

P-ISSN: 2394-1685 E-ISSN: 2394-1693 Impact Factor (ISRA): 5.38 IJPESH 2021; 8(4): 342-354 © 2021 IJPESH www.kheljournal.com

Received: 13-05-2021 Accepted: 15-06-2021

Jomar B Esto

University of Southern Mindanao, Kabacan, Cotabato, Philippines

Porferia S Poralan

Physical Education Department, University of the Immaculate Conception, Davao City, Philippines

Understanding personality traits of students and their physical activity engagement: A convergent design

Jomar B Esto and Porferia S Poralan

DOI: https://doi.org/10.22271/kheljournal.2021.v8.i4f.2203

Abstract

The observed low level of physical activity among the students drives the curiosity to understand the dominant traits of Grade 10 students and whether these traits would associate with their physical activity engagement. Using a mixed method, convergent design, 150 student-respondents were selected from schools in the Cotabato province to respond to the survey questionnaire. At the same time, seven participants were invited to join the In-Depth-Interview and ten participants in the Focus Group Discussion (FGD). The statistical tools used were frequency, mean, standard deviation, and Chi-Square Test for Association. Results revealed that agreeableness was the most dominant personality trait possessed by the Grade 10 students. Their physical activity engagement was moderate. The results further showed no significant association between personality traits and physical activity engagement among the participants. Moreover, the qualitative findings revealed five essential themes: a healthy and active lifestyle, school and home-based physical activity, positive emotion, social and physical demands, and personal belief and support. As to how participants' physical activity shaped their values, attitudes, and commitment, essential themes such as attention focus, positive disposition, prioritized task, and trying new physical activities emerged. Finally, data integration revealed nine merging-converging, and two of them were merging-diverging in nature.

Keywords: personality traits, status of physical activity, convergent design, Philippines

Introduction

Physical activity engagement continues to pull down bars as of this time. Many of the students are subscribing to sedentary lives. The increasing use of smartphones neglects physical activity, which can be detrimental to overall health. Inactivity is widely observed among teenagers, and it is high time to help students develop the habit of physical activity [39]. These may be the underlying reason why the Philippines, particularly the Department of Health, had advised the promotion of physical activity. Gadgets, various types of entertainment, and even social media all fall into this category., most of the time, contribute to a sedentary lifestyle of Filipino students attributing to their physical inactivity. In 2008, around 26.7 percent of Filipinos were overweight. Overweight incidence among Filipino children aged five to 10 years old has steadily grown, reaching 6.6 percent in 2008. Seemingly, their participation in physical activity has a drastic dropped [23].

Personality plays an important role in achieving individual's holistic development. Personality has played a big role in activity participation and mostly the eagerness to involvement; on the other hand, more benefits could be achieved when an individual is highly active or participative. The intensity level executed in doing activity could also be a factor in achieving a goal such as a fitness goal. Personality is a driven factor that raises the level of interest of the person in physical activity. Understanding of interconnectedness has begun to advance as studied in the bidirectionality of personality and physical exercise has been studied in recent years [44].

Objectives of the Study

The objectives of the study were (1) to determine the dominant personality trait of the participants, their status of physical activity engagement, (2) to identify the significant

Corresponding Author: Jomar B Esto University of Southern Mindanao, Kabacan, Cotabato, Philippines association between personality trait and physical activity engagement, the lived experiences, (3) to determine the role of lived experiences on shaping the values, attitudes, and commitment of the participants, and (4) to corroborate quantitative data with the qualitative data results.

Personality

Personality is a mirror of what you do and speak. Basically, personality defines who the person is. A person's behaviors reflect his or her personality and inform how different that person is from others ^[3]. The point of reference of this study is in a variety of behavioral and psychological studies, the Big Five personality characteristics model is used as a broad taxonomy. Agreeableness, openness, neuroticism, conscientiousness, and extraversion are the big five relatively independent dimensions of the personality traits model. The big five personality framework tends to be utilized and considered as one of the most prominent models in contemporary psychology ^[24, 14, 30].

Meta-analytic reviews suggest that among the five personality traits, physical exercise is favorably related with conscientiousness and extraversion, with some conflicting evidence for a modest negative association with neuroticism. Personality has played a big role in activity participation and mostly the eagerness to involvement; on the other hand, more benefits could be achieved when an individual is highly active or participative. The intensity level executed in doing activity could also be a factor in achieving a goal such as a fitness goal. Personality is a driven factor that raises the level of interest of the person in physical activity. Understanding of interconnectedness has begun to advance as studied in the bidirectionality of personality and physical exercise has been studied in recent years [44].

Another meta-analytic study indicates that about 20% to 40% reduction in risk of all-cause mortality when regular participation in physical activity could be applied across the lifespan [33], and the state of having a chronic condition is lower for those who are physically active individuals [13]. The findings of research on the relationship between Personality Types and Physical Activity Engagement resulted in positive outcomes.

Extraversion, agreeableness, conscientiousness, and emotional stability were found to be positively related with intrinsic motivation according to study [12]. The findings imply that persons with these personality qualities engage in physical exercise for their own personal and relational reasons. In other words, intrinsic motivation comes from having a link to relational and personal motivations for physical exercise. Intrinsic motivation could be one of the factors that would strengthen the physical activity engagement of the individuals.

Issues Associated with Physical Activity Engagement

Physical inactivity is a major contributor to illness and disability. The influence brought from external factors such as friends-influence of drug addiction such as tobacco & alcoholic drinks, and too many interests on mobile game playing. In short, having these sedentary lifestyles would be the possible main reasons why they chose to become inactive unknowing the potential benefits that are actively getting involved in physical activity could bring. In addition, a sedentary lifestyle increases all causes of mortality, and it doubles the risk of having cardiovascular diseases, diabetes, and an increase of any chronic conditions. About 60% to 85%

of the people in the world-from both developed and developing nations are having these kinds of conditions. However, there has been an insufficient response on the issue, and fewer interventions have been made to address this concern [55].

In addition, the lack of time due to hectic academic requirements and busy lessons to focus on, the lack of time due to responsibilities related to the family and social environment, some students prioritized some things over to exercise. More so, the barriers indicate that students see exercise and other physical activity involvement as a waste of time ^[5].

Having a sound personality is of vital importance in playing everyday roles. Numerous studies focused on exploring personality types, and their importance shows that personality has an impact on someone's physical development. Physical development, in the sense of being involved in any physical activity which uses energy to achieve a certain goal such as fitness, is considered important. Students within the basic education had already engaged in different activities, which most of them are not into the physically objective types of activity that led to the inactivity of the students. High technology products such as online mobile gaming influenced young individuals to have this sedentary lifestyle activity, but despite the truth, news on being inactive could lead to acquiring diseases, they still opt to live sedentary lives.

The lack of physical activity is a significant health problem in the adolescent population. To address this concern, varied activities are programmed in the school curriculum and maybe community programmed sports/recreational activities. Physical Education, as a core subject offered at all educational levels, is a subject that gives emphasis on the holistic development of the student and emphasizes primarily on the development of the physique. This one issue is wished to address understanding how one's personality affects his or her physical activity engagement in the subject, school activities, and other community involvement. Attitude towards Physical Education can be indicated by different factors like how the students perceive their competence in performing the activities, teacher-factors, curriculum, and provision of good facilities and equipment that will be used in the class.

Personality refers to long-term, enduring individual differences in emotional style and overall impact on emotional reactions, as determined by underlying behavioral tendencies ^[53]. Understanding individuals' personality would help the researcher to find out the reason behind the inactivity of students to physical activity and able to come up with assessments to improve one's performance. Personality refers to an individual's generally stable patterns of thought and personality that set them apart from others ^[47].

Physical exercise is usually advocated for its various physical health advantages and has something to do with the expenditure of energy through body motions in the context of physical activity participation [29]. Physical activity is also good to the mental health of young individuals [11]. Physically active learners are more engaged in their school sessions, according to growing evidence [54]. Behavioral engagement refers to a set of behaviors that show participation in school activities, and it is most assessed through students' classroom conduct, time on task, and focus. Concentration is often considered a kind of cognitive engagement; however, it is more frequently regarded a form of behavioral engagement when defined as the act of concentrating attention [21]. Fidgeting in class, time off-task, and inattention are common

indicators of behavioral disengagement.

Conceptual Framework

The study was able to identify the relationship between the Independent and the dependent variables as the personality traits of the students using Big Five Factors personality served as the independent variable of the study in which personality dimensions are the following: the extraversion, agreeableness, conscientiousness, neuroticism, and openness are the main traits to be assessed using a questionnaire [25]. Physical Activity Engagement served as the dependent variable. The study investigates the grade 10 students' physical activity during their spare time, physical activity at lunch, physical activity during PE classes, sports/dance/play game after sports/dance/play school, game during weekends, sports/dance/play game during the evening and sports/dance/play game during the weekdays.

Materials and Methods

This study employed a convergent mixed-methods design. The basic premise of this methodology is that combining quantitative and qualitative approaches allows for a more comprehensive and synergistic use of data, as well as gains in breadth and depth of understanding and corroboration of data, while offsetting the weaknesses inherent in using each approach separately and provides a more complete and comprehensive understanding of the research problem than either quantitative or qualitative approach alone. Given the following advantages, the common issue in the use of this research design is its complexity and resolution to discrepancies that may arise in the interpretation of the findings [15]. The convergent design has an emphasis on obtaining different but complementary data on the same topic to understand the research problem best. In this study, the researcher utilized quantitative and qualitative methods to gather data. A descriptive-correlation method was used for the quantitative part of the research, and the corroboration approach was used for the qualitative part of the study to describe how the dominant personality trait of the students influences their engagement towards physical activity [16]. The descriptive category includes correlation studies that are new or to modify or control corroboration. The primary interest of this study was to describe association among the variables, without seeking to establish a causal connection.

This study was conducted in the Province of Cotabato. In the quantitative phase of the study, the participants were all grade 10 students enrolled in the following institutions, University Laboratory School-University of Southern Mindanao, Notre Dame of Kabacan Inc., and Kabacan Wesleyan Academy Inc. with a total of 150 respondents. In qualitative phase, a different set of participants were determined, and purposive sampling technique was utilized in the selection of the participants. The researcher tried to find students who can and are willing to provide information through knowledge or experience. A total of 10 key participants for In-depth Interviews (IDI) and seven participants for the focus group discussion (FGD) were invited, these number of qualitative participants was considered to capture the substance. Quota sampling being employed to which 50 students from each institution became the respondents of the study.

For the qualitative part of this study, the researcher used a purposive sampling technique in determining the samples. To ensure that researcher spoke with varied people to build a more positive view regarding the lived experiences and insights of students as regards to personality traits and

physical activity engagement. A consent form was read and signed by the participants before the schedule of the interview. This form contains their rights, benefits, and privileges if they so decide to participate in the study; by way of signing, the participant agreed to take part in the research and agreed to the conditions set by the researcher. Since participants belong to a vulnerable age, the study does not entail a highly sensitive issue, however, an ascent form was still accomplished before the conduct of the research.

The study made use of questionnaires adapted from the study by Peeters et al. 1995, and International Physical Activity Questionnaire. Format of the questionnaire was revised to suit for easy understanding of each indicator of the study. To generate quantitative data for personality traits questionnaires on Big Five Personality Traits authored by John & Srivastava (1999) was used. It consists of 44 five-point Likert scale questions that are written in English and measures the student's personality trait. The first part of the questionnaire, respondents answered by checking the corresponding numeric response to each question that best reflects their personality status. Frequency and percentage were the statistical tools used in determining the dominant personality traits of the students. The second part of the questionnaire is a five-point Likert scale. A criterion for identifying the level of physical activity engagement is presented below. The respondents answered the questionnaire by ticking the corresponding numeric response to each question that best reflects their level of physical activity engagement. The questionnaire went into validity test and reliability test. Experts in the field were consulted for the validity of the content. The pilot testing made was for the reliability test, and personality traits have a Cronbach's Alpha of .917, which has forty-four number of items; and on the physical activity engagement variable, it has a Cronbach's Alpha of .889, which was computed using the 23 items test. The Cronbach's Alpha results were found within the reliability ranges, which means all items in the questionnaire were reliable to use.

In the quantitative phase of the study, the use of descriptive correlation design, frequency counts, and percentages for the dominant personality trait of the students were statistical tools employed to analyze the data. To compute the level of physical activity engagement, the mean and the standard deviation were used. The chi-square was used to test the association. The results of the qualitative data analysis were sent to an experienced analyst for theme analysis. Several steps were followed to analyze and interpret the word data The analyst first became acquainted with the data by obtaining the audio-recorded materials, taking notes, and assigning preliminary codes to the data to describe the content. Themes are more general than codes, and they entail interpreting both codes and data [37].

Results & Discussion (Times New Roman, 12, Bold) Personality Traits of the Participants Dominant Personality Trait

The dominant trait of grade 10 students is agreeableness personality. Students' agreeableness seems like they were more likely to be warm and kind. The more agreeable one becomes, the more one becomes a trusting, helpful, compassionate, cooperative, soft-hearted person and who can maintain positive interpersonal relationships at work [14, 30].

Status of Physical Activity Engagement of the Participants Physical Activity During Spare Time

Students have low engagement together, which means

physical activity engagement is never observed, which implies that students demonstrate low physical activities during their spare time. Students have a low priority in participating in sports activities and any substantial physical activity engagement during their free time. Physical activities found out that this is not students' preference in their lives, but still, students are aware of the possible benefits that they could gain in physical activity engagement once they try and get involved [13]. In addition, few students were engaged in physical activity during their spare time. They have many competing goals in life, such as some youngsters refusing to attend physical education courses or even recess time to participate in academic activities such as remedial classes, which can enhance learning experiences and improve academic achievement [42].

Physical Activity during PE class

The student's status in terms of physical activity engagement during PE class is high, and it was observed most of the time. This means that only in physical education classes where the students get more involved in physical activity compared to other schedules in a week. During physical education class, the participation in physical activity of both boys and girls was at a high level. Their involvement in physical education classes also helped to lessen the sitting activities of boys, and it is a positive response among the students, and they can perform a moderate to vigorous physical activity [49].

Physical Activity at Lunch

Student's status on their involvement in physical activity at lunch was rated low, as seen in the findings, supported by the interpretation that physical activity engagement time was never observed. Children decline to engage in physical education or even recess to participate in academic programs such as remedial courses, which provide enriched learning experiences and are meant to improve academic performance. It seems that these academic-related activities are given priority to improve students' academic performance [42].

Physical Activity after School

It was found out that physical engagement after school was only sometimes observed. This implies that students have moderate involvement in physical activity. The findings support the study's findings that recreational sedentarism occurs on the way to school and at school during recess, lunch, and after-school programs, in which students tend to sit to complete schoolwork, and those students aged eight to eighteen have spent a significant amount of time on social media compared to other active types of activities [45].

Physical Activity during Evening

Student's participation in physical activity during the evening was rated moderate, and it was sometimes observed. After school programs for elementary and middle school students are projected to spend additional time that corresponds to a moderate to strong intensity level of physical exercise [7].

Physical Activity during Weekends

Respondents have shown moderate participation in physical activities during weekends, which is their involvement was sometimes observed. This implies a moderate physical activity engagement of the participants during weekends. On weekends, boys are more likely to engage in moderate to vigorous physical activity (MVPA). It was also discovered that weekend intervention techniques may be more beneficial

to low active youngsters throughout the week [18].

Physical Activity in the last 7 days

Participants' involvement in the last seven days was low, which means physical activity engagement time is never observed. This implies that respondents have had these minimal engagement activities in the last seven days. Physical Activity among Canadian Children on School Days and Non-School Days, reported in an article, contradicts the previous findings. It was shown that grade five kids' daily step counts were considerably greater on school days than non-school days (Saturday-Sunday) because they walk from home to school and back on weekdays, and they have numerous activities at school, including physical education class [52].

Physical activity during each day of the week

It was found out that the grade 10 respondents were moderately active on Saturdays and implies that during weekdays students have very low physical activity. The main reason for not practicing sports and exercising during school days and after attending school was due to time limitations [1]. Time limitation that causes less involvement in physical activity is also true to the experiences of the students who were involved in the study.

Significance of association between personality trait and physical activity engagement

The result shows that there was no significant influence that existed between the respondents' personality trait and their physical activity engagement (p=.607). Furthermore, this backs up the findings of a study that found no link between agreeableness as a personality characteristic and physical activity in a meta-analysis of personality correlates of physical activity [43]. Since there was no presence of an association between the two variables; this implies that the physical activity engagement of the respondents is not associated with their personality traits. The findings revealed that moderate physical activity engagement is not enough to have a relationship with personality.

Lived Experiences of Grade 10 Students as Regard to their Physical Activity Engagement Healthy Active Lifestyle

The physical activity involvement of students is only activated by these reasons, maintaining their health, creating an active lifestyle, and improving discipline among themselves. These entail that student have primordial interest in making themselves sturdy, strong, and healthy at the same time, even if they are in school or not. The result is congruent to the study which posits that the motivation for engaging in physical activity is closely linked to keeping oneself physically fit and healthy [46]. Physical exercise, as a result, cannot be dismissed as beneficial to one's health. Furthermore, this backs up the findings that indicates that the appropriate exposure to high-intensity physical education activity is an active contributor to a healthy lifestyle and improved quality of life in youngsters and across the lifespan [9]. Students were aware of maintaining their health by involving themselves in different physical activities to achieve a healthy lifestyle.

School and Home-Based Physical Activity

The extent of involvement in physical activity of the students does not only rely primarily on what expectations from them to be—in MAPEH class. Findings revealed that students were

also engaged an physical activities such as dancing with family members at home and playing ball games with their friends at school. This posits the extent of what they do, depends upon their interest and availability. Knowing that they cannot do everything during the PE period, then it is most likely that they do it outside the time-bounded period found that on weekends, boys and girls engage in more moderate physical activity (MPA) and even more to some-moderate to vigorous physical activity (MVPA) [18]. It was also shown that weekend intervention techniques may assist youngsters who are not as active throughout the week.

Positive Emotion

In doing physical activity, the student feels happy, relieved when they engaged in physical activity. This is a common reaction coming from the students in which they felt distressed after engaging in physical activity. The result confirms by the statement that, exercise was considered a vital way of maintaining someone's fitness in terms of physical, mental, and even the totality of wellbeing. Exercise could also lessen stress among individuals. Motivation, conduct, and commitment to physical education are all influenced by emotion. Pleasant sentiments about a work make it worthwhile to devote one's attention to it, to immerse oneself in it, and to desire to repeat it. Positive emotions, on the other hand, would benefit kids in encouraging them to participate in physical exercise for the rest of their lives [34].

Social and Physical Demands

The students experienced challenges and difficulties, and some of them had encountered having a plus-size body built as a problem, back pain, shortness of breathing, and complying with the demands at school and in doing physical activity. The main reason why students engaged was just for weight management, social interaction, and enjoyment. In a qualitative study, *it was* found out that young girls were a concern about maintaining their slim body shape because they see it as one of the challenges, children are being shy of having a slim body, and even shy of showing to others; lack of self-confidence and competence were a common issue in physical activity engagement and other recreational participation among masculine students [2].

Personal Belief and Support

Students have encountered different challenges and difficulties in life. They tend to cope when they get encouragement from family and friends, trust oneself, and practice things until it is perfected. This implies that Filipinos are strong enough and have this positive personality of being able to surpass challenges along with the support of the families and trusting oneself is a great thing. Students who have always exerted effort to face difficulty are characterized by an individual who has high self-efficacy. Individuals with high self-efficacy or self-belief set higher objectives and are more devoted to finding and implementing better ways to achieve those goals [4]. Peers and friends can encourage kids to engage in physical exercise and improve their enthusiasm to do so. When kids get involved in extracurricular activities, it can help them deal with personal difficulties and obstacles. The increasing the number of buddies increases the reinforcement to make someone perform more workouts [19].

Role of Experiences in Shaping the Values, Attitudes, and Commitment of the Participants

Attention Focus

One of the values that students develop in trying to engage in

physical activity engagement is attention focus. The students were inspired in performing activities, and they even acknowledged their strength & weakness in doing such activities. Students became lively, had fun, develop confidence. Activity participation among women has shown an essential effect, such as improving happiness to which they become happier and value doing active lifestyle activities, and even having weight training activities uplift the positive effect of pursuing lifelong activity [48]. Furthermore, more involvement in sports activities is likely to enhance the emotional well-being of an individual [17]; Actively participating in physical activities increased the likelihood of having a positive body image and a positive self-perception of mental and physical health in youngsters. Another researcher also posited that sports participation among individuals increases happiness [22]; additionally stated that learners with high self-efficacy are predicted to be more inspired of doing things and have higher ambitions than those students with low academic self-efficacy [41, 8].

Positive Disposition

The student's attitude towards physical activity is based on their belief that nothing is impossible if one perseveres and considers physical fitness to be necessary to live longer and open to build a positive relationship and outlook in life. This indicates that the students were doing physical activity to stay away from sickness, stay healthy, become fit, have a longer life span, improve attitude towards others, are encouraged to do better, and have this positive outlook in life. Furthermore, the findings of this study are consistent with the findings that pupils who have a more favorable attitude toward physical education had a greater degree of positive disposition [26]. Furthermore, people who have a greater conviction in their ability to perform a physical task are more likely to enjoy the activity than those who are physically inept [20]. Students who have a more positive attitude towards physical education are those who were actively engaged in sports and in any physical activities outside the school [28, 32, 50].

Commitment

The students' commitment is manifested in their pledge to complete tasks, and the promise to enjoy the present moment. This means that students are hardworking, able to learn time management, energetic, and do multitasking. Personality has little impact on commitment and work value, and as the results demonstrate, survey participants scored higher on career commitment and job value. On the other hand, someone's devotion to their career will have a major impact on the worth of their work [51].

Data Integration of the Salient Points of the Quantitative and Qualitative Finding

The quantitative data and qualitative data findings, when integrated, out of eleven findings, nine of them were merging-converging and two were merging-diverging in nature.

On the Dominant Personality of the Participants

In the first finding under the personality of the participants, the dominant personality trait of the participants was agreeableness with which half of them possess. Respondents were displaying a friendly and pleasant manner. This parallel to the qualitative data findings of students possessing this positive emotion with the axiological implication that indicates that the students are trusting and amicable. Merging-converging in nature, this implies that agreeableness has a positive impact on building relationships among people.

Individual behavioral qualities that are viewed as kind, empathetic, cooperative, warm, and thoughtful are also manifestations of this personality feature. Although a recent meta-analysis of personality correlates of physical activity (Rhodes & Smith, 2006) found no link between physical activity and agreeableness, highly agreeable individuals would have a better chance of building rapport during physical activity engagement than less agreeable individuals [35]. Relative to its axiological implication, agreeableness can be the springboard for making new friends and, at the same time, increase one's chance to engage in physical activity. It gives a person a platform to eradicate the possibility of failing to gain friends.

In the second finding under the impact on the personality of the participants, the dominant personality trait of the participants, specifically agreeableness, also converged with the qualitative theme result of being open to building positive relationships and outlook in life. These two findings are merging converging in nature. This suggests agreeableness aids in the formation of interpersonal bonds. Individual behavioral qualities that are viewed as kind, empathetic, cooperative, warm, and thoughtful manifestations of this personality feature. Moreover, in the third finding under the impact on the personality of the participants, the dominant personality trait of the participants, specifically, agreeableness, corroborated to the qualitative findings, specifically having a positive disposition in facing challenges. These two findings are merging converging and implies that being warm, altruistic, an affectionate, trusting, and friendly has an inclination that whenever problems arise, a person may always be steadfast and sturdy. In the light of challenges, personality trait such agreeableness is considered essential. Personality trait leads people to care for the potential consequences of their actions. They need to surround themselves with the possible outcome which options at the outset shall be taken into consideration than to indulge themselves in impulsive decisions which challenges at hand are affecting them. Thus, on the verge of problems, one should have agreeableness to overcome challenges [6].

Further, the fourth finding stated agreeableness converged with the qualitative findings specifically on the theme of students vow to complete a task. The findings are merging converging in nature and infers that a personality trait of agreeableness in life may lead individuals to different positive effects such as completing a task, succeeding in a mission, or finishing a job with the help of others. This personality trait tends to lead a person to be efficient and organized instead easy-going and disorderly. People who are empathetic towards other people have higher levels of this trait [36].

Moreover, the fifth finding converged with the qualitative findings that students pledge to step outside of their comfort zone. These two are merging converging in nature and imply that being good can boost self-esteem and self-confidence among students pursuing to come out form their shells and make a difference. This finding conforms to study which found out that people are sometimes encouraged to push themselves out of their comfort zones to willfully make themselves do things that make them uncomfortable or afraid [31] [38]. Hence, its axiological implication supports the cited statement in which students won't allow fear to swallow them. Finally, the sixth finding converged with the qualitative findings specifically promised to try new physical activities. These two are merging converging in nature implies that having an agreeableness personality and being an empathetic individual could lead them to try physical activities as these are their new set goals. So, when things are new, they usually carefully plan it and make sure that everything goes well. It was speculated that goal-oriented behavior could be the main facet of why certain people are decisive in what they want because they know at the end, their efforts paid off. Thus, in its axiological implication, individuals tend to be adventurous because they know something, in the end, is expected. They opt to try new things with the perception in mind that their actions have positive or negative consequences ^[6].

Status of Physical Activity of the Participants

In the first quantitative finding under the status of physical activity of the participants, they engaged themselves in physical activities once they have spare time. Meanwhile, in the qualitative findings, they insinuated that they still consider the importance of health, so they take an active role in realizing it. These findings are merging diverging in nature and are manifesting among students that the academic world is now exhausting them to do many things, so they tend not to do physical activity. A research findings agreed with the results claiming that external physical activity variables such as a lack of resources, support, and time influenced respondents in his study [40]. He also mentioned in his study that individuals' reason to attend a physical activity was because of health. Thus, in the axiological implication, though the significance of health among students is of paramount importance, still physical activities are realized once they are free from the academic demands. In the second finding, the participants consider Zumba and dancing as dancing is common among the participants. These findings are merging converging in nature that entails that the participants are more on aerobics activities, and dancing is their favorite.

Inclined activity among individuals and dancing can be adjusted to fit a target population's age, traditions, norms, and even some physical limitation. The axiological implication to this dancing is among the appealing physical activities, and students consider this as their source of exercise. In the third finding under types of activities, the participants are engaged by playing basketball/volleyball together with friends or classmates and playing badminton as a form of physical activity, which converged with the qualitative findings that participants are playing ball games. These findings are merging converging in nature that seminal studies have said that students love playing sports, mainly basketball, badminton, volleyball, soccer, baseball, football, and kickball [27]. The result can be concluded that playing the sports mentioned above can have direct access to gain friends and build harmonious relationships among other students. Thus, in the axiological implication, the main reason why student engaged and loved to play team sports are basically because of the positive aspect it contributed to one's interpersonal skills. Fourth finding likes physical activities during their physical education classes, which profoundly converged with the qualitative findings that they perform physical activities. Findings are merging converging in nature. Hence, in its axiological implication that physical education time is very important, which can lead to active participation among the students.

On the Significance of Association

In terms of the quantitative data, there was no evidence of a link between personality characteristics and physical exercise participation. Hence, it diverged from the result in table 4.2 with a code of emphasizing that energetic and friendly, its axiological implication infers those students being

energetic and friendly. Yet, they do not have physical activity engagement. This suggests that agreeableness has a beneficial influence on forming interpersonal connections, and that this attribute shows itself in individual behavioral traits such as kindness, sympathy, cooperation, warmth, and consideration. In a recent meta-analysis examining personality as correlates of physical activity, findings indicated that there was no connection between physical activity and agreeableness [43].

Table 1: Personality Traits of the Participants

	Frequency	Percentage
Extraversion	5	3.3
Agreeableness	76	50.7
Conscientious	16	10.7
Neuroticism	6	4
Openness	47	31.3

Table 2: Status of Physical Activity Engagement of the Participants

Indicators	Mean	SD	Interpretation	
1. Physical Activity during Spare Time				
1. I do skipping rope as an exercise.	1.57	1.01	Very Low	
2. I am walking for exercise.	3.33	1.32	Moderate	
3. I ride a bicycle as a form of exercise.	2.13	1.21	Low	
4. I do jogging or running.	2.52	1.07	Low	
5. I love aerobics (Zumba) as a form of exercise.	1.94	1.16	Low	
6. I like swimming to increase my body strength.	1.57	.99	Very Low	
7. I play basketball/volleyball together with friends	2.39	1.47	Low	
8. I consider dancing as a form of exercise.	2.54	1.33	Low	
9. I play badminton as a form of physical activity	2.01	1.26	Low	
10. I play soccer as form of exercise.	1.39	.92	Very Low	
Category Mean	2.21	.82	Low	
2. Physical Activity during PE classes.	3.54	.92	High	
3. Normal Activity at Lunch.	1.86	1.07	Low	
4. Sports, Dance, or Play Game after school.	3.08	1.25	Moderate	
5. Sports, Dance, or Play Game during evening.	2.73	1.33	Moderate	
6. Sports, Dance, or Play Game during last weekend.	2.99	1.21	Moderate	
7. Describes you best for the last 7 days.	2.42	1.14	Low	
8. Physical Activity for Each Day Last Week				
1. Physical activity last Monday	2.54	1.20	Low	
2. Physical activity last Tuesday	2.94	1.25	Moderate	
3. Physical activity last Wednesday	2.59	1.18	Low	
4. Physical activity last Thursday	2.93	1.17	Moderate	
5. Physical activity last Friday		1.27	Moderate	
6. Physical activity last Saturday		1.38	Moderate	
7. Physical activity last Sunday		1.35	Moderate	
Category Mean	2.76	1.05	Moderate	
Overall Mean	2.69	1.34	Moderate	

Table 3: Significance of Association between Personality Trait and Physical Activity Engagement

Personality Trait	Value	Asymp. Sig (2 sided)	Interpretation
Physical Activity Engagement	10.097	.607	Not Significant

Table 4: Lived Experiences of Grade 10 Students as Regard to their Physical Activity Engagement

Issues Probed	Core Ideas	Code/ Categories	Essential Theme	
	Maintain wellness of having healthy body	Maintaining their health status		
	Healthy body	hy body		
	Enjoy doing Zumba at home			
Reasons for engaging in physical	Fun even though its tiring		Healthy active lifestyle	
activity	More active lifestyle Creating an active lifestyle			
	Tiring but fun			
	Improve skill as a student Improving discipl			
	Happy to be disciplined	student		
	Dancing Zumba with family			
Extent of involvement in physical activity	Joining contemporary dance	Dancing most of the time	School and home based physical	
	Doing exercises in the house (Zumba)			
	Sports like badminton, volleyball and tennis	Dlaying hall games	activity	
	Play volleyball	Playing ball games		

	Varied of Physical activities during MAPEH class	Involving on MAPEH classes		
	Watching videos			
	Watching UAAP games	Keeping energetic		
	Enjoying it, in-love with dancing	Reeping energetic		
	Hardworking.		Positive emotion	
On their personality trait	Playing with friends after class			
	Being Confident			
	Build character when pressured	Good feelings		
	Нарру			
	Strong			
	Hard time breathing		Social and Physical Demands	
	Have a heart problem	Experiencing back pain and		
	Back problem	shortness of breath		
Challenges and Difficulties	Plus size			
	Waking up early in the morning	B 11 . 1 . 1 . 1		
	Tired but need to do physical activities	Problems in doing physical activity		
	Hard time doing sit ups and plunking	activity		
	Seek advice and guidance from parents and teachers	D		
	Encourage by friends	Receiving encouragement from family and friends		
	Receive motivational words from family	from family and mends	Personal belief and support	
Coping with the challenges and difficulties	Reminding oneself to pursue			
	Trust myself	Twisting angelf		
	Encourage oneself to finish the activities	Trusting oneself		
	Thinking positive			
	Practicing	.		
	Learning from mistakes	Doing practice until it is perfected		
	Endure the pain	porrected		

Table 5: Role of Experiences on Shaping their Values, Attitudes, and Commitment of the Participants

Issues Probed	Core Ideas	Code/Categories	Essential Theme	
On Values	Physical activities can help in happy lifestyle			
	Makes one lively	Inspired in doing activities		
	Fun, has many benefits		Attention focus	
	Can build confidence		Attention focus	
	Trust to oneself	Acknowledged their strength and weakness		
	Can do a lot of things			
	Doing the activity even if it's difficult	Nothing is impossible if one perseveres		
	Nothing is impossible	Nothing is impossible if one perseveres		
	Doing it to stay away from sickness			
	Stay healthy	Considers physical fitness to be important in living	Positive disposition	
On Attitude	Become fit	longer		
	Have longer life span			
	Improve the attitude towards others			
	Encourage to do better	Open to build positive relationship and outlook in life		
	Positive outlook in life			
	Hardworking		Prioritize task	
	Forget being shy			
	Learn time management	Vow to complete task		
	Energetic			
	Doing multitasking			
	Makes one think on the need to work hard			
	The need to relax	Promise to enjoy the present moment		
On	Let go of stress related matters		Try new physical activities	
Commitment	Doing the activity to overcome difficulty	Pledge to step outside of the comfort zone		
	Get out of the comfort zone	riedge to step outside of the conflort zone		
	Get involved in activities	Determined to get more involved in physical activities		
	Do physical activities	Determined to get more involved in physical activities		
	Know oneself before involving in physical			
	activity	Vow to make goals happen		
	Do the task that was not done before	vow to make goals happen		
	Enjoy the activity while doing it			

Table 6: Joint Display of Quantitative and Qualitative Findings

Focal Points	Quantitative Data Findings	Qualitative Data Findings	Data Integration/Nature	Axiological Implications
On the personality traits of the participants	Table 1 On the dominant personality trait of the participants specifically agreeableness (50.7%).	Table 4.2 with a theme positive emotion.	Merging-Converging	The students are trusting and are amiable.
		Table 5 with a code/category open to build positive relationship and outlook in life.	Merging-Converging	The students do not have difficulty making friends.
		Table 5 with an essential theme have a positive disposition	Merging-Converging	The students do not have difficulty in facing challenges since they believe that people will help them.
		Table 5 with a code/category vow to completing task	Merging-Converging	The students are determined to succeed.
		Table 5 with a code/category pledge to step outside of the comfort zone	Merging-Converging	The students will not allow fear to swallow them.
		Table 5 with an essential theme try new physical activities	Merging-Converging	The students are adventurous and are decisive to get what they want.
Status of Physical Activity of the Participants	Table 2 on physical activity during spare time (mean=2.21	Table 4.2 with the essential theme healthy active lifestyle	Merging – Diverging	The students recognize the need to care for their health but with the demands at school they use their spare time to comply with academic requirements.
	Table 2 on aerobics (Zumba) as a form of exercise (mean=1.94) and consider dancing as a form of exercise (mean=2.54)	Table 4.2 with code/category dancing most of the time.	Merging – Converging	The students love for dancing became a source of their exercise.
	Table 2 on play basketball/volleyball together with friends/classmates (mean=2.39), play badminton as a form of physical activity (mean=2.01	Table 4.2 with code/category playing ball games	Merging-Converging	The students love to play team sports.
	Table 2 on physical activity during PE classes (mean=3.54)	Table 4.2 with code/category being active during MAPEH time	Merging-Converging	MAPEH class is the students main source of physical activities
	Table 2 on table summary of the participants physical activity engagement (mean=2.51)	Table 4 with an essential theme school based physical activity	Merging-Converging	The students physical activity engagement is limited only to school activities.
On the significance of association	Table 3. On the significance of association between physical activity engagement and personality trait (asymp. sig =.607)	Table 4 with a code/category energetic and friendly	Merging-Diverging	Despite of the students being energetic and friendly they do not have physical activity engagement this may be caused by their excessive use of technology.

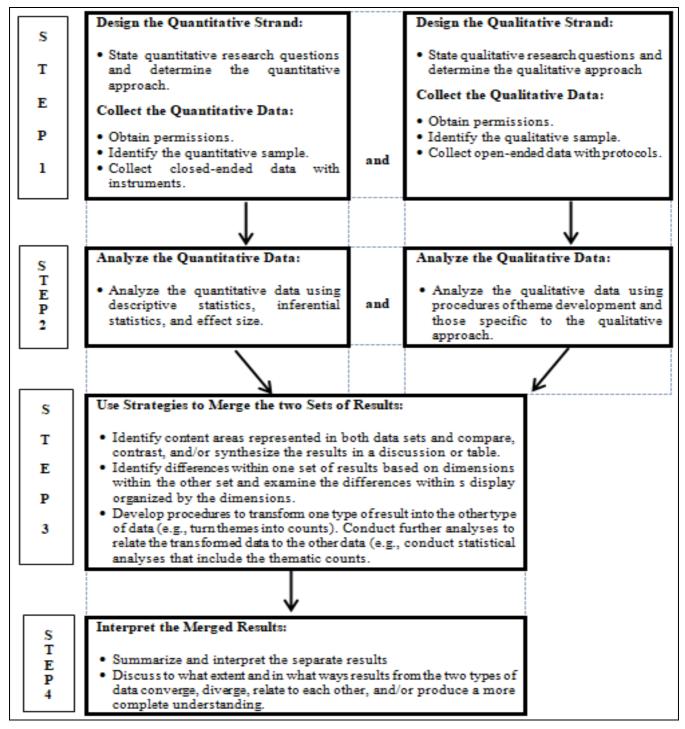


Fig 1: Flow of Procedures

Conclusions

Agreeableness, as the dominant personality trait of the students is followed by openness, conscientiousness, neuroticism, and lastly, extraversion. Physical activity engagement among the students were moderate, that simply implies that students' physical activity engagement was sometimes observed during their spare time, after school, lunchtime, weekends, and during weekdays. There was no evidence of a link between the students' personality characteristics and their physical activity. This revealed that personality traits do not necessarily define their physical activity engagement. All types of personalities are potentially inclined to engage in physical activity. The lived experiences of the students were highlighted in the following themes: healthy lifestyle, school and home-based physical activity, positive emotions, social and physical demands, and personal

belief and support. Participants' values, attitude, and commitment to physical activity were expressed in the following themes: attention focused, positive disposition, prioritize task and try new physical activity. The qualitative and quantitative data corroborated in merging-converging and merging diverging nature.

Acknowledgment

The researcher expresses his sincere and heartfelt appreciation to the numerous people who had helped make this research work a reality. To Dr. Avee B. Joy Dayaganon for the encouragement to pursue this endeavor. To Dr. Porferia S. Poralan, his thesis adviser, for extending her intellectual insights, guidance, and support from the start to the final phase of this research. The researcher also extends his gratitude to Ruben L. Tagare, for extending their words of

wisdom, valuable pieces of advice, guidance and countless efforts that helped the researcher to have the courage to finish this research. Without these entities, the completion of this paper could not have been possible. To the Esto Family, his lovely parents, for the prayers and kind understanding throughout the conduct of the study. Above all, to the Almighty Father, for the constant blessings in terms of physical, mental, emotional, social, and spiritual aspect, for the wisdom during the comprehensive examination and for journeying with him throughout the duration of the study, for the protection during his travels for schooling, for the strength during the test of times, and for the guidance along the whole journey of this study.

References

- Alkhateeb SA, Alkhameesi NF, Lamfon GN et al. Pattern of physical exercise practice among university students in the Kingdom of Saudi Arabia (before beginning and during college): a cross-sectional study. BMC Public Health 2019;19:1716. https://doi.org/10.1186/s12889-019-8093-2
- Allender S, Cowburn G, Foster C. Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. Health Education Research 2006;21(6):826-835. https://doi.org/10.1093/her/cyl063
- 3. Alpatanni P. Personality 2015. https://www.research gate.net/publication/287217339_Personality
- 4. Artino AR Jr. Academic self-efficacy: from educational theory to instructional practice. Perspectives on medical education 2012;1(2):76-85. https://doi.org/10.1007/s40037-012-0012-5
- 5. Arzu D, Tuzun E, Eker L. Perceived Barriers to Physical Activity in University Students 2006. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3861763
- Barrick MR, Mount MK, Strauss JP. Conscientiousness and Performance of Sales Representatives: Test of the Mediating Effects of Goal Setting. Journal of Applied Psychology 1993;78(5):715-722.
- 7. Bassett DR, Fitzhugh EC, Heath GW, Erwin PC, Frederick GM, Wolff DL *et al.* Estimated energy expenditures for school-based policies and active living. American Journal of Preventive Medicine 2013;44(2):108-113.
- 8. Bassi M *et al.* Academic Self-Efficacy Beliefs and Quality of Experience in Learning. Journal of Youth and Adolescent 2007;36:3. PubMed. http://iasir.net/AIJRHAS Spapers/AIJRHASS18-242.pdf
- 9. Bevans K, Fitzpatrick LA, Sanchez B, Forrest CB. Individual and Instructional Determinants of Student Engagement in Physical Education. Journal of teaching in physical education: JTPE 2010;29(4):399-416. https://doi.org/10.1123/jtpe.29.4.399
- 10. Bichescu A. Leisure Time Sport Activities of the Students at Resita University. Procedia Social and Behavioral Sciences 2013;117:735-740. https://www.sciencedirect.com/science/article/pii/S1877042814018217
- 11. Biddle S, Asare M. Physical activity and mental health in children and adolescents: a review of reviews. British Journal of Sports Medicine 2011. doi:10.1136/bjsports-2011-090185
- 12. Bowman KM. The Relationship Between Personality Type and Exercise Motivation 2015. https://encompass.eku.edu/cgi/viewcontent.cgi?article=13

- 41&context=etd
- 13. Brown *et al.* Social Activity and Cognitive Functioning Over Time: A Coordinated Analysis of Four Longitudinal Studies 2012. https://www.ialsa.org/content/brown-et-al-2012-social-activity-and-cognitive-functioning-overtime-coordinated-analysis
- 14. Costa P, McCrae RR. A five-factor theory of personality. The Five-Factor Model of Personality: Theoretical Perspectives 1999;2:51-87. https://www.researchgate.net/publication/284978581_A_fivefactor_theory_of_personality/
- 15. Creswell JW. Designing and Conducting Mixed Method Research. Third Edition 2017. https://us.sagepub.com.
- 16. Creswell JW, Plano Clark VL, Gutmann M, Hanson W. Advanced mixed methods research designs. In A. Tashakkori & C. Teddlie (Eds.), Handbook of mixed methods in social & behavioral research 2003,209-240p. Thousand Oaks, CA: Sage. https://www.sagepub.com/sites/default/files/upm-binaries/35066_Chapter3.pdf
- 17. Donaldson SJ, Ronan KR. The effects of sports participation on young adolescents' emotional well-being. Adolescence 2006;41(162):369-389.
- 18. Fairclough S, Boddy L, Mackintosh K, Valencia-Peris A, Ramírez R. Weekday and weekend sedentary time and physical activity in differentially active children. Journal of Science and Medicine in Sport 2014, 18.10.1016/j.jsams.2014.06.005.
- Faith MS, Leone MA, Ayers TS, Heo M, Pietrobelli A. Weight criticism during physical activity, coping skills, and reported physical activity in children. Pediatrics 2002;110(2Pt1):e23. doi: 10.1542/peds.110.2.e23. PMID: 12165622. https://pubmed.ncbi.nlm.nih.gov/12165622/
- Ferrer-Caja E, Weiss M. Predictors of intrinsic motivation among adolescent students in physical education. Research Quarterly for Exercise and Sport 2000;3:267-279. https://doi.org/10.1080/02701367.200 0.10608907
- 21. Fredricks J, Blumenfeld P, Paris A. School engagement: Potential of the concept, state of the evidence. Review of educational research 2004;74(1):59-109. doi:10.3102/00346543074001059
- 22. Gisladottir TL, Matthiasdottir A, Kristjansdottir H. The effect of adolescents' sports clubs participation on self-reported mental and physical conditions and future expectations. Journal of Sport Sciences 2013;31(10):1139-1145.
- 23. Gloor N *et al.* Sleep duration, positive attitude toward life, and academic achievement: The role of daytime tiredness, behavioral persistence, and school start times. Journal of Adolescence 2013. http://dx.doi.org/10.101 6/j.adolescence.2012.11.008
- 24. Goldberg L. Language and Individual Differences: The Search for Universals in Personality Lexicons. In L. Wheeler (Ed.), Review of Personality and Social Psychology. Beverly Hills, CA: Sage Publication 1981,141-165p. https://www.scirp.org/(S(i43dyn45teexjx 455qlt3d2q))/reference/ReferencesPapers.aspx?Reference ID=1905116
- 25. Goldberg LR. The structure of phenotypic personality traits. American Psychologist 1993;48(1):26–34. https://doi.org/10.1037/0003-066X.48.1.26
- 26. Gouveia E, Ihle A, Gouveia R, Lopes H. Students' Attitude Toward Physical Education: Project: Physical Education in Schools from the Autonomous Region of

- Madeira (EFERAM-CIT) 2019. https://www.ncbi.nlm.ni h.gov/pmc/articles/PMC3790905/pdf/40064_2013_Articl e
- 27. Hofferth SL. Changes in American children's time 1997 to 2003. Electronic international journal of time use research 2009;6(1):26-47. https://doi.org/10.13085/eijtur. 6.1.26-47
- 28. Hunuk D, Demirhan G. Turkish adolescents' attitudes toward physical education. Perceptual and Motor Skills 2010;111:324-332. https://doi.org/10.2466/06.07.11.1 3.pms.111.5.324-332
- 29. Janssen I, LeBlanc AG. Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. International Journal of trajectories and their different predictive relations to dropout. Journal of Social Issues 2010;64(1):21-40.
- 30. John OP, Srivastava S. The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), Handbook of personality: Theory and research. New York, NY, US: Guilford Press 1999,102-138p. https://psycnet.apa.org/record/1999-04371-004
- 31. Kiknadze N. Comfort Zone Orientation 2018. 10.13140/RG.2.2.27310.97601. https://www.researchgate.net/publication/330452689_Comfort_Zone_Orientation/citation/download
- 32. Koca C, Demirhan G. An examination of high school students' attitudes toward physical education with regard to sex and sport participation. Perceptual and Motor Skills 2004:98:754-758
- 33. Kodama S, Tanaka S, Heianza Y, Fujihara K, Horikawa C, Shimano H *et al.* Association between physical activity and risk of all-cause mortality and cardiovascular disease in patients with diabetes: a meta-analysis. Diabetes care 2013;36(2):471–479. https://doi.org/10.2337/dc12-0783
- 34. Leisterer S, Jekauc D. Students' Emotional Experience in Physical Education A Qualitative Study for New Theoretical Insights. Sports (Basel, Switzerland) 2019;7(1):10. https://doi.org/10.3390/sports7010010
- 35. Terracciano A, Lockenhoff CE, Crum RM *et al.* Five-Factor Model personality profiles of drug users. BMC Psychiatry 2008;8:22. https://doi.org/10.1186/1471-244X-8-22
- 36. Melchers MC, Li M, Haas BW, Reuter M, Bischoff L, Montag C. Similar Personality Patterns Are Associated with Empathy in Four Different Countries. Frontiers in Psychology 2016. http://journal.frontiersin.org/article/10.3389/fpsyg.2016.00290/full.
- 37. Mortensen D. How to do a Thematic Analysis of User Interviews 2018. https://www.interaction-design.org/literature/article/how-to-do-a-thematic-analysis-of-user-interviews
- 38. Newmark A. Chicken soup for the soul: Step outside your comfort zone: 101 stories about trying new things, overcoming fears, and broadening your world. Cos Cob, CT: Chicken Soup for the Soul 2017. https://www.amazon.com/Chicken-Soup-Soul-Overcoming-Broadening/dp/1611599741
- 39. Ng M, Fleming T, Robinson M. Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet 2014;384(9945):766-781. https://www.sciencedirect.com/journal/the-lancet

- 40. Oluyinka S, Endozo AN. Factors Affecting Physical Activity Participation Among University Students. Journal of Social Science Research 2019;14:3161-3170. 10.24297/jssr.v14i0.8142.
- 41. Pawlowski T, Downward P, Rasciute S. Subjective wellbeing in European countries on the age-specific impact of physical activity. European Reviews of Aging & Physical Activity 2011;8(2):93-102.
- 42. Pelligrini AD, Bohn CM. The Role of Recess in Children's Cognitive Performance and School Adjustment. Educational Researcher 2005;34(1):13-19.
- 43. Rhodes RE, Smith NE. Personality correlates of physical activity: A review and meta-analysis. British Journal of Sports Medicine 2006;40(12):958-965.
- 44. Rhodes R, Boudreau P. Physical Activity and Personality Traits 2017. 10.1093/acrefore/9780190236557.01 3.210.https://www.researchgate.net/publication/3141146 48_Physical_Activity_and_Personality_Traits
- 45. Rideout V, Foehr UG, Roberts DF. Generation M2: Media in the lives of 8 to 18-year-olds. Washington, DC: Kaiser Family Foundation 2010. https://www.nap.edu/read/18314/chapter/8#307
- 46. Rios D, Cubedo M, Rios M. Graphical study of reasons for engagement in Siedentop, D., Hastie, P., & van der Mars, H. (2004). Complete guide to Sport Education. Champaign, IL: Human Kinetics 2013. https://www.researchgate.net/publication/325653785_Stu dents'_Attitude_Toward_Physical_Education_Relations_With_Physical_Activity_Physical_Fitness_and_Self-Concept
- 47. Roberts BW, Wood D, Caspi A. The development of personality traits in adulthood. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality: Theory and research. New York, US: Guilford Press 2008,3:375–398.
- 48. Salesi M, Jowkar B. Effects of Exercise and Physical Activity on Happiness of Postmenopausal Female. Salmand: Iranian Journal of Ageing 2011,6(2). http://salmandj.uswr.ac.ir/article-1-415-en.html
- 49. Salvy SJ, Roemmich J, Bowker J, Romero N, Stadler PBS, Epstein L. Effect of Peers and Friends on Youth Physical Activity and Motivation to be Physically Active. Journal of Pediatric Psychology 2009;34(2):217-225. https://doi.org/10.1093/jpepsy/jsn071
- 50. Subramaniam PR, Silverman S. Middle school students' attitudes toward physical education. Teaching and teacher education 2007;23(5):602-611. ISSN 0742-051X. https://doi.org/10.1016/j.tate.2007.02.003
- Sun J, Wang J. A study on career commitment and work value of physical education teachers in Chinese traditional sports school. Journal of Discrete Mathematical Sciences and Cryptography 2018;21(6):1467-1472, DOI: 10.1080/09720529.2018.1527816
- 52. Vander-Ploeg KA, Wu B, McGavock J, Veugelers PJ. Physical activity among Canadian children on school days and non-school days. Journal of Physical Activity & Health 2012;9:1138-1145. pmid:22207077.
- 53. Warr P. Well-being and the workplace. In ED InD. Kahneman, Well-being: The foundation of hedonic psychology. New York: Russell Sage Foundation Press 1999.
- 54. Whitt-Glover MC, Ham SA, Yancey AK. Instant Recess®: a practical tool for increasing physical activity during the school day. Progress in community health

- partnerships: research, education, and action 2011;5(3):289-297. $https://doi.org/10.1353/cpr.20\\11.0031$
- 55. World Health Organization. Global Strategy on Diet, Physical Activity and Health 2019. https://www.who.int/dietphysicalcativity/factsheet_young_people/en/