

Sedentary Lifestyle And Kinesthetic Activities Among Senior High School Students In Congressional District 1, Division Of Batangas Province

Isabel R. Hernandez ¹

1 – Golden Gate Colleges

sabiee749@gmail.com / 0009-0000-4724-3286

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Abstract

This study aimed to assess the sedentary lifestyle of Senior High School students and their utilization of kinesthetic activities in Congressional District 1, Division of Batangas Province. The findings served as the basis for the development of proposed enrichment activities that encourage movement and physical engagement among learners.

The study employed a descriptive research design using a survey questionnaire as the primary data gathering instrument. The respondents of the study consisted of 379 Grade 11 Senior High School students from public senior high schools in Balayan, Calatagan, Lemery, Lian, Nasugbu, Taal, Tuy, and the component city of Calaca in Batangas Province. Data were analyzed using frequency, percentage, weighted mean, ranking, and Pearson's r correlation coefficient to determine the relationship between the variables.

Findings revealed that the students were moderately aware of their sedentary lifestyle in terms of daily sitting time, screen time, and tolerance in physical activities. The utilization of kinesthetic activities such as sports, movement-based exercises, and hands-on activities was also found to be moderately utilized. Results further indicated that students experience several challenges in engaging in kinesthetic activities, including academic workload, lack of motivation, time constraints, and dependence on digital devices. The statistical analysis showed no significant relationship between the students' level of awareness of sedentary lifestyle and the extent of their utilization of kinesthetic activities.

Based on the findings, enrichment activities focusing on movement-based learning and active participation were proposed to help reduce sedentary behavior among senior high school students. These enrichment activities aim to promote physical engagement, improve students' health and well-being, and support the integration of kinesthetic approaches in Physical Education and Health programs.

Keywords: *Sedentary Lifestyle, Kinesthetic Activities, Academic Workload, Enrichment Activities*

Introduction

Sedentary lifestyle has become increasingly prevalent among students due to prolonged sitting, excessive screen time, and limited physical activity. In the modern educational environment, learners spend extended hours in classrooms and engaging with digital devices, which contributes to reduced physical movement and increased health risks.

Among senior high school students, academic demands often require long periods of sitting, leading to decreased physical activity levels. This condition may result in obesity, poor posture, fatigue, and reduced physical fitness. Beyond physical health, sedentary behavior may also negatively affect students' motivation, engagement, and overall academic performance.

To address this concern, kinesthetic activities are introduced as an effective pedagogical approach that promotes active learning through movement-based strategies such as sports, interactive tasks, and hands-on activities. These approaches are grounded in Experiential Learning Theory (Cherry, 2025), which emphasizes that meaningful learning occurs through active experience, reflection, and application.

Despite the recognized benefits of kinesthetic learning, its integration in classroom instruction remains limited. This gap highlights the need to examine the relationship between students' sedentary lifestyle awareness and their utilization of kinesthetic activities.

This study aims to determine the level of sedentary lifestyle awareness among students, assess their utilization of kinesthetic activities, identify related challenges, and examine the relationship between these variables.

Specifically, it seeks to answer the following questions:

1. How do students assess their own level of awareness of sedentary lifestyle relative to their:
 - 1.1 daily sitting time;
 - 1.2 screen time; and
 - 1.3 tolerance in physical activities?
2. To what extent of utilization of kinesthetic activities be assessed by the students to combat a sedentary lifestyle in terms of:
 - 2.1 sports;
 - 2.2 movement-based exercises; and
 - 2.3 hands-on activities?
3. Is there any significant relationship between the assessments on the students' level of awareness on their sedentary lifestyle and on the extent of utilization of kinesthetic activities?
4. What challenges do students face in overcoming a sedentary lifestyle?
5. Based on the results, what enrichment activities may be proposed?

Objectives:

The study aimed to:

1. Determine students' level of sedentary lifestyle awareness in terms of sitting time, screen time, and tolerance in physical activity
2. Assess the utilization of kinesthetic activities
3. Identify challenges encountered in engaging in kinesthetic activities
4. Determine the relationship between sedentary lifestyle awareness and kinesthetic activity utilization
5. Propose enrichment activities to enhance kinesthetic learning

Methodology

Research Design

This study employed a descriptive-correlational research design to determine the level of students' awareness of sedentary lifestyle and the extent of utilization of kinesthetic activities, as well as to examine the relationship between these variables. The descriptive method was used to systematically describe the current conditions of students' sedentary behavior in terms of sitting time, screen time, and tolerance in physical activities. Meanwhile, the correlational approach was utilized to determine whether a significant relationship exists between sedentary lifestyle awareness and the utilization of kinesthetic activities. This design is appropriate as it allows the researcher to analyze patterns, trends, and relationships without manipulating variables.

Participants

The respondents of the study consisted of 379 Grade 11 students enrolled in public senior high schools in Congressional District 1, Batangas Province during the School Year 2025–2026. The participants were selected using random sampling technique to ensure that each student had an equal chance of being included in the study. These students were considered appropriate respondents as they are exposed to academic activities that require prolonged sitting and are directly involved in classroom learning where kinesthetic strategies may be applied.

Research Instrument

The primary instrument used in this study was a researcher-made questionnaire designed to gather data on students' sedentary lifestyle awareness, utilization of kinesthetic activities, and challenges encountered.

The questionnaire underwent validation by experts in education to ensure content validity, clarity, and reliability before administration.

Data Collection Procedure

Prior to data collection, the researcher secured permission from school authorities to conduct the study. After approval was granted, the researcher coordinated with teachers for the proper distribution of the questionnaire. The respondents were oriented regarding the purpose of the study, and confidentiality of their responses was assured. With approval granted, the questionnaires were distributed using both online and in-person methods within a given time frame. After completion, all questionnaires were collected, checked, and organized for data analysis. Ethical considerations were strictly observed, ensuring that participation was voluntary and that all responses were treated with confidentiality.

Data Analysis

The data were analyzed using appropriate statistical tools. Weighted mean and ranking determined the levels and significance of variables. Pearson r was used to test the relationship between sedentary lifestyle and kinesthetic activities. All results were interpreted using corresponding verbal interpretations and standard statistical significance levels.

Results

This section presents the descriptive and inferential findings of the study.

Tables 1-5 summarize the descriptive and inferential results of the study.

Table 1. Sedentary Lifestyle Assessment

Indicators	Composite Mean	Verbal Interpretation
Daily Sitting Time	3.24	Moderately Aware
Screen Time	3.37	Moderately Aware
Tolerance in Physical Activities	2.69	Moderately Aware

Table 2. Extent of the Utilization of Kinesthetic Activities to Combat a Sedentary Lifestyle

Indicators	Composite Mean	Verbal Interpretation
Sports	3.09	Moderately Utilized
Movement-based Exercises	3.37	Moderately Utilized
Hands-on Activities	3.19	Moderately Utilized

Table. 3 Correlation Between Overall Sedentary Lifestyle Awareness and Utilization of Kinesthetic Activities

Variables	r- value	p- value	Decision
Sedentary Lifestyle Awareness vs. Utilization of Kinesthetic Activities	0.169	0.122	Failed to Reject Ho (Not Significant)

Table. 4 Correlation Between Sedentary Lifestyle Awareness and Utilization of Kinesthetic Activities

Sedentary Lifestyle Dimension	Kinesthetic Activities Dimension	r- value	p- value	Interpretati on
Daily Sitting Time	Sports	0.155	0.005	Significant
Daily Sitting Time	Movement-Based Exercises	0.367	0.000	Significant
Daily Sitting Time	Hands-On Activities	0.213	0.000	Significant
Screen Time	Sports	0.109	0.049	Significant
Screen Time	Movement-Based Exercises	0.384	0.000	Significant
Screen Time	Hands-On Activities	0.298	0.000	Significant
Tolerance in Physical Activity	Sports	- 0.049	0.376	Not Significant
Tolerance in Physical Activity	Movement-Based Exercises	0.078	0.158	Not Significant
Tolerance in Physical Activity	Hands-On Activities	- 0.036	0.514	Not Significant

Table. 5 Top Challenges Encountered by Students

Indicators	Weighted Mean	Verbal Interpretation
Feel shy/lack confidence	2.87	Often
Difficulty balancing schoolwork and activities	2.79	Often
Self-conscious about body shape	2.76	Often

Descriptive Statistics

Sedentary lifestyle Assessment

- Daily Sitting Time: Composite Mean- 3.24 (Moderately Aware)
- Screen Time: Composite Mean- 3.37 (Moderately Aware)
- Tolerance in Physical Activities- 2.69 (Moderately Aware)

Extent of the Utilization of Kinesthetic Activities to Combat a Sedentary Lifestyle

- Sports: Composite Mean- 3.09 (Moderately Utilized)
- Movement-based Exercises: Composite Mean- 3.37 (Moderately Utilized)
- Hands-on Activities: Composite Mean- 3.19 (Moderately Utilized)

Top Challenges Encountered by Students in Utilizing Kinesthetic Activities to Overcome a Sedentary Lifestyle

- Feel shy/lack confidence: Weighted Mean- 2.87 (Often)
- Difficulty balancing schoolwork and activities: Weighted Mean- 2.79 (Often)
- Self-conscious about body shape: Weighted Mean- 2.76 (Often)

Inferential Statistics

Daily Sitting Time

- Sports: $r=0.155, p=0.005$ → negligible but significant relationship.
- Movement-based exercises: $r=0.367, p=0.000$ → low but significant relationship.
- Hands-on activities: $r=0.213, p=0.000$ → low but significant relationship.
- *Interpretation:* Awareness of prolonged sitting slightly influences participation in kinesthetic activities.

Screen Time

- Sports: $r=0.109, p=0.049$ → negligible but significant relationship.
- Movement-based exercises: $r=0.384, p=0.000$ → low but significant relationship.
- Hands-on activities: $r=0.298, p=0.000$ → low but significant relationship.
- *Interpretation:* Awareness of screen exposure is linked to slight increases in active learning tasks.

Tolerance in Physical Activity

- Sports: $r=-0.049, p=0.376$ → no significant relationship.
- Movement-based exercises: $r=0.078, p=0.158$ → no significant relationship.
- Hands-on activities: $r=-0.036, p=0.514$ → no significant relationship.
- *Interpretation:* Physical tolerance does not significantly influence participation in kinesthetic activities.

Discussion

The findings indicate that students possess a moderate level of awareness of sedentary lifestyle but demonstrate only moderate participation in kinesthetic activities. This suggests that awareness alone is insufficient to significantly influence behavioral change.

Based on Experiential Learning Theory (Cherry, 2025), learning is strengthened through active engagement and reflection. However, the results imply that students' experiences with kinesthetic learning remain limited and often restricted to low-intensity activities. This weak experiential exposure may explain the weak overall relationship between awareness and behavior.

Moreover, psychological and contextual barriers such as shyness, body image concerns, and academic workload significantly affect students' participation. These findings align with previous studies (Ha et al., 2025) emphasizing that motivation, self-efficacy, and environmental support are stronger predictors of physical activity than awareness alone.

Thus, improving sedentary behavior requires structured, inclusive, and supportive kinesthetic interventions rather than awareness campaigns alone. To address these issues, a KINETIC Enrichment activity is proposed. This activities aims to reduce sedentary behavior among Senior High School students, improve engagement in structured and hands-on kinesthetic activities, overcome barriers like shyness and low motivation, build confidence and skills in Physical Education, and promote healthier, more active daily routines.

The study, however, was limited to Grade 11 Senior High School students in Congressional District I, Division of Batangas Province, making the findings less generalizable to other grade levels, regions, or contexts. It relied on self-reported data, which may be influenced by recall and social desirability bias. Additionally, data collection was confined to a



specific academic period, and other factors such as family influence, school environment, mental health, and access to facilities were not extensively examined.

Conclusion

Students demonstrated a moderate level of awareness of sedentary lifestyle and a moderate utilization of kinesthetic activities, primarily through low-intensity and teacher-guided movements. A negligible to low relationship was found between sedentary lifestyle awareness and utilization of kinesthetic activities, indicating that awareness alone is not sufficient to influence behavioral change. The most pressing challenges identified were shyness, difficulty in managing academic workload, and body image concerns, which limit students' participation in physical activities.

Based on the findings, the study recommends:

1. Schools may implement structured kinesthetic enrichment programs such as the proposed KINETIC Enrichment Activities to promote active learning.
2. Teachers should integrate inclusive, low-pressure, and non-competitive movement-based activities.
3. Guidance programs should address self-confidence, body image, and student motivation.
4. School administrators may strengthen Physical Education policies promoting daily movement integration.
5. Future researchers may explore additional variables such as motivation, peer influence, and school environment.

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