



PHYSICAL ACTIVITY ENGAGEMENT, SELF-DETERMINATION, AND MENTAL HEALTH OF PUBLIC SENIOR HIGH SCHOOL STUDENTS: A CONVERGENT DESIGN

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Article DOI: <https://doi.org/10.36713/epra19561>

DOI No: 10.36713/epra19561

ABSTRACT

This study explored the influence of physical activity, self-determination, and mental health among senior high school students in Region XI using a mixed-methods convergent design. Results indicated moderate physical activity, high self-determination, and strong mental health, with significant interconnections between these factors. Qualitative findings highlighted themes such as enjoying school tasks, forming relationships, emotional turmoil, and school challenges, with data integration revealing converging and diverging patterns in mental health and experiences shaping beliefs.

KEYWORDS: Education, Physical activity engagement, self-determination, mental health, senior high school students, convergent design, Philippines

INTRODUCTION

This study addresses the urgent need to explore the combined influence of physical activity, self-determination, and mental health among public senior high school students in Region XI, filling a gap in the literature. Mental health issues, including anxiety and depression, are rising globally and in the Philippines, particularly among adolescents facing academic pressures and societal challenges. Despite evidence linking physical activity to improved mental health, many teenagers remain inactive. By examining these variables, the study aims to help educators, parents, and policymakers identify mental health factors and develop targeted interventions to support students' well-being and academic success.

REVIEW RELATED LITERATURE

Physical activity significantly improves physical, mental, and social well-being, yet global inactivity rates remain high, especially among adolescents. Barriers like time constraints, low motivation, and limited access hinder consistent engagement, necessitating tailored programs to address disparities in participation based on age, gender, and personal factors (WHO, 2020; Janssen & LeBlanc, 2010; Arabboev et al., 2023; Mozrzymas et al., 2024). Additionally, self-determination plays a crucial role in fostering motivation and emotional resilience, which are essential for mental health and overall life satisfaction (Deci & Ryan, 2000; Santos et al., 2023).

METHODOLOGY

The study employs a convergent mixed methods design, integrating quantitative and qualitative data to provide a comprehensive understanding of physical activity, self-determination, and mental health among senior high school students in Region XI. According to Tashakkori and Teddlie (2006), this design allows simultaneous collection and integration of distinct data types, providing a holistic view of research findings. Creswell and Creswell (2017) highlight that this approach explores relationships between variables by analyzing each dataset independently before synthesizing results to identify convergence or divergence. Utilizing both descriptive correlational quantitative and phenomenological qualitative methods, the study ensures a well-rounded analysis of research questions, comparing statistical data with lived experiences (Creswell, 2012; Vagle, 2014).

Quantitative data was gathered through standardized questionnaires, including the Physical Activity Questionnaire for Adolescents (PAQ-A), while qualitative data was collected via in-depth interviews and focus group discussions. These methods were validated through pilot testing and expert reviews, ensuring reliability and ethical standards. The Mental Health Continuum short form (MHC-SF) was used to evaluate mental health dimensions—emotional, psychological, and social well-being. The integration of qualitative and quantitative data allowed for a nuanced understanding, cross-validating quantitative findings with qualitative insights to enrich the exploration of physical activity engagement, self-determination, and mental health among senior high school students (Creswell, 2013; Moser & Korstjens, 2018).



RESULTS

This section presents the findings of a survey conducted among public senior high school students in Region XI, focusing on physical activity engagement, self-determination, and mental health. The results reveal moderate physical activity engagement with an overall mean of 2.71, suggesting occasional participation in physical activities. Self-determination among students is high, with a mean score of 3.96, and includes high ratings for competence, autonomy, and relatedness. Similarly, mental health status is elevated, with an overall mean of 3.76, encompassing emotional, social, and psychological well-being.

The multiple regression analysis shows that physical activity engagement positively influences mental health, with a statistically significant association ($p=.02$) and a beta coefficient of .12. This indicates that increased physical activity correlates with better mental health. Self-determination also plays a crucial role in mental health, accounting for a 42% increase in mental health status for every unit increase in self-determination. These findings underscore the importance of both self-determination and physical activity in promoting students' mental health, supported by themes like enjoying school tasks, relating well with others, and coping with challenges.

DISCUSSION

The study on public senior high school students in Region XI explores the relationship between mental health, self-determination, and physical activity engagement. Findings indicate that while physical activity is hindered by barriers such as time constraints and limited access to facilities, students demonstrate high self-determination, autonomy, and intrinsic motivation, which positively influence academic performance and personal development. Mental health is also reported to be robust, supporting students' well-being and enhancing social interactions, consistent with global research by WHO (2019), Santos et al. (2023), and Montes et al. (2019).

Additionally, senior high school students exhibit high emotional, social, and psychological well-being, emphasizing the importance of a supportive school environment and community involvement. Research highlights the role of physical activity and self-determination in promoting mental health, with studies by Feng et al. (2024) and Seemiller et al. (2020) reinforcing these findings. Emotional challenges such as anxiety and frustration are addressed through strategies like emotion regulation and fostering a growth mindset, supported by literature from Larson and Richards (1994) and Goleman (1995). Collective support from peers, teachers, and the community is essential for enhancing mental health and academic engagement, further reinforcing the interconnectedness of emotional, social, and academic development.

CONCLUSION

The study findings reveal that physical activity engagement among senior high school students is moderate, indicating occasional participation rather than consistent involvement. This suggests a need for increased regularity in physical activities to enhance overall health and well-being. Additionally, self-determination is rated high, with students exhibiting autonomy, competence, and relatedness, which positively impacts their mental health and resilience. Their overall mental health is also high, showcasing their ability to manage stress and maintain positive behaviors. The interplay between physical activity engagement and self-determination significantly influences mental health outcomes, with students who regularly engage in physical activities and demonstrate high self-determination experiencing improved mental health. Furthermore, the merging of qualitative and quantitative findings highlights both convergent and divergent aspects of mental health, reflecting the complexity of how experiences shape beliefs and perceptions.

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