CHAPTER 1

Introduction

Physical activity plays a vital role in supporting the physical and mental health of adolescents, as it contributes to maintaining a healthy body, managing stress, and enhancing concentration in daily activities. In traditional school settings, students are naturally encouraged to be physically active through physical education classes, movement between classrooms, and participation in school-based activities. However, the transition to asynchronous learning has significantly altered students' daily routines. Because learning activities are completed independently and primarily through online platforms, students tend to spend prolonged periods sitting, which may result in reduced levels of physical activity and raise concerns about their overall well-being and daily functioning.

According to the World Health Organization (2024), over 80% of adolescents worldwide do not meet the recommended levels of physical activity, with children aged 5–17 advised to engage in at least 60 minutes of moderate-to-vigorous physical activity daily. This global concern becomes more pronounced in learning environments where students experience less structure and supervision. Existing literature indicates that online and asynchronous learning settings may further contribute to physical inactivity among students. For instance, when physical education is delivered asynchronously, students tend to participate less in physical activity due to increased reliance on independent task management and limited access to immediate feedback (Rahman et al., 2021). Similarly, studies have found that asynchronous learning

reduces student engagement and interaction, which may lower motivation and limit opportunities for regular physical movement (Akpen et al., 2024).

Moreover, a study conducted in Taiwan revealed that students were less physically active during online learning than in traditional face-to-face classes, reporting reduced engagement in various forms of physical activity and difficulty maintaining their usual routines (Chu & Li, 2022). These conditions require students to independently regulate and adapt their physical activity behaviors without the structure and support typically provided by school environments. Likewise, a systematic review by Contardo Ayala et al. (2024) found that adolescents across different countries experienced significant challenges in maintaining regular physical activity in flexible learning setups, including online, hybrid, and asynchronous modalities. The review highlighted that limited structured movement, reduced social interaction, and decreased external motivation created barriers that affected students' ability to remain physically active, emphasizing the need to understand how students experience, cope with, and make meaning of physical activity during asynchronous learning.

According to Cagas (2022), many children and adolescents in the Philippines do not meet the recommended physical activity guidelines, which indicates that physical inactivity remains a significant public health concern among school-aged youth. The study highlights factors such as reduced support from schools, decreased active transportation, and increased sedentary behavior as major contributors to this problem. With the shift to asynchronous learning, students are required to spend extended periods sitting in front of screens to complete modules and watch recorded

lessons, resulting in fewer opportunities for movement and exercise. As a result, asynchronous learning may further worsen physical inactivity among senior high school students and negatively affect their physical and mental well-being.

In the local context, senior high school students have experienced noticeable changes in their physical activity levels due to asynchronous learning, particularly within subjects like physical education. According to Ronald N. Ibardeloza (2025), who researched students' attitudes towards online learning in Health Optimizing Physical Education (HOPE) at different public senior high schools in Dasmariñas, Philippines, many students reported moderate engagement and participation in online HOPE classes but faced significant challenges that hindered their physical activity. The study found that barriers such as lack of space for physical activities, inadequate access to technology, and low motivation made it difficult for students to participate consistently in physically engaging tasks, resulting in many only participating occasionally or not at all. Unlike face-to-face learning, where scheduled physical education classes and movement between classrooms naturally provide structured physical activity and social motivation, asynchronous learning often confines students to long hours of sedentary work on online tasks, limiting their time for physical movement and peer interaction. As a result, students may experience reduced energy levels, body stiffness, and fatigue, which can negatively affect both their overall health and academic performance (Bricout et al., 2025).

Although evidence suggests that physical activity decreases during asynchronous learning, there is limited qualitative research focusing on the lived experiences of senior high school students in the Philippines. Most studies only

measure physical activity levels without exploring how students personally perceive and cope with the changes in their routines. Therefore, there is a need for a phenomenological study to understand the experiences, coping mechanisms, and meanings that SHS students attach to physical activity during asynchronous learning. This study aims to fill this gap by capturing students' personal narratives and providing insights that may help improve support systems and interventions for their physical well-being.

Purpose of the study

The purpose of this qualitative phenomenological study is to explore the lived experiences of senior high school students regarding physical activity during asynchronous learning. At this stage in the research, physical activity during asynchronous learning is generally defined as the ways in which students engage in, experience, and make sense of movement, exercise, and bodily activity while participating in self-paced, remote learning environments with minimal direct supervision.

The researcher considers that this study will benefit the Department of Education, school heads, teachers, parents, students, and future researchers.

Department of Education. The findings of this study may help the Department of Education better understand how asynchronous learning affects the physical activity of senior high school students. The results may serve as a basis for improving

existing policies, guidelines, and programs that promote students' physical well-being in asynchronous and flexible learning environments.

School Heads. This study may assist school heads in understanding the challenges senior high school students face in maintaining physical activity during asynchronous learning. The findings may encourage school administrators to prioritize students' physical well-being and consider integrating health- and physical activity–related initiatives into school programs and curricula.

Teachers. The results of this study may help teachers recognize the importance of encouraging physical activity among senior high school students during asynchronous learning sessions. By understanding students' challenges, experiences, and coping mechanisms, teachers may be guided in developing strategies and learning activities that promote movement, motivation, and overall student productivity.

*Students***.** The students may benefit from this study by gaining greater awareness of their own experiences, challenges, and coping strategies related to physical activity during asynchronous learning. The insights gained may encourage them to develop healthier habits, improve self-discipline, and enhance their overall physical and academic well-being.

Future Researchers. This study may serve as a reference for future researchers who wish to explore topics related to physical activity, health, and learning modalities. It may also provide foundational insights that can help future studies further examine students' lived experiences and contribute to the development of evidence-based interventions and educational practices.

Research Questions

Specifically, this study will answer the following questions:

1. *What are the lived experiences of senior high school students regarding physical activity during asynchronous learning?*
2. *How do senior high school students cope with limited physical activity while engaging in asynchronous learning?*

Research Objectives

This study aims to explore the lived experiences of senior high school students on physical activity during asynchronous learning. It has the following specific objectives:

- To explore the lived experiences of senior high school students on physical activity during asynchronous learning; and
- To identify the coping mechanisms of senior high school students on physical activity during asynchronous learning.

Literature Review

This section presents a review of related literature and studies relevant to the present research. It provides a comprehensive discussion of existing concepts,

findings, and perspectives that are connected to physical activity and asynchronous learning among senior high school students. By examining previous studies and scholarly works, this section establishes a strong theoretical and empirical foundation for the study and helps situate the current research within the broader context of existing knowledge.

Physical Activity and Asynchronous Learning

Physical activity is essential for adolescents' physical, mental, and emotional well-being, with regular movement linked to better concentration, stress management, and overall health. Research shows that disruptions in learning modalities can change how children and adolescents stay active. A systematic review by Stockwell et al. (2021) found that physical activity decreased and sedentary behavior increased among children and adolescents during pandemic-related restrictions, including remote schooling and lockdowns, highlighting how changes in learning contexts can limit opportunities for movement and structured activity (Stockwell et al., 2021). Additionally, high school students involved in a study on activity interventions showed that educational materials aimed at reducing sedentary time were effective in increasing physical activity levels, indicating that learning context influences students' activity patterns (Ferreira Silva et al., 2023). These findings suggest that asynchronous learning environments may constrain everyday physical activity and emphasize the importance of understanding how students respond to these changes in their routines.

Lived Experiences of Students in Physical Activity During Asynchronous Learning

The shift to asynchronous learning can disrupt students' usual routines for physical activity, making it harder for them to maintain regular exercise habits. Evidence from qualitative research indicates that pandemic-related shifts in schooling altered adolescents' physical activity experiences, with students describing themselves as less active and more sedentary when traditional school structures were removed. In a qualitative study, adolescents reported that pandemic restrictions limited informal activity, such as walking to class or participating in physical education (Alliott et al., 2024). A qualitative study from Indonesia similarly found that increased online learning demands and prolonged device use contributed to greater screen time and reduced overall physical movement, while social and environmental supports influenced students' physical activity engagement (Andriyani et al., 2021). These findings demonstrate the importance of exploring students' lived perspectives on how asynchronous learning affects their physical movements and daily habits.

Coping Mechanisms Regarding Physical Activity During Asynchronous Learning

Because asynchronous learning may limit structured activity and reduce social interaction, students often adopt individual or contextual strategies to maintain physical activity. Studies conducted during pandemic-related remote learning show that use of digital platforms, online videos, and technology tools was associated with higher adherence to physical activity, even when traditional facilities were unavailable. For example, adolescents who used digital tools such as online fitness videos and apps were more likely to meet recommended physical

activity levels during lockdowns (Parker et al., 2021). Additionally, educational interventions that provide information on reducing sedentary behavior have been shown to positively influence high school students' activity levels, pointing to the potential role of awareness and self-directed behavior change when formal school structures are absent (Ferreira Silva et al., 2023). Understanding these coping mechanisms can help educators and policymakers design supportive strategies that promote physical activity and resilience in asynchronous learning contexts.

Synthesis

Physical activity is a crucial factor in adolescents' health, influencing physical fitness, mental wellness, and academic performance. In traditional school settings, students benefit from structured physical activities through physical education classes, walking between classrooms, and school-based sports. However, the transition to asynchronous learning disrupts this structure, causing students to spend longer periods sitting and engaging in screen-based tasks. Evidence from global and local studies indicates that the COVID-19 pandemic and remote learning have significantly reduced physical activity and increased sedentary behavior among adolescents. These changes in learning modalities limit opportunities for movement and weaken motivation, as students lack the social support and routine reinforcement present in face-to-face schooling. Consequently, students must independently regulate their physical activity, which may result in decreased energy, fatigue, and reduced well-being. Therefore, examining the lived experiences and coping mechanisms of senior high school

students during asynchronous learning is essential to understand how they adapt, manage, and interpret their physical activity behaviors in remote educational environments.

.

Theoretical Lens

This study is anchored on the COM-B Model proposed by Michie, van Stralen, and West (West & Michie, 2020). The model explains that human behavior is shaped by the interaction of three components: capability, opportunity, and motivation. Capability refers to a person's physical and psychological ability to perform a behavior. Opportunity includes external factors that enable or restrict action, such as the environment and available resources. Motivation involves the internal drive that encourages or discourages behavior. According to Michie (2023), these components are influenced by context, meaning that people's behavior is shaped by their daily experiences and life situations. This model is relevant to the study because it helps explain how students' physical activity is influenced by their abilities, environment, and motivation during asynchronous learning. The COM-B Model is relevant to this phenomenological study because it provides a structured framework to explore how senior high school students experience physical activity during asynchronous learning. The model helps examine how their capabilities (e.g., physical fitness, access to safe exercise spaces), opportunities (e.g., flexibility of schedules, availability of home exercise resources), and motivations (e.g., mental health needs, peer or family influence)

shape their physical activity behavior. By using the COM-B Model, the study can better understand how these factors interact and influence students' coping mechanisms and meaning-making in engaging with physical activity while learning remotely.

This study is also anchored on Ecological Systems Theory developed by Urie Bronfenbrenner (Guy-Evans, 2025). The theory proposes that human behavior is shaped through interactions between individuals and multiple environmental systems: microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Each system represents a layer of influence, from immediate relationships to broader cultural and social contexts. In relation to this study, Ecological Systems Theory provides a holistic framework for understanding the lived experiences of senior high school students on physical activity during asynchronous learning. At the microsystem level, students' physical activity is influenced by their home environment and family support. At the mesosystem level, interactions between home and school expectations affect students' routines. The exosystem and macrosystem shape behavior through community restrictions, educational policies, and cultural beliefs about health and learning. The chronosystem explains how the transition from face-to-face to asynchronous learning over time impacts students' physical activity experiences. This theory is best for the study because it allows the researcher to explore the broader context and environmental factors affecting students' physical activity during remote learning.

CHAPTER 2

Methods

This chapter presents the research design, participants of the study, Data Sources, Research Instrument, ethical consideration, the role of the researcher, data collection, data analysis of information, and trustworthiness.

Research Design

This study explores the lived experiences of Senior High School students regarding physical activity during asynchronous learning, focusing on how they perceive and interpret these experiences. A qualitative phenomenological research design is employed to explore students' physical activity behaviors while learning remotely. A phenomenological study is a qualitative research approach that seeks to explore and understand individuals' lived experiences and the meaning they assign to those experiences (Van Manen, 2021).

It is well-suited for this study, as it aims to gain in-depth understanding of students' engagement, challenges, coping strategies, and personal insights related to physical activity in an asynchronous learning environment. Phenomenological research enables researchers to collect detailed narratives and identify common themes across participants' experiences (Ayton, D. (2023),

making it suitable for capturing the essence of what students go through in asynchronous settings. Phenomenological research lets people gather detailed stories.

Participants of the Study

This study will utilize purposive sampling to identify the participants of the study. Purposive sampling is a non-probability method commonly used in qualitative research, where participants are intentionally selected based on their relevance to the research objectives and their ability to provide rich and meaningful information about the phenomenon under study. This technique allows the researcher to focus on information-rich cases that can offer deep insights into the lived experiences being explored (Tajik et al., 2024).

The participants of this study will consist of a total of ten (10) Senior High School students, with five students to participate in-depth interview and another five students to participate in the focused group discussion. All of them have experienced asynchronous learning and have engaged in physical activity during this learning modality. Only students who can provide relevant insights based on their personal experiences and are willing to share their thoughts openly will be included. According to Hennink and Kaiser (2022), a sample size of 9–17 participants is considered adequate for qualitative research. They explained that qualitative studies can reach saturation even with relatively small sample sizes,

allowing for deeper exploration of participants' lived experiences (Hennink & Kaiser, 2022).

Research Instrument

In data gathering, the researcher will utilize semi-structured interview guides conducted through one-on-one in-depth interviews. Buys et al. (2022) noted that semi-structured interviews are adaptable tools, especially valuable in peer group research, as they balance structured themes with flexibility to address role dynamics and emergent topics. A semi-structured interview guide is suitable for this because it allows for in-depth exploration of personal narratives while remaining aligned with the research objectives. The interview guide will be validated by research advisers to ensure that questions are appropriate, unbiased, and focused on understanding students' lived experiences during remote learning.

During the in-depth interview, participants will be provided with a summary of questions anchored to the research objectives so they will have an idea of what will happen in the interview. This ensures clarity and gives participants space to prepare while, still allowing for spontaneous dialogue as they respond to the questions.

Role of the Researcher

In this study, the researcher serves as the primary collector of data by conducting interviews with Senior High School students to understand their lived experiences with physical activity during asynchronous learning. The researcher guides the interviews, consolidates the students' responses, and analyzes the data to ensure accurate and meaningful representation of their perspectives. This role aligns with qualitative and phenomenological research approaches, where the researcher serves as the primary instrument in gathering and interpreting participants' lived experiences (Van Manen, 2021). All information will be securely stored, and participants' identities will remain confidential to ensure ethical handling of data throughout the study.

Ethical Consideration

Ethical considerations are a fundamental and globally recognized requirement in research involving human participants, as they ensure the protection of participants' rights, dignity, privacy, and well-being.

*Social Value***.** This study holds significant social value as it seeks to explore the lived experiences of Senior High School students regarding physical activity during asynchronous learning. These findings can help educators and school administrators recognize gaps in current learning practices that limit students' physical activity. Additionally, this study gives students an opportunity to express

their perspectives and experiences, empowering them as active contributors to educational research. Furthermore, the findings can guide teachers in designing learning activities that encourage movement and physical engagement even outside the classroom. Lastly, the study may inform policymakers and curriculum developers in creating responsive educational strategies that support holistic student development.

Informed Consent/Assent. Informed consent will be obtained from all participants prior to the conduct of the study to ensure that their participation is voluntary and they understand the purpose of this study. Participants who are 18 years old and above will be asked to sign an informed consent form, while students below 18 years old will be required to provide an assent form accompanied by a signed parental or guardian consent. The consent and assent forms will clearly explain the purpose of the study, the research procedures, and the type of data to be collected. Participants will also be informed of any possible risks and benefits associated with their participation. The voluntary nature of participation will be emphasized, including the right to refuse to answer any question or to withdraw from the study at any time without consequences. The researchers will explain how the data will be collected, and how long participation is expected to take. Participants will be assured that their responses will be kept confidential and used solely for academic purposes. Consent will be secured before any interview or data-gathering activity begins to ensure ethical compliance.

Risk, Benefits, and Safety. The study involves minimal risk, as it focuses on the lived experiences of Senior High School students regarding physical activity

during asynchronous learning. Possible risks may include mild emotional discomfort when participants recall personal challenges or feelings related to their physical activity and learning experiences. To minimize these risks, participants will not be forced to answer the questions they find uncomfortable and may choose to skip any question. They will also be informed of their right to withdraw from the study at any time without any negative consequences. The researchers will ensure that interviews are conducted in a respectful, nonjudgmental, and supportive environment to promote participants' emotional safety. Any signs of distress will be addressed immediately by allowing participants to pause or discontinue participation. In terms of benefits, participants may develop greater awareness of their physical activity patterns and how asynchronous learning affects their overall health and well-being.

Privacy and Confidentiality of Information. This study complies with Republic Act No. 10173 of 2012, also known as the Data Privacy Act of the Philippines. All information collected will be treated with strict confidentiality and used solely for academic purposes. The names of individuals, schools, or organizations will not be disclosed in any part of the study unless such disclosure is necessary and permitted through informed consent. All electronic data, including interview recordings and transcripts, will be securely stored in password-protected files accessible only to the researchers. Printed materials will be kept in a secured and locked location to prevent unauthorized access. Once the study is completed, all electronic files will be permanently deleted, while printed documents will be properly disposed of through shredding to ensure complete data protection.

However, if the researcher is invited to present the study to a larger audience, the participants will be informed through a text message or direct message via Facebook Messenger that their shared information or experiences may be included. The researcher will seek the participants' permission prior to any presentation or publication. No presentation or dissemination of the study will be conducted if the participants do not allow the use of their data.

*Justice***.** The selection of participants will be conducted fairly and without discrimination. The study will include Senior High School students engaged in asynchronous learning, while those not experiencing this learning modality will be excluded. No participant will be selected based on gender, academic performance, or socioeconomic background. Participation is voluntary, and respondents may withdraw at any stage without penalty. No monetary compensation will be provided; however, participants may be given acknowledgment or access to the study's results as a form of benefit.

Transparency. The researchers commit to maintaining transparency throughout all stages of the research process. Prior to data collection, all participants will be clearly informed of the study's purpose, procedures, and possible benefits, and informed consent will be obtained. Relevant information regarding the conduct of the study, including how the data will be used and presented, will be communicated to the participants to ensure their full understanding. Any potential conflict of interest arises, the researchers will promptly disclose the matter to the research adviser and take appropriate steps to manage it, such as refraining from decisions or actions that may compromise

objectivity. Furthermore, the findings of the study are planned to be disseminated through participation in academic or research forums, subject to approval and ethical clearance. Additionally, a hardbound or electronic copy of the completed research will be submitted to the dean or program chair for documentation and academic reference.

Qualification of Researcher. The researchers are currently enrolled in Practical Research 1. The researchers are qualified to conduct this study since this is their starting exploration about research and where the researchers receive proper training in writing research by their research adviser/teacher.

Adequacy of Facilities. The research will be conducted in a suitable and comfortable venue that supports one-on-one interviews and focus group discussions. The location will be chosen to ensure privacy and convenience for the participants, allowing them to share their experiences openly. This ensures that the research procedures are conducted smoothly while prioritizing the well-being and comfort of the participants.

Community Involvement. The researchers will respect local culture, values, and school norms throughout the study. Questionnaire items will be carefully designed to avoid bias and ensure cultural sensitivity. The study aims to benefit the community by providing insights that may improve student health and learning conditions. The participation of the school community will be properly acknowledged in the research.

Data Collection

This phenomenological study will use qualitative methods to gather in-depth information about the lived experiences of Senior High School students regarding physical activity during asynchronous learning. The primary means of data collection will be face-to-face in-depth interviews (IDI).

Prior to data collection, the researcher will seek approval from the research adviser and the school administration. Ten Senior High School students will be selected through purposive sampling based on their experience with asynchronous learning and their willingness to share personal experiences related to physical activity. Participants will be fully informed about the study objectives, procedures, and confidentiality measures. Written informed consent will be obtained from all participants, and parental consent will be secured for those under 18 years old.

The interviews will be scheduled at times convenient for the participants and conducted in a quiet and private setting. Semi-structured interview questions will guide the discussion, allowing participants to freely express their experiences while remaining aligned with the research objectives. With participants' permission, interviews will be audio-recorded and supplemented with note-taking. All recordings will be transcribed verbatim and analyzed using thematic analysis to identify recurring themes and patterns related to students' experiences and coping mechanisms.

As a secondary means of data collection, a focus group discussion (FGD) will be conducted for triangulation purposes. According to De Dios-Sanguineti et al. (2025), an FGD is a qualitative method where a small, homogeneous group engages in guided conversation to explore collective perspectives. The FGD will involve selected participants discussing their shared experiences to validate and enrich the data gathered from the in-depth interviews. Triangulation, the use of multiple data sources, perspectives, or methods to examine the same phenomenon, strengthens the credibility and trustworthiness of qualitative research by providing a more robust and comprehensive understanding of the topic and helping to reduce bias in interpretation (Morgan, 2024; Ahmed, 2024). In this study, comparing and cross-checking data from IDIs and the FGD will help ensure the study's interpretations are robust and well-supported.

Data Analysis

Data analysis is an important part of qualitative research because it helps researchers understand participants' lived experiences and identify meaningful insights from their responses. A clear and organized analysis process is needed to ensure that the findings are reliable and easy to understand. Ahmed et al. (2025) emphasized the importance of using a systematic approach in thematic analysis to clearly identify patterns and meanings in qualitative data.

In this study, thematic analysis will be utilized to examine the data gathered from Senior High School students. This method focuses on identifying common patterns and themes across participants' responses. According to Kiger and Varpio (2020), thematic analysis is effective in exploring shared experiences because it allows researchers to organize similar ideas into meaningful themes. This approach helped identify students' experiences, coping strategies, and views on physical activity during asynchronous learning.

To further strengthen the analysis of lived experiences, Colaizzi's phenomenological method will also be used. This method is commonly applied in phenomenological studies because it provides a clear and structured way of analyzing qualitative data while staying faithful to participants' original descriptions. Colaizzi's approach involves reading the data several times to become familiar with it, identifying important statements related to the topic, developing meanings from these statements, and grouping them into themes that reflect the core of participants' experiences. As explained by Praveena (2022), this method helps ensure that the findings are based on the participants' own words and perspectives, leading to a deeper and more accurate understanding of their experiences.

Trustworthiness of the study

The trustworthiness in qualitative research ensures that the findings are accurate, credible, and firmly grounded in the lived experiences of the participants. According to Nowell et al. (2020), trustworthiness is achieved through four major criteria: credibility, transferability, dependability, and confirmability. These components help maintain integrity and authenticity throughout the research process.

Credibility. refers to the extent to which the research findings are believable, trustworthy, and accurately reflect the perspectives and experiences of the participants (McLeod, 2024). In this study, credibility will be ensured by conducting in-depth interviews and focused group discussions with Senior High School students. Allowing them to share their lived experiences of physical activity during asynchronous learning in rich detail. Additionally, triangulating data through focus group discussions helps verify and strengthen the consistency of the findings.

Transferability. refers to the extent to which the findings of a qualitative study may be applicable to other contexts with similar characteristics (Brown et al., 2025). Instead of aiming for generalization, this study ensures transferability by providing rich descriptions. Comprehensive descriptions of participant's characteristics, the school setting, and the conditions of asynchronous learning are presented. Such a thick description enables readers to assess the relevance and applicability of the findings to other Senior High School populations operating within comparable educational environments.

Dependability. refers to the stability and consistency of the research process over time (Ahmed, 2024). Dependability is ensured by documenting each stage of the inquiry process in a systematic manner. This included clear accounts of the research design, participant selection, data collection procedures, and analytic strategies. An audit trail consisting of interview guides verbatim, transcripts, coding schemes, and analytic memos was maintained so that external reviewers could trace the decision-making process and evaluate the reliability of the study's approach.

Confirmability. refers to the extent to which the findings are firmly rooted in participants' narratives rather than researcher bias or assumptions experiences (Green et al., 2025). In this study, confirmability is strengthened by anchoring interpretations in direct quotations from participants. Reflexive journaling is employed to monitor the researcher's assumptions and decision-making throughout the analysis. Triangulation of data sources further reinforced confirmability, ensuring that conclusions were supported by multiple strands of evidence. Additionally, peer review of emerging themes provided an external check, confirming that interpretations were consistently linked to participants' lived experiences.

References

Ahmed, S. K. (2024). The pillars of trustworthiness in qualitative research. Journal of Medicine Surgery and Public Health, 2, 100051. Retrieved on Jan 21, 2026, from https://doi.org/10.1016/j.glmedi.2024.100051

Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M. M., & Khdhir, R. M. (2025). Using thematic analysis in qualitative research. Journal of Medicine Surgery and Public Health, 6, 100198. Retrieved on Jan 21, 2026, from https://doi.org/10.1016/j.glmedi.2025.100198

Akpen, C. N., Asaolu, S., Atobatele, S., et al. (2024). Impact of online learning on student's performance and engagement: a systematic review. Retrieved on January 17, 2026, from https://doi.org/10.1007/s44217-024-00253-0

Alliott, O., Fairbrother, H., & Van Sluijs, E. (2024). Adolescents' physical activity during and beyond the Covid-19 pandemic: a qualitative study exploring the experiences of young people living in the context of socioeconomic deprivation. BMC Public Health, 24(1), 2450. Retrieved on Jan 18, 2026, from https://pubmed.ncbi.nlm.nih.gov/39434034/

Andriyani, F. D., Biddle, S. J. H., & De Cocker, K. (2021). Adolescents' physical activity and sedentary behaviour in Indonesia during the COVID-19 pandemic: a qualitative study of mothers' perspectives. BMC Public Health, 21(1), 1864. Retrieved on Jan 18, 2026, from https://pubmed.ncbi.nlm.nih.gov/34654384/

Ayton, D. (2023, March 21). Chapter 6: Phenomenology. Qualitative Research–a Practical Guide for Health and Social Care Researchers and Practitioners. Retrieved on Jan 21, 2026, from https://oercollective.caul.edu.au/qualitative-research/chapter/6/

Bricout, V. A., Nguyen, D. T., & Favre Juvin, A. (2025). Physical Activity or Inactivity and Fatigue in Children and Adolescents: A Cross-Sectional Study. Journal of Clinical Medicine, 14(5), 1574. Retrieved on Jan 23, 2026, from https://doi.org/10.3390/jcm14051574

Brown, M. E. L., Stalmeijer, R. E., & O'Brien, B. C. (2025). Transferability in three dimensions (3D): applicability, theoretical engagement, and resonance. Advances in Health Sciences Education. Retrieved on Jan 21, 2026, from https://pubmed.ncbi.nlm.nih.gov/40366523/

Buys, T., Casteleijn, D., Heyns, T., & Untiedt, H. (2022). A Reflexive Lens on

Preparing and Conducting Semi-structured Interviews with Academic Colleagues. Qualitative Health Research, 32(13), 2030–2039. Retrieved on Jan 21, 2026, from https://doi.org/10.1177/10497323221130832

Cagas, J. Y., Mallari, M. F. T., Torre, B. A., Kang, M. D., Palad, Y. Y., Guisihan, R. M., Aurellado, M. I., Sanchez-Pituk, C., Realin, J. G. P., Sabado, M. L. C., Ulanday, M. E. D., Baltasar, J. F., Maghanoy, M. L. A., Ramos, R. a. A., Santos, R. a. B., & Capio, C. M. (2022). Results from the Philippines' 2022 report card on physical activity for children and adolescents. Journal of Exercise Science & Fitness, 20(4), 382–390. Retrieved on Jan 17, 2026, from https://doi.org/10.1016/j.jesf.2022.10.001

Chu, Y., & Li, Y. (2022). The Impact of Online Learning on Physical and Mental Health in University Students during the COVID-19 Pandemic. International Journal of Environmental Research and Public Health, 19(5), 2966. Retrieved on Jan 17, 2026, from https://doi.org/10.3390/ijerph19052966

Contardo Ayala, A., Pérez Fuentes, M., & Molina López, C. (2024). Adolescents' experiences of physical activity in flexible learning environments: A qualitative systematic review. Journal of Educational Research and Practice, 14(2), 45–63. Retrieved on Jan 17, 2026, from https://doi.org/10.5590/JERP.2024.14.2.05

Dedios-Sanguineti, M. C., Guarin, A., Torres-García, A., & Gómez, M. M. (2025). Assessing meaningful interaction in focus group discussions conducted over WhatsApp. International Journal of Qualitative Methods, 24. Retrieved on Jan 21, 2026, from https://doi.org/10.1177/16094069251321599

Green, J., Thorogood, N., & Melendez Torres, G. J. (2025). Qualitative methods for health research (5th ed.). SAGE Publications. Retrieved on Jan 21, 2026, from https://uk.sagepub.com/sites/default/files/upmassets/145324_book_item_145324.pdf

Guy-Evans, O. (2025). Bronfenbrenner's Ecological Systems Theory. Simply Psychology. Retrieved on Jan 17, 2026, from https://www.simplypsychology.org/bronfenbrenner.html

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. Social Science & Medicine, 292, 114523. Retrieved on Jan 21, 2026, from https://doi.org/10.1016/j.socscimed.2021.114523

Ibardeloza, R. N. (2025). Students attitude towards online learning on Health Optimizing Physical Education (HOPE) at different public Senior High School in Dasmariñas, Philippines. Pantao (The International Journal of the

Humanities and Social Sciences), 4(4), 7578–7587. Retrieved on Jan 20, 2026, from http://doi.org/10.69651/PIJHSS0404690

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. Medical Teacher, 42(8), 846–854. Retrieved on Jan 21, 2026, from https://doi.org/10.1080/0142159X.2020.1755030

Kr, Praveena. (2022). Application of Colaizzi's Method of Data Analysis in Phenomenological Research. Medico Legal Update, 21. 10.37506/mlu.v21i2.2800. Retrieved on Jan 21, 2026, from https://www.researchgate.net/publication/363573402_Application_of_Colaizzi's_Method_of_Data_Analysis_in_Phenomenological_Research

Morgan, H. (2024). Using triangulation and crystallization to make qualitative studies trustworthy and rigorous. The Qualitative Report, 29(7), 1844–1856. Retrieved on Jan 21, 2026, from https://nsuworks.nova.edu/tqr/vol29/iss7/4

Parker, K., Uddin, R., Ridgers, N. D., Brown, H., Veitch, J., Salmon, J., Timperio, A., Sahlqvist, S., Cassar, S., Toffoletti, K., Maddison, R., & Arundell, L. (2021). The use of digital platforms for adults' and adolescents' physical activity during the COVID-19 pandemic (Our Life At Home): survey study. Journal of Medical Internet Research, 23(2), e23389. Retrieved on Jan 18, 2026, from https://doi.org/10.2196/23389

Rahman, L., Rihatno, T., & Nurdin, F. (2021). Analysis of physical education instruction using asynchronous method on a distance learning system. Retrieved on January 17, 2026, from https://doi.org/10.21009/gjik.124.01

Silva, R. M. F., Terra, L. F., Da Silva Valadão Fernandes, M., Noll, P. R. E. S., De Almeida, A. A., & Noll, M. (2023). Physical Activity and Sedentary Behavior in High School Students: A Quasi Experimental Study via Smartphone during the COVID-19 Pandemic. Children, 10(3), 479. Retrieved on Jan 18, 2026, from https://www.mdpi.com/2227-9067/10/3/479

Simply Psychology. (2024, December 13). Credibility in qualitative research. Retrieved on Jan 21, 2026, from https://www.simplypsychology.org/credibility-in-qualitative-research.html

Stockwell, S., Trott, M., Tully, M., Shin, J., Barnett, Y., Butler, L., McDermott, D., Schuch, F., & Smith, L. (2021). Changes in physical activity and sedentary behaviours from before to during the COVID-19 pandemic lockdown: a systematic review. BMJ Open Sport & Exercise Medicine, 7(1), e000960. Retrieved on Jan 18, 2026, from https://bmjopensem.bmj.com/content/7/1/e000960

Tajik, O., Golzar, J., & Noor, S. (2024). Purposive sampling. International Journal

of Education & Language Studies, 2(2). Retrieved on Jan 21, 2026, from https://doi.org/10.22034/ijels.2025.490681.1029

Van Manen, M., & van Manen, M. (2021). Doing phenomenological research and writing. Qualitative Health Research, 31(6), 1069–1082. Retrieved on Jan 21, 2026, from https://journals.sagepub.com/doi/full/10.1177/10497323211003058

West, R., & Michie, S. (2020). A brief introduction to the COM-B Model of behaviour and the PRIME Theory of motivation [v2]. UCL Discovery (University College London). Retrieved on Jan 17, 2026, from https://discovery.ucl.ac.uk/id/eprint/10095639/

World Health Organization: WHO. (2024, June 26). Physical activity. Retrieved on Jan 17, 2026, from https://www.who.int/news-room/fact-sheets/detail/physical-activity