during the COVID-19 Pandemic. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1059786>
- Yuan, Y., Ji, X., Yang, X., Wang, C., Samsudin, S., & Dev, R. D. O. (2022). The Effect of Persistence of Physical Exercise on the Positive Psychological Emotions of Primary School Students under the STEAM Education Concept. *International Journal of Environmental Research and Public Health*, 19(18), 11451. <https://doi.org/10.3390/ijerph191811451>
- Zullig, K. J., & White, R. J. (2010). Physical Activity, Life Satisfaction, and Self Rated Health of Middle School Students. *Applied Research in Quality of Life*, 6(3), 277–289. <https://doi.org/10.1007/s11482-010-9129-z>