

Physical Activities Engagement and Healthy Lifestyle Practices of Grade 10 MAPEH Students at Batangas Province High School for Culture and Arts

Cherry Rose S. Cruzat ¹, Dr. Don-Don M. Abante ¹

1 – Golden Gate Colleges - Graduate School

silangrosecerry@gmail.com/0009-0009-3817-2346

Publication Date: July 18, 2026

DOI: [10.5281/zenodo.21429625](https://doi.org/10.5281/zenodo.21429625)

Abstract

Physical activity and a healthy lifestyle are important for adolescents, but many are still not active enough. This study aimed to assess Grade 10 students' physical activity and healthy lifestyle practices, identify the challenges they encounter and explore possible school-based interventions to improve their wellness and participation.

A descriptive-survey design was used with 50 Grade 10 MAPEH students during the School Year 2025–2026. Data were collected using researcher-developed questionnaires, performance rubrics, and semi-structured interviews. Quantitative data were analyzed using descriptive statistics, while qualitative responses were examined through thematic analysis. All instruments were validated by experts. including the school principal and a MAPEH master teacher.

Findings revealed that students demonstrated a moderate level of physical activity engagement (composite mean = 2.70), with flexibility activities showing slightly higher than strength-related activities. Healthy lifestyle practices were generally observed (composite mean = 3.14), particularly in hygiene, while rest and sedentary behavior avoidance were less consistent. Students experienced moderate challenges (composite mean = 2.53), with meal skipping and fatigue identified as the most common concerns. After the implementation of student-led health campaigns, an improvement was noted with mean scores increasing from 2.94 to 3.09.

This study concludes that although students demonstrate acceptable engagement in physical activity and healthy practices, targeted school-based interventions are still needed to strengthen consistency and promote long-term wellness among learners.

Keywords: *physical activity engagement, healthy lifestyle practices, adolescent wellness, school-based intervention, MAPEH students*

1. INTRODUCTION

Physical activity and a healthy lifestyle are important for students' overall well-being, yet many adolescents today are not active enough and spend more time on screens, which increases health risks like obesity and stress. Similar patterns are seen among students in the Philippines, including in Batangas Province, where some learners show low participation in exercise, poor eating habits, and insufficient rest, affecting their school performance and energy levels. Although schools promote health through programs like MAPEH, there is still a gap between knowing healthy practices and actually applying them in daily life. This study therefore examines the physical activity and lifestyle habits of Grade 10 students to serve as a basis for developing school-based programs that promote healthier and more active living.

This study aims to assess the physical activities engagement and healthy lifestyle practices of Grade 10 MAPEH students at Batangas Province High School for Culture and Arts. Specifically, it seeks to answer the following questions:

1. What is the level of physical activities engagement of Grade 10 students in terms of:
 - 1.1. Aerobic activities;
 - 1.2. Strength activities;
 - 1.3. Flexibility activities; and
 - 1.4. Sports participation?

2. What is the level of healthy lifestyle practices of Grade 10 students in terms of:
 - 2.1. Nutrition and eating habits;
 - 2.2. Personal hygiene and self-care;
 - 2.3. Rest and sleep patterns; and
 - 2.4. Avoidance of sedentary behaviors?

3. What challenges do students encounter in maintaining regular participation in physical activities and practicing a healthy lifestyle?

2. MATERIALS AND METHODS

Research Design

This study used a descriptive-survey research design to examine students' physical activity engagement and healthy lifestyle practices through collected quantitative questionnaires and rubrics to describe their behaviors, identify challenges, and provide a basis for improving school-based health programs.

Participants

The study involved 50 Grade 10 students of Batangas Province High School for Culture and Arts during the second quarter of School Year 2025–2026. This group was specifically selected because adolescents at this stage are at a critical developmental period in which lifestyle choices and health-related behaviors significantly influence their overall well-being.

Research Instruments

Three research instruments were used to gather both quantitative and qualitative data. First, a researcher-made questionnaire which served as the main instrument for gathering quantitative data. It was designed in accordance with the study's research questions and included indicators on students' engagement in aerobic, strength, flexibility, and sports activities, as well as nutrition, personal hygiene, rest, and sedentary behaviors. Second, a performance rubric to objectively assess students' participation and engagement in school-based physical activities. The rubric evaluated aspects such as stamina, energy exerted, body coordination, rhythm, and active participation. This tool ensured consistency and fairness in assessing students' performance. Lastly, a semi-structured interview was conducted with selected students. The interview guide included open-ended questions that explored the challenges, difficulties, and personal experiences of students in participating in physical activities and practicing healthy lifestyle habits. This qualitative tool provided deeper insights into the learners' perspectives, adding richness and context to the findings of the study.

Procedure

The study was conducted with selected Grade 10 students of Batangas Province High School for Culture and Arts after securing school approval and informed consent from their parents. It involved a pre-survey, school-based health and physical activity interventions, and a post-survey to assess changes in students' behaviors and awareness, supported by semi-structured interviews for deeper insights. All data were properly organized and analyzed with the help of a statistician, while ethical standards were strictly observed to ensure confidentiality and protect participants' identities.

Data Analysis

In this study, the data were analyzed using a mixed-methods approach. For the quantitative part, survey and rubric results were examined using descriptive statistics such as mean, frequency, percentage, weighted mean, and ranking in order to describe students' levels of engagement and identify which program components were most effective. Meanwhile, the qualitative data gathered from semi-structured interviews were analyzed thematically following Kiger and Varpio (2020), allowing the researcher to explore students' experiences, perceptions, and motivations in a more in-depth way. By combining both approaches, the study was able to provide a clearer and more complete understanding of the changes in students' physical activity engagement and healthy lifestyle practices.

3. RESULTS

Section 1: Level of Physical Activities Engagement of Grade 10 Students

The results showed that Grade 10 students were generally active and engaged in physical activities across all areas, with moderate levels of participation reflected in the composite means: Aerobic Activities (WM = 2.73), Strength Activities (WM = 2.51), Flexibility Activities (WM = 2.84), and Sports Participation (WM = 2.72). They were most engaged in aerobic exercises like jogging and dancing (WM = 3.21, Highly Engaged) and in enjoying sports for recreation (WM = 3.18, Highly Engaged), which suggested a stronger preference for enjoyable and movement-based activities. However, the results also showed that participation was not yet fully consistent, especially in activities requiring endurance and regular practice. This was reflected in lower scores, such as managing shortness of breath during exercise (WM = 2.35), maintaining strength-training routines (WM = 2.15), and regularly joining sports competitions (WM = 2.38). Overall, while students were generally active, the findings suggested a need to further strengthen their endurance, consistency, and involvement in more structured physical fitness activities.

Section 2: Level of Healthy Lifestyle Practices of Grade 10 Students

The results showed that Grade 10 students generally practiced healthy lifestyle habits across different areas. They demonstrated strong personal hygiene and self-care (WM = 3.82) and often practiced nutrition habits (WM = 3.09), particularly in drinking enough water and eating balanced meals. However, lower scores were observed in limiting junk food and making healthy food choices when eating outside.

In terms of rest and sleep patterns (WM = 2.75) and avoidance of sedentary behaviors (WM = 2.89), students showed moderate practices, with challenges noted in sleep consistency, late-night gadget use, and screen time management. Overall, while students exhibited generally positive lifestyle habits, improvements are still needed in diet control, sleep quality, and reducing sedentary behaviors.

Section 3: Challenges of Students in Maintaining Regular Participation in Physical Activities and Practicing a Healthy Lifestyle

The results showed that Grade 10 students were moderately experienced in the challenges affecting their regular participation in physical activities and healthy lifestyle practices, with a composite mean of 2.53. The most common difficulty was skipping meals due to time constraints or lack of appetite (WM = 2.96, Moderately Experienced), followed by tiredness or low energy that limits physical activity (WM = 2.78) and lack of time because of schoolwork (WM = 2.76). Students also reported challenges in managing their time between school, rest, and personal care (WM = 2.76) and limited access to exercise facilities or equipment (WM = 2.72). Other factors, such as excessive gadget use (WM = 2.58) and difficulty maintaining a balanced diet (WM = 2.46), were also noted, though to a lesser extent. Meanwhile, motivation (WM = 1.98) and lack of support from family or peers (WM = 2.14) were the least experienced challenges. Overall, the findings suggest that time management, energy levels, and daily routines are the main barriers affecting students' healthy lifestyle practices.

Section 4: Proposed School-Based Program

The study showed that Grade 10 students experience challenges in physical activity, nutrition, time management, sleep, and hygiene, which indicates the need for a more structured and supportive school environment. In response to these needs, the proposed program includes structured physical activities, nutrition support, wellness and time management sessions, peer-led campaigns, hygiene education, and reward systems, along with the involvement of teachers, parents, and the community to strengthen support. Overall, the program aims to address these challenges by improving students' physical activity, health knowledge, and daily lifestyle habits through a more organized and supportive school-based approach.

4. DISCUSSION

The study showed that Grade 10 students were generally active in physical activities, particularly in aerobic exercises and sports; however, their participation in endurance and structured fitness activities was inconsistent, suggesting a need to further develop stamina and promote more regular exercise habits. Similarly, in terms of lifestyle practices, students demonstrated strong personal hygiene, but their nutrition, sleep, and sedentary behaviors were only moderately practiced, with issues such as unhealthy eating, irregular sleep patterns, and high screen use still evident. These gaps in both physical activity and lifestyle practices were closely linked to challenges such as lack of time, fatigue, and academic demands; therefore, the proposed school-based program focuses on structured activities, health education, and stronger support from teachers, parents, and the community to improve students' overall well-being.

5. CONCLUSION

Based on the results of the study, Grade 10 students showed a moderately healthy lifestyle before the implementation of the campaigns (CM = 2.94), indicating that improvement was still needed in their nutrition, physical activity, and hygiene practices.

After the student-led health advocacy campaigns, students showed better knowledge, behaviors, and peer support (CM = 3.09), along with stronger leadership and engagement in school health activities (CM = 3.32), showing that the program was effective in promoting healthier lifestyles. However, students still experienced moderate challenges such as time management, limited resources, and inconsistent participation (CM = 3.00), suggesting the need for better support and planning in future programs.

RECOMMENDATIONS

Based on the findings, it is recommended that schools regularly conduct health education programs to improve students' nutrition, physical activity, and hygiene practices. Student-led health activities may also be sustained and reinforced to maintain the positive effects on students' knowledge, behavior and peer support. Teachers and school administrators are encouraged to actively involve students in planning and implementing health initiatives to further develop their leadership skills. In addition, providing adequate resources, guidance, and support in time management is recommended to address challenges and ensure consistent participation in health-related programs.

REFERENCES

- Barnes, K. (2021). School-based healthy eating and physical activity policies and practices. *Centers for Disease Control and Prevention*. <https://www.cdc.gov/healthyschools>
- Barranco-Ruiz, Y., & Villa-González, E. (2020). Health benefits of Zumba fitness: A systematic review. *International Journal of Environmental Research and Public Health*, 17(12), 4472. <https://doi.org/10.3390/ijerph17124472>
- Centers for Disease Control and Prevention. (2025). Comprehensive school-based physical activity programs. <https://www.cdc.gov>
- Community Preventive Services Task Force. (2020). School-based physical education: Increasing physical activity. <https://www.thecommunityguide.org>
- Creswell, J. W. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- De Guzman, R. (2020). *Academic demands and health behavior among adolescents: A correlational study* [Unpublished master's thesis]. Batangas State University.
- Del Rosario, M. (2022). *Motivational factors affecting adolescents' participation in strength training activities* [Unpublished research paper]. University of Santo Tomas.
- Donatelle, R. J. (2022). *Health: The basics* (13th ed.). Pearson.
- Garcia, L. (2021). *Adolescent eating behavior and peer influence in selected public schools in Batangas* [Unpublished undergraduate thesis]. Batangas State University.
- García-Hermoso, A., et al. (2020). Muscular strength as a predictor of physical fitness in adolescents: A systematic review. *Sports Medicine*, 50(10), 1689–1703. <https://doi.org/10.1007/s40279-020-01302-8>
- Hjelle Guddal, M., et al. (2021). Physical activity and mental health among adolescents: The role of sports participation. *Frontiers in Psychology*, 12, 617. <https://doi.org/10.3389/fpsyg.2021.618105>
- Hoeger, W. W. K., Hoeger, S. A., & Fawson, A. L. (2021). *Principles and labs for fitness and wellness* (14th ed.). Cengage Learning.
- McMurray, R. G., & Harrell, J. S. (2023). *Promoting health in schools: A comprehensive approach to wellness in children and adolescents*. Human Kinetics.
- Mendoza, P. (2020). *Personal hygiene and health outcomes among high school students* [Unpublished master's thesis]. Polytechnic University of the Philippines.
- Mohammadi, A. (2025). The impact of school-based nutrition and physical activity programs on adolescent wellness. *Journal of School Health and Nutrition*, 95(4), 211–220.

- National Nutrition Council & Department of Health. (2022). Nutrition situation report: The state of Filipino adolescents. <https://www.nnc.gov.ph>
- Neil-Sztramko, S. E. (2021). Effects of school-based physical activity interventions on youth fitness outcomes: A meta-analysis. *Preventive Medicine Reports*, 24, 101543. <https://doi.org/10.1016/j.pmedr.2021.101543>
- Ortega, F. B., Ruiz, J. R., & Castillo, M. J. (2019). Physical fitness in childhood and adolescence: A powerful marker of health. *International Journal of Obesity*, 43(2), 377–389. <https://doi.org/10.1038/s41366-018-0202-6>
- Peña-González, I., et al. (2019). Flexibility and physical fitness among adolescents: Correlations and implications for school programs. *European Physical Education Review*, 25(3), 701–716. <https://doi.org/10.1177/1356336X18799100>
- Puspodari, E., et al. (2022). Comparative effects of high-impact aerobic dance and Zumba on cardiovascular endurance. *Journal of Physical Education Research*, 29(1), 56–68.
- Republic Act No. 10173, Data Privacy Act of 2012. (2012). *Official Gazette of the Republic of the Philippines*.
- Reyes, J. (2021). *Gadget use and sleeping habits among Filipino teenagers* [Unpublished research study]. University of the Philippines.
- Rodríguez-Rodríguez, F., et al. (2021). Body composition indicators and adolescent health performance. *Journal of Youth Health and Fitness*, 15(2), 84–93.
- Santos, R. (2021). *Flexibility practices and physical performance of secondary school learners* [Unpublished research report]. De La Salle University.
- SciELO Brazil. (2022). Effects of Zumba dance exercise on heart rate recovery in Brazilian schoolgirls. *Brazilian Journal of Sports Medicine*. <https://www.scielo.br>
- Tan, M., & Villanueva, C. (2021). *Motivational and physiological factors affecting student participation in physical activity* [Unpublished research]. Philippine Normal University.
- World Health Organization. (2022). *Global status report on physical activity 2022*. <https://www.who.int>