

# Level of Physical Activity and Sedentary Behavior towards Physical Well-Being of Secondary Teachers

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## Abstract:

In contemporary society, characterized by technological advancements and sedentary lifestyles, the significance of physical activity for overall well-being cannot be overstated. Despite global initiatives to promote physical activity and mitigate sedentary behavior, educators, particularly secondary teachers, face unique challenges due to their demanding profession and prolonged periods of sedentary work. The World Health Organization underscores the importance of regular physical activity for maintaining health and well-being, yet many teachers struggle to meet recommended activity levels. The study used a descriptive-correlational research design participated by 60 secondary teachers from Buenavista National High School who are currently teaching during the 2023–2024 school year. Based on the tallied responses, teachers varied widely in age, ranging from 25 to 64 years old, with fewer respondents in their late 50s and 60s. The most common age group was 25 to 34 years old, making up 48.33% of the total sample, and most of them were single. There are more female teachers than male teachers, with females comprising a larger proportion (58.33%) of the total compared to males (41.67%). As revealed, teachers have a moderate level of physical activity and have sedentary behavior. So, even if a person engages in enough physical activity to meet the guidelines, they may still be considered sedentary if they spend a significant portion of their day sitting or lying down at work, at home, for study, travel, or in their leisure time. In teachers' perceptions to physical well-being, they believed that they didn't have a normal weight, waist, enough sleep, and good posture. They believe that low physical activity and sedentary behavior have a negative impact on their physical well-being, while at the same time, physical activity and avoiding sedentary behavior are essential for physical well-being. Further, it is depicted that there is no significant correlation between the profile of the respondents and physical well-being and no significant correlation between physical activity and sedentary behavior to physical well-being as well.

Keywords: Physical activity, Sedentary behavior, Physical well-being

## I. Introduction

The World Health Organization continuously emphasizes the importance of regular physical activity for maintaining physical health and overall well-being. The WHO (2022) defines physical activity as any movement of the body that involves the use of energy; this includes everything from household tasks to leisure sports [40]. Physical activity is highly recommended because it may aid in the prevention not only of psychological or mood disorders but also to overall health [4].

On the other hand, sedentary behavior—is defined as spending little energy while sitting or lying down for extended periods [39]. Sedentary behaviors

(from the Latin *sedere*, "to sit") include sitting while commuting, at work, at home, and during leisure or free time. Common sedentary behaviors include sleeping, sitting, lying down, watching television and other forms of screen-based entertainment (collectively referred to as "screen time"), and driving automobiles [34]. If people engage in excessive sedentary behavior, they may still suffer negative health effects even if they meet recommended levels of physical activity. Conversely, sedentary behavior has become a major concern since it has been linked to several health dangers, such as musculoskeletal issues and cardiovascular diseases [17].

Physical well-being is the state of being in good health, both physically and physiologically. It includes many aspects of physical health, such as fitness, nutrition, sleep, and overall body function. Exercise, diet, regular medical check-ups, and staying away from harmful substances all have an impact on one's physical well-being. Individuals with good physical health typically have more energy, better immune function, and a higher overall quality of life. Overall, physical well-being emphasizes the importance of caring for one's body through healthy lifestyle choices, regular exercise, proper nutrition, adequate rest, and seeking medical attention when necessary. Prioritizing physical well-being can lead to improved health outcomes, increased vitality, and a better quality of life [1], [21].

According to a systematic review by Prince and colleagues, working adults only devoted about 4% of their waking and working hours to moderate-to-vigorous physical activity (MVPA), with 60% and the majority of their time spent in sedentary behavior [22]. There is a common saying in this mode of learning, whether in a private or public institution, that sitting is the new smoking. Nowadays, every employee leads an inactive lifestyle that involves working or sitting for almost eight hours a day.

The effects of physical activity and sedentary behavior affect all individuals, but teachers are the ones who must stay alert, as they are the ones who create the future of the students. Worryingly, there is evidence that teacher health is deteriorating [41]. Teaching has always been a demanding profession, and its demanding work environment is well-known. Wide-ranging effects are probably coming from inactivity and sedentary behaviors. The most worrisome aspect is probably the potential harm to teachers' physical health. These effects could help to explain the high rates of attrition and work absences in the teaching profession [20]. Numerous health issues can arise for teachers. This includes serious and detrimental effects on their physical health as well as the emergence of mental health problems (such as depression; [15]. Research in this area, for instance, has shown that cardiovascular diseases and somatic symptoms, such as headaches, are more common [28].

Teachers in Buenavista have sedentary behavior and their numerous school-related responsibilities may prevent them from finding time for exercise. Teachers' working conditions were already difficult due to the teacher/student ratio ranging from 40 to 50 per teacher and the high number of lessons (30-

32 per week) they had to give. Considering the nature of their occupation, school personnel may find it difficult to meet the suggested physical activity levels because they spend the majority of their day in the school environment. Work-related factors can affect the health of teachers and office workers, according to studies conducted in various parts of the world [27]. Teachers serve as role models for students, both academically and in terms of health behaviors. If teachers lead sedentary lifestyles or engage in low levels of physical activity, they may unintentionally influence students' attitudes and behaviors toward physical activity and health.

Exercise boosts productivity and lowers people's feelings of exhaustion, boredom, and vitality. As such, teachers must be physically active to perform their duties effectively [12]. On the other hand, physically active teachers report higher levels of job satisfaction and higher perspectives of their overall and physical health [6]. Consequently, since it can improve a teacher's overall job satisfaction, physical activity should be viewed as an essential part of a work-life balance strategy. Thus, it is recommended that educators engage in physical activity at work or even at home to meet the physical activity guidelines [37].

However, WHO (2022), as cited in the study of Bull (2018) reports that one in every four adults worldwide does not meet the recommended levels of PA [40], [8]

Intense physical activities, such as running and weightlifting, can be perceived as difficult or intimidating, particularly for people who are new to regular exercise or have low fitness levels [40]. According to WHO (2022), younger adults tend to participate in vigorous physical activity but do not meet the recommended level of vigorous activity [40]. To meet the recommended level of vigorous activity, they have to consume 150 minutes per week. According to the WHO (2022), it is better to have a low-to-moderate level of physical activity than never, like we believe in little to no progress [40].

### **Objectives Of The Study**

As one of the secondary teachers at Buenavista District, which is the locale of the study, the researcher has a responsibility to find effective ways to encourage teachers to become more physically active to lessen the effects of physical inactivity and sedentary lifestyle. As a physical education teacher and health and wellness enthusiast who understands

the pervasive impacts of physical inactivity and sedentary behavior, it is alarming to see teachers who serve as role models, provide quality education, and are key to the success of students abusing their health. The researcher has a responsibility to fill in to find effective ways to encourage a healthy and active lifestyle among teachers, as this will serve as an awareness, assessment of their health, and a wake-up call to their current health status. Physical educators have the power to promote a healthy and active lifestyle and share knowledge among students, teachers, and future generations.

Unfortunately, the researcher has also witnessed this chaos and worries that it could result in multiple diseases if it persists.

Likewise, the results of the study can be used by teachers and schools to promote a healthy lifestyle and improve the quality of life, as Lemberg stated it may be a wise investment in public health [18]. In addition, it is a small step to the WHO Global Action Plan of a "whole-of-system" approach that all sectors and stakeholders working together at the global, regional, and local levels urge to create safe and supportive environments as well as more opportunities for people to increase their physical activity levels [38].

## **II. Methodology**

This study used - a descriptive-correlational research design, it specifically employed descriptive survey methods in the completion of the study that aimed to identify the level of physical activity and sedentary behaviors towards the physical well-being of secondary teachers in Buenavista District.

### **A. Research Instrument**

Relevant data for this research were gathered through a researcher's self-devised questionnaire. The questionnaire contained four parts to identify the profile of the respondents in terms of age, sex, and civil status, respondents' level of physical activity and sedentary behavior, and the respondent's perception of physical well-being.

To determine the profile of the respondents and their level of physical activity, the researcher prepares a checklist. The respondent answered based on their personal experience with each statement. To determine the respondent's sedentary behavior and perception of physical well-being, the researcher prepared a 5-item survey questionnaire and a 20-item survey questionnaire, respectively. Moreover, a five-point Likert scale was used to identify the

perceptions of the respondents towards physical well-being, where five is described as strongly agreeing, four as moderately agreeing, three as agreeing, two as moderately disagreeing, and one as strongly disagreeing. The basis of the statements and questions in the research instrument was the different related literature and studies.

The tool is submitted for panel approval and undergoes validation. To validate the questionnaire, the researcher asked five individuals to do so. The validators are three P.E. instructors from Marinduque State College, and the two validators are a Senior Education Program Specialist from DepEd -Division of Marinduque and an English teacher and research enthusiast from the Buenavista District.

### **B. Research Procedure**

The researcher followed the protocols required by the Dean's office to ensure that the concept to be studied is of good quality to comply with the degree in Master of Arts in Education. The proposal was submitted and defended in front of a panel of experts. All suggestions and comments given during the defense were the basis for refining the paper's content.

The researcher prepared a permission letter addressed to the office of the district supervisor of Buenavista District through the heads of the school for the conduct of the study and dissemination of the research instrument.

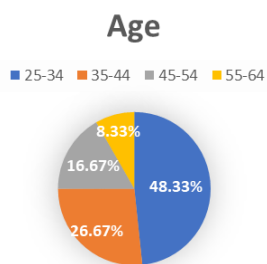
After the approval of the district supervisor, a permission letter was sent to the schools' principals informing them of the researcher's desire to gather data in their station.

When the addressed offices approved the permission letter, the researcher conducted his study following the following steps: first, the researcher disseminated the survey questionnaires to the respondents. The respondents were informed regarding what they were asked to do and what the risks were before they agreed to participate in the study. They were given ample time to complete the questionnaire so that they could depict their true view of the research questions.

After repossessing the responses, the researcher started to tabulate and analyze the data gathered with the help not only of the researcher statistician but also of LSPU San Pablo's Statistic Centre where she sent a copy of the data matrix along with other supporting documents to assure that the data were statistically treated and corrected. Primary and secondary data have been utilized in the study. The consent from the respondents was taken and ensured

with appropriate permission to use their given data. Other ethical aspects of research were also followed strictly.

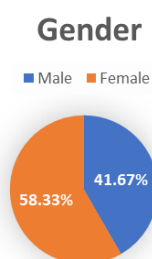
### III. Results And Discussion



**Figure 1.** Distribution of Respondents by Age

According to Figure 1, the age range of the respondents spans from 25 to 64 years old. The most common ages among the respondents are 25 to 34 years old, representing 48.33% of the total respondents. Followed by 35 to 44 years old, 45 to 54 years old, and 55 to 64 years old with 26.67%, 16.67%, and 8.33%, respectively. Respondents in their late 20s to early 50s appear to be relatively well-represented, with varying frequencies across different ages within this range. The number of respondents gradually decreases as age progresses past the mid-50s, with fewer respondents in their late 50s and 60s. This means that participants come from varying ages, with a concentration in the late 20s to early 50s age range.

The age distribution of teachers in the Philippines varies according to different studies. In the study of Salvan & Hambre (2020), 50% of the participating teachers were between the ages of 27 and 32 [27]. Furthermore, it was discovered that there is a lower representation of older age groups (45-64), implying that the outcome may not adequately capture the viewpoints or actions of people in these older age groups.



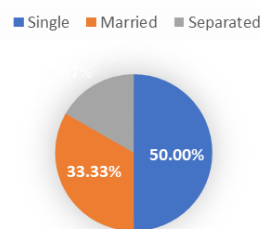
**Figure 2.** Distribution of Respondents by Gender

Figure 2 shows the distribution of respondents as to their gender, 41.67% of the respondents are male,

while 58.33% are female. In this case, there are more females (35 cases) than males (25 cases), with females comprising a larger proportion (58.33%) of the total compared to males (41.67%). This indicates a slightly higher representation of females in the respondent sample compared to males. This can indicate that women tend to outnumber men even in education courses, particularly in fields such as early childhood education and primary education. According to the study of Zabala et al. (2018), female teachers accounted for 88.66% of the respondents, while male teachers made up only 11.34% [42]. The findings confirmed previous gender and education research, which found that women have always dominated teaching.

On the other hand, the large number of female participants suggests that women make up the majority of the district's teaching personnel. As a result, census data confirmed that teaching is a female-dominated profession in the Philippines [24].

#### Civil Status



**Figure 3.** Distribution of Respondents by Civil Status

Figure 3 shows the distribution of respondents as to their civil status, 50.00% of the respondents are single, 33.33% of the respondents are categorized as married, and 6.7% of the respondents are categorized as separated. As most of the respondents' dominant age is 25-34 years old this implies that most of the respondents are single, a study found that most Filipinos are getting permanent jobs first before getting married [42]. According to new data from the Philippine Statistics Authority (PSA), 34.26 million, or 39.7%, of the 86.33 million people aged ten and up in 2020 had never married. According to a study by Ferrer (2017), the financial well-being of public-school teachers in the country is a serious issue, characterized by a burgeoning debt problem and low net income as it is necessary to be stable first before



settling [14]. Many young adults prioritize their education and career advancement over starting a family, resulting in a delayed marriage.

**Table 1.** Respondents' Level of Physical Activity

Indicators	M	SD	VI
1. How many days did you do physical activities during the last 6 days?	1.53	0.50	Low
2. What is the average time you usually spend doing physical activities like heavy lifting, fast cycling or running on one of those days?	1.78	0.56	Low
3. What is the average time you usually spend doing physical activities like brisk walking, slow dancing, carrying light loads, and sweeping the floor on one of those days?	2.20	0.58	Moderate
4. What is the average time you usually spend walking on one of those days?	2.47	0.50	Moderate
5. What is the average time you usually spend sitting, lying, or eating on one of those days?	2.43	0.50	Moderate
<b>Overall</b>	<b>2.08</b>	<b>0.30</b>	<b>Moderate</b>

Legend: 3.00 Vigorous  
2.00 – 2.99 Moderate  
1.00 – 1.99 Low

Table 1 displays the level of physical activity of secondary teachers in Buenavista. The overall mean of the level of physical activity indicator is 2.08 with a verbal description of moderate. The results indicate that the respondents have a moderate level of physical activity. This could be a positive sign for population health. Engaging in moderate physical activity is associated with various health benefits, including improved cardiovascular health, weight management, mental well-being, and overall well-being [40]. The majority of the sample falls into the moderate activity category. This implies that a high proportion of respondents with low levels of physical activity could have a potential health concern. Low physical activity levels are associated with various health risks, including obesity, cardiovascular disease, and mental health issues [4].

On the other hand, indicator 1 “How many days did you do physical activities during the last 6 days?” and indicator 2 “What is the average time you usually spend doing physical activities like heavy lifting, fast cycling or running on one of those days?” shows a 1.53 mean and 1.78, respectively. Though this result falls into the low level of physical activity this implies that teachers lack time to engage in regular activity. The results of indicator 2 also suggest a low level of engagement in intense physical activities. Intense physical activities, such as running and weightlifting, can be perceived as difficult or intimidating, particularly for people who are new to regular exercise or have low fitness levels [40]. According to WHO (2022), younger adults tend to participate in vigorous physical activity but do not meet the recommended level of vigorous

activity [40]. To meet the recommended level of vigorous activity, they have to consume 150 minutes per week. In addition, indicators 3 and 4 with a mean of 2.20 and 2.47 indicate a moderate level of engagement in activities such as brisk walking, slow dancing, carrying light loads, and walking. According to the WHO (2022), it is better to have a low-to-moderate level of physical activity than never, like we believe in little to no progress [40]. However, indicator 5: “What is the average time you usually spend sitting, lying, or eating on one of those days?” shows a moderate level of sedentary behavior. Therefore, even though the respondents engage in little to moderate exercise, they still have sedentary behavior.

Physical activity was sometimes regarded as merely a habit by teachers, rather than promoting biological, physical, and mental wellness. Physical activity was frequently not effectively structured within the everyday activities that each instructor conducted [25].

**Table 2.** Respondents' Sedentary Behavior

Indicators	M	SD	VI
1. I spent time sitting in one position for 2-3 hours at work or even at home.	4.27	0.45	strongly agree
2. I spent sitting or lying in a day for a total of 4-8 hours.	4.17	0.49	strongly agree
3. I prefer to ride a tricycle or other means of transportation instead of walking to get to the destination, even if it's not very far.	4.65	0.48	strongly agree
4. I don't take frequent breaks while sitting at work or while using gadgets.	4.27	0.45	strongly agree
5. I prefer to just lie down and nap in my free time rather than engage in physical activity.	4.58	0.50	strongly agree
<b>Overall</b>	<b>4.39</b>	<b>0.19</b>	<b>strongly agree</b>

Legend: 4.01– 5.00 SA  
3.50 – 4.00 A  
2.50 – 3.49 MA  
1.50 – 2.49 D  
1.00 – 1.49 SD

Table 2 displays the sedentary behavior of secondary teachers in Buenavista. The mean scores for each indicator are 4.27, 4.17, 4.65, 4.27, and 4.58, respectively with an overall mean of 4.39 with a verbal description of strongly agree. This implies that the participants strongly agree with statements indicating a sedentary lifestyle. The data shows that all of the respondents are having sedentary behavior. Sedentary refers to prolonged sitting or lying down. So, even if a person engages in enough physical activity to meet the guidelines, they may still be considered sedentary if they spend a significant portion of their day sitting or lying down at work, at home, for study, travel, or in their leisure time [40]. The highest mean and small standard deviations

suggest a high level of consensus among the participants regarding these sedentary behaviors.

On the other hand, in indicator 1, participants strongly agree that they spend extended periods sitting in one position, both at work and at home, with a mean score of 4.27 same with indicator 2 with a mean of 4.17. This high indicates that the majority of participants believe they spend too much time sitting, which could have a negative impact on their health and well-being. Prolonged sitting has been linked to a variety of health risks, including obesity, cardiovascular disease, diabetes, musculoskeletal issues, and decreased physical fitness [40]. According to the World Health Organization, 60 to 85% of people worldwide—from both developed and developing countries—live sedentary lifestyles, making it one of the more serious yet under-addressed public health issues of our time. Nearly two-thirds of children are also estimated to have sedentary behavior, which has serious implications for their future health [40]. Teachers frequently engage in sedentary behavior due to the nature of their profession, which requires long hours of standing or sitting in classrooms, grading papers, preparing lesson plans, and attending meetings [5].

Among the indicators of sedentary behavior, indicator 3 has a high mean score of 4.65. This implies that participants strongly agree that they prefer passive modes of transportation, such as riding a tricycle or other means, over walking even for short distances. As the respondents are all teachers, teachers often have busy schedules and may feel that using passive transportation methods like riding a tricycle or taking public transportation saves time compared to walking, allowing them to reach their destinations more quickly. Passive transportation methods can offer greater comfort and convenience, especially in situations where teachers need to carry materials or equipment with them [30].

In indicator 4, there is a strong consensus among participants that they do not take frequent breaks from sitting, whether at work or while using gadgets, with a mean score of 4.27. A study by Dalton (2014) found that a flow state can affect teachers from frequent breaks [10]. This implies that when an individual is completely immersed in a task, they maintain complete focus on that activity; they may not notice time passing, question why they are doing the task, or evaluate their performance [35]. Interrupting this state has the potential to reduce productivity and work quality. When people are deeply engaged in a task and flow, they may remain seated or stationary for long periods without

realizing it. This prolonged sedentary behavior can lead to a decrease in overall physical activity [35].

In indicator 5, participants strongly prefer lying down and napping over engaging in physical activity during their free time, as reflected by a mean score of 4.58. Teaching can be a demanding profession, both mentally and physically. After a long day at work, teachers may feel mentally and physically exhausted and prioritize rest to relieve stress and fatigue. Lying down and napping can be a quick and efficient way to recharge and rejuvenate. Some teachers may simply lack the motivation or interest to participate in physical activity during their free time. They may dislike traditional forms of exercise or find it difficult to find activities that they enjoy and value. In such situations, lying down and napping may be perceived as a more appealing and enjoyable way to spend leisure time [19]. According to affective reflective theory, people's actions are influenced not only by rational thought processes but also by emotional responses and subjective experiences. The affective reflective theory proposes that people's affective responses, such as positive or negative emotions associated with specific activities, influence their decision-making processes and, ultimately, shape their behavior [9].

**Table 3.** Respondents' Perceptions to Physical Well-Being

Indicators	M	SD	VI
1. I have a normal weight.	2.32	1.31	disagree
2. Having a low level of physical activity can affect my BMI result.	4.18	0.39	strongly agree
3. Having a sedentary behavior can increase the result of my BMI.	4.57	0.50	strongly agree
4. High result of BMI can pose a number of health risks.	4.47	0.50	strongly agree
5. A normal BMI would have a positive impact on my overall health and well-being.	4.48	0.50	strongly agree
6. I have a normal current waist-hip ratio.	2.32	1.31	disagree
7. Having a low level of physical activity can affect my waist-hip ratio.	4.37	0.49	strongly agree
8. Having a sedentary behavior can increase the result of my waist-hip ratio.	4.30	0.46	strongly agree
9. High result of waist-hip ratio can pose a number of health risks.	4.43	0.50	strongly agree
10. A normal waist-hip ratio would have a positive impact on my overall health and well-being.	4.40	0.49	strongly agree
11. I always have enough sleep.	2.37	1.28	disagree
12. Physical activity can improve the quality of sleep.	4.30	0.46	strongly agree
13. Sedentary behavior can affect the quality of sleep.	4.42	0.50	strongly agree
14. Poor sleep patterns can affect my daily productivity and mood.	4.35	0.48	strongly agree
15. Improving my sleep quality would have a positive impact on my overall health and well-being.	4.30	0.46	strongly agree
16. I have a good posture.	2.43	1.23	disagree
17. Physical activity can improve my posture.	4.37	0.49	strongly agree
18. Sedentary behavior can affect my posture.	4.47	0.50	strongly agree
19. Poor posture can pose a number of health risk.	4.43	0.50	strongly agree
20. Improving my posture would have a positive impact on my overall health and well-being.	4.60	0.49	strongly agree
<b>Overall</b>	<b>3.99</b>	<b>0.35</b>	<b>agree</b>

Legend: 4.01 – 5.00 SA  
3.50 – 4.00 A  
2.50 – 3.49 MA  
1.50 – 2.49 I  
1.00 – 1.49 SD

Table 3 displays the perception of secondary teachers in Buenavista towards their physical well-being. The average of all indicators is 3.99, which falls between "agree" and "strongly agree" on the verbal interpretation scale. This overall mean

indicates that respondents generally agree or strongly agree with the statements presented in the indicators. These statements address a variety of health behaviors and perceptions, including weight, physical activity, sedentary behavior, sleep quality, waist-hip ratio, and posture. However, there is some variation in respondents' perceptions of their weight, sleep quality, and posture.

In indicators 1 to 5, indicator 1 has the lowest mean of 2.32 with verbal interpretation of disagree. In other words, they don't see themselves as having a normal weight. This suggests that respondents tend to disagree with the statement about having a normal weight. This may indicate that respondents believe their weight is not within the normal or healthy range, which could have an impact on their self-image, body satisfaction, and possibly their health behaviors. On the other hand, respondents strongly agree that low physical activity and sedentary behavior have a negative impact on BMI. They also strongly agree that a high BMI poses health risks, whereas a normal BMI improves overall health and well-being. Some respondents may be aware of their BMI and use it as a benchmark when assessing their weight status, whereas others may rely on other factors such as personal appearance, clothing fit, or societal norms [23].

On the other hand, in indicators 6 to 10, indicator 6 has the lowest mean of 2.32. This indicates that, on average, respondents disagree with the statement, suggesting that they do not perceive their current waist-hip ratio as normal. Overall, the data indicate that respondents understand the link between physical activity, sedentary behavior, waist-hip ratio, and health outcomes. They strongly agree that physical activity and avoiding sedentary behavior are essential for maintaining a healthy waist-hip ratio, as well as overall health and well-being. They also recognize the potential health risks associated with a high waist-hip ratio, as well as the benefits of having a normal waist-hip ratio. In the study of Sorokowski (2017), WHR is primarily a physiological measure that is influenced by social and cultural factors [31]. Understanding social norms surrounding WHR can provide insight into how people perceive body image, beauty ideals, and health in their respective societies.

In indicators 11 to 15, indicator 11 has the lowest mean 2.37 with the verbal interpretation of disagree. This indicates that, on average, respondents disagree with the statement, suggesting that they do not perceive themselves as always having enough sleep. In the study of Lever et.al., (2017) teachers frequently face demanding workloads that extend

beyond regular school hours [19]. Overall, respondents strongly believe that physical activity can improve sleep quality. They also strongly agree that sedentary behavior and poor sleep habits have an impact on daily productivity and mood, and that improving sleep quality benefits overall health and well-being. The study of Alnawwar (2023), proves that regular physical activity has been linked to longer and better-quality sleep, according to this scientific research, adults who worked out for at least half an hour every day slept for an average of fifteen minutes longer than those who did not [2].

In indicators 16 to 20, indicator 16 has the lowest mean of 2.43 with verbal interpretation of disagree. This indicates that, on average, respondents disagree with the statement, suggesting that they do not perceive themselves as having good posture. Respondents strongly believe that physical activity can improve posture. They also strongly agree that sedentary behavior has a negative impact on posture, that poor posture poses health risks, and that improving posture benefits overall health and well-being. Moreover, Atlas et al. (2017) found that low back pain is a common disorder in adults, with a lifetime prevalence of 50% to 70% [7]. Teaching is a job that carries a high risk of musculoskeletal disorders. Prolonged standing, sitting, a poorly designed ergonomic workplace, and stress are just a few of the factors that contribute to these disorders. The level of stress reflects the teachers' increased risk of developing LBP as a result of fatigue, their work environment, and job satisfaction. Daily working hours also increase the risk of LBP because teachers are exposed to prolonged and incorrect postures while sitting or standing.

In terms of prolonged sitting, teachers frequently spend a significant portion of their day sitting. Prolonged sitting can cause muscle imbalances, weakness in core muscles, and poor spinal alignment, all of which contribute to poor posture. In addition, teachers may have to carry heavy bags or backpacks containing teaching materials, laptops, or textbooks. Teachers' muscle strength, flexibility, and joint mobility may change as they age, affecting their posture. Age-related conditions like arthritis or osteoporosis can also contribute to poor posture [11]. Overall, the data indicate that respondents understand the significance of posture for health and well-being and recognize the potential benefits of improving posture through physical activity and avoiding sedentary behavior.

The average score for all statements is close to 4 (out of 5), indicating strong agreement with the



perceived importance of physical activity, avoiding sedentary behavior, and maintaining healthy lifestyle habits for overall health and well-being.

**Table 4.** Relationship between Profile and Physical Well-being

	Value	P-value
<b>Gender</b>	2.571a	0.109
<b>Civil status</b>	1.389a	0.499

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

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

Table 4 shows the relationship between the profile of the respondents to physical well-being. The results revealed that there is no significant relationship between the profile and physical well-being. For gender, the p-value of 0.109 indicates that there is no statistically significant relationship between gender and well-being at the conventional significance level (usually 0.05). In civil status, the p-value of 0.499 indicates that there is no statistically significant relationship between civil status and well-being. In conclusion, based on these findings, there does not appear to be a significant relationship between gender, civil status, and well-being in the analyzed data.

Perception of physical well-being is a multifaceted and subjective experience that can vary widely among individuals, regardless of their gender and civil status. The usual context is that as you get older, your perception of being physically active decreases—this applies to both men and women. Individual health status in physical well-being is significantly influenced by age, gender, and civil status. However, according to the WHO (2022), many conditions and factors influencing physical well-being are beyond an individual's control, a complex set of factors influence people's perceptions of their health, including environmental, cultural, and socioeconomic conditions [40]. This may explain why there is no linear relationship between the variables. Each individual's perception of physical well-being is shaped by their unique experiences, beliefs, values, and priorities. Personality traits, resilience, coping mechanisms, and previous experiences with illness or injury can all have an impact on how people perceive and interpret their physical health [16].

On the distribution of data on how the respondents' male and female perceived their physical well-being, there is a mean of 4.04 for males and 3.96 for females. This implies that most men agreed on the perceived physical well-being of women. A Mayo Clinic study (2019) looks into differences in how men and women perceive their own health. According to the study, men had a better perception of their health than women. In addition, research found that, on average, males tend to engage in higher levels of vigorous physical activity compared to females. However, they may engage in less vigorous activity overall compared to males. Moreover, women are less active than men in terms of physical activity (PA), a gender-based disparity that is consistently observed in the literature but women tend to be more self-conscious about their bodies [33]. This concludes that men reported higher levels of physical activity and greater to perceived good physical well-being.

On the distribution of data on civil status and physical well-being, married respondents have a mean of 4.06, while single and separated have mean scores of 3.95 and 4.02, respectively. According to WHO (2022), single individuals may have more flexibility and autonomy over their time and activities, which could potentially allow them to engage in a wide range of physical activities, they don't give much thought to how being sedentary and physically active affect one's health [40]. On the other hand, married individuals may also face time constraints and competing priorities related to work, family, and household responsibilities, which could potentially limit their opportunities for physical activity. The Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), have found that physical activity tends to decrease with age. As a result, married individuals agreed more with the idea that sedentary behavior and low physical activity have an impact on physical well-being [13].

**Table 5.** Correlation between Age, Physical Activity Sedentary behavior and Well-being

	Physical Well-being	
	r	p
Age	0.157	0.231
Physical activity	-0.064	0.629
Sedentary	-0.054	0.684

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



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

Table 5 shows the relationship between age, physical activity, and sedentary behavior to physical well-being. The correlation coefficient ( $r$ ) of 0.157 suggests a weak positive relationship between age and well-being. This means that as people get older, their perception of physical well-being improves slightly, but the relationship is not strong. The  $p$ -value of 0.231 in age indicates that this correlation is not statistically significant at the standard significance level of 0.05. As a result of this data, we cannot conclude that there is a significant relationship between age and well-being in the general population. On the distribution of age and physical well-being, 25 to 34 years old have the mean score of 3.91, followed by 35 to 44, 45 to 54, and 55 to 64 years old with the mean score of 3.98, 4.13, 4.06, respectively. This implies that teachers in middle age and beyond agreed that level of physical activity and sedentary behavior can affect physical well-being. WHO (2022), generally indicates that people's levels of physical activity tend to decrease with age [40]. Younger adults especially teachers typically in their 20s and 30s—tend to be more physically active because of a variety of factors, including lifestyle choices, family obligations, and work demands. However, people in middle age and beyond (usually after the age of 50) may experience health issues like joint problems, chronic illnesses, or decreased mobility. People may become more conscious of the limitations and weaknesses of their bodies as they get older. Furthermore, a number of age-related changes that can affect an older adult's physical well-being include decreased muscle mass, stiff joints, and decreased flexibility [40]. Individual health conditions, personal experiences, and cultural factors can also impact an individual's perception of their physical well-being. For instance, a person with chronic pain might view their physical well-being differently than a person in good general health [3].

On the other hand, the correlation coefficient ( $r$ ) is -0.064, indicating a very weak negative relationship between physical activity and well-being. This implies that there may be a slight tendency for moderate levels of physical activity to be associated with slightly lower levels of well-being, but the link is extremely weak. The  $p$ -value of 0.629 indicates that this correlation is not statistically significant at the standard level of 0.05. As a result, this data does not support a significant

relationship between physical activity and well-being.

The level of physical activity of teachers as shown in Table 3, has a mean score of 2.08 with verbal interpretation of moderate physical activity. This implies that even though teachers have moderate levels of physical activity, regular physical activity is more closely linked to a positive perception of physical well-being. According to WHO (2022), engaging in regular physical activity plays a significant role in shaping individuals' perceptions of their physical well-being [40]. Physical activity was frequently not effectively structured within the everyday activities that each instructor conducted [25].

The correlation coefficient ( $r$ ) of -0.054 indicates a very weak negative correlation between a sedentary lifestyle and well-being. Similar to physical activity, this suggests that there may be a slight tendency for higher levels of sedentary behavior to be associated with slightly lower levels of well-being, but the relationship is extremely weak. The  $p$ -value of 0.684 indicates that this correlation is not statistically significant at the conventional significance level of 0.05. Therefore, there is no evidence of a significant relationship between sedentary lifestyle and well-being based on data.

The results of the sedentary behavior of the teacher as shown in Table 4, have a mean score of 4.39 with verbal interpretation of strongly agree. This implies that the statements indicating a sedentary lifestyle are strongly agreed upon by the participants. The information reveals that every respondent engages in highly sedentary behavior. The result between sedentary behavior and physical well-being is evident as the respondent's perception to physical well-being have a total mean of 3.99 with verbal interpretation of agree. Being inactive can negatively impact one's physical health and negatively impact one's perception of one's own vitality and health. However, a study found that more time spent sedentary or physically inactive is associated with lower well-being, and sedentary behaviors show weak relationships with subjective well-being [32]. This study shows a negative correlation between SB and with particular perceptions of one's physical self [36]. This explains the possible weak correlation between slightly lower levels of well-being and higher levels of sedentary behavior.

With a mean score of 3.99, the majority of respondents only slightly agree about how they

perceive their physical well-being. This indicates that even though the respondents' levels of physical activity are low and their sedentary behavior is high, they nevertheless believe that physical well-being is correlated with both physical activity and sedentary behavior. Nevertheless, despite being aware of how their physical health is impacted by a high sedentary lifestyle and low physical activity, the respondents opt to become physically inactive. The affective reflective theory explains why individuals stay physically inactive, according to Lewins' ideas to the context of physical inactivity on someone sitting on the sofa and refusing to do anything different, the fact that this person's motivation for behavior change and exercise motivation may not be strong enough is only one explanation [9]. This theory explains how behavior influences an individual's lifestyle. The motivation or driving forces are intention, values, and beliefs. Driving forces motivate an individual to change their current state (inactivity); the stronger the driving forces, the more likely they are to become physically active. On the other hand, if there is a driving force, there are restraining forces; this is why individuals resist driving forces and opt for sedentary activities.

#### **IV. Conclusion**

Based on the findings, it is concluded that the hypothesis of no significant relationship between the profile, physical activity, and sedentary behaviors towards the physical well-being of secondary teachers is accepted. Consequently, it is recommended that aside from physical well-being explore psychosocial factors and investigate the role of psychosocial factors such as stress, resilience, social support, and self-perception in shaping individuals' perceptions of physical well-being. Understanding how these factors interact with age, physical activity, and sedentary behavior can provide valuable insights or consider cultural and contextual factors that may influence perceptions of physical well-being. Investigate how cultural norms, societal expectations, environmental factors, and socioeconomic status interact with age, physical activity, and sedentary behavior to shape individuals' perceptions of well-being. Further research could conduct longitudinal studies to track changes in physical well-being over time and examine how age-related factors, physical activity levels, and sedentary behavior patterns influence these changes.

Longitudinal research can help identify potential causal relationships and clarify the impact of different variables on physical well-being. Further research may also design and implement health behavior interventions or developmental plans to increase physical activity and reduce sedentary behavior aimed at improving physical well-being, taking into account individual differences and preferences.

#### **Acknowledgment**

First of all, the researcher would like to thank Almighty God for His enduring grace, guidance, and protection that he has bestowed upon him during the entire process of this research.

The researcher extends heartfelt appreciation to her thesis adviser, Dr. Darwin D. Ofrin, for his invaluable guidance, encouragement, and unwavering support throughout this journey. The researcher would also like to express her sincerest gratitude to the LSPU President, Dr. Mario R. Briones, the Vice President for Academic Affairs, Professor Eden C. Callo, Ed.D, to the Campus Director, Associate Professor Joel M. Bawica, MIT, to the Dean of Graduate School and Applied Research, Dr. Edilberto Z. Andal, her research subject specialist, Dr. Roger A. Gimpaya, her research Statistician, Dr. Eva F. Puyo, and her research technical editor, Mr. John Vincent C. Aliazas. Their expertise and insightful feedback have been instrumental in shaping this research.

The researcher is indebted to their professors and mentors at Laguna State Polytechnic University – GSAR for their encouragement, scholarly advice, and intellectual guidance. Their commitment to academic excellence has inspired the researcher to strive for greater heights. To the staff in the graduate school for their administrative support, assistance, and dedication to facilitating the academic journey of all the students. Their professionalism and willingness to assist have been greatly appreciated.

To her parents, Ricardo M. Layag and Isidra L. Jalac, for their endless love, encouragement, and understanding. Their unwavering support has been a source of strength and motivation for the researcher. A very special thanks for their parental presence and guidance.

The researcher extends her appreciation to her friends especially Ma'am Kath and Sir Ray Jay, and her colleagues for their encouragement, support, and camaraderie. Their friendship has made this academic endeavor more enjoyable and meaningful.

Special thanks to the researcher's boyfriend, Kevin L. Jinang, for his unwavering love, understanding,

and encouragement throughout this journey. His support has been the researcher's anchor during both the challenges and triumphs of completing this research.

Gratitude is also extended to the Buenavista National High School – SHS, Marinduque State College – CICS for the stimulating discussions that succeeded in this study well. This organization serves as the researcher's support system in finalizing this research.

To all those who have supported the researcher along this journey, thank you from the bottom of her heart.

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