

# Physical Activity and Exercise Participation Motives as Correlates of Dance Skills Performance Among Grade 10 Students

Safra, Gloryfaith M.<sup>a</sup>, Edilberto Z. Andal, EdD.<sup>b\*</sup>

<sup>a</sup> gloryfaithsafra03@gmail.com, <sup>b</sup> edilberto.andal@lspu.edu.ph

<sup>a</sup>Teacher 1, Cagbalete Island National High School, Mauban 4328 Quezon, Philippines

<sup>b</sup>Doctor of Education- College of Teacher Education, Graduate Studies and Applied Research, Dean, Laguna State Polytechnic University, San Pablo City Campus 4000 Laguna, Philippines

---

## Abstract

This study aimed to determine the relationship of physical activity and exercise participation motives with that of the dance skills performance of students. This study utilized the descriptive- correlational research design with 40 of Cagbalete Island National High School Grade 10 students of the academic year 2021-2022 as the respondents. Participatory motives were measured using the Exercise Motivation Inventory (EMI-2) of Markland (1997). The statistical tools used were the mean statistics standard deviation in determining the participation motives of the respondents and Pearson Product-Moment Correlation Coefficient in determining the relationship between the participatory motives and dance skills performance of the respondents. Results show that enjoyment is the top motive of the students to participate in physical activity and exercises. They are very good in manifesting their physical, technical and skills performance. It was concluded that there is a significant relationship between the physical activity and exercise motives in terms of enjoyment with that of the dance skills performance of the students, which implies that enjoyment plays a crucial role in their physical activity participation. To ensure enjoyment in Physical Education (PE) it is suggested that teacher consider certain enjoyment processes particularly activity-related excitement when structuring PE activities and programs.

Keywords: Participation Motives, Dance Skills, Physical Activity, Dance Performance

---

## 1. Main text

### Introduction

Physical activity is defined by World Health Organization (WHO) (2011) as any bodily movement requiring energy expenditure, whereas exercise is defined as a planned, structured, repetitive, and purposeful sense of objective that can improve or maintain one or more components of physical fitness. Regular physical activity is an important part of a healthy lifestyle that has significant physical and mental health benefits (Romaguera, et al., 2011). Despite this, individuals are becoming increasingly satisfied with a sedentary existence. Physical inactivity has been identified as a substantial risk factor for a variety of health conditions as well as overall global morbidity and mortality (Gavin et al., 2014; Box, et al., 2019; Murphy & Eaves, 2016).

---

Researchers are finding more and more evidence of the impact of physical activity on health and well-being. Many studies have linked physical inactivity to non-communicable, chronic diseases, which are associated with the highest levels of global morbidity and mortality. This includes diabetes, some types of cancer, osteopathic (e.g., osteoporosis), cardiovascular (e.g., congestive heart failure, heart attack, coronary artery disease, stroke) and neurovascular (e.g., dementia, Alzheimer's) diseases. (Silva et al., 2019; Friedenreich, et al., 2010, as cited by Morris and Roychowdhury, 2020; Wardoku et al., 2019).

According to WHO (2020), there is growing concern about the physical health and psychological wellbeing of adults and children in many countries around the world. In both childhood and adulthood, exercise is widely recognized as essential for good health and well-being (Gillison, et al., 2011, WHO, 2020). It is supported by Hallal, et al., (2012), as referenced by Carraro, et al., (2014), roughly 31% of the world's population is physically inactive. Physical activity and exercise levels are declining in adolescence, which is a major public health problem. This can be seen at work, where many physical tasks have been mechanized or automated, in instrumental physical activity like transportation, shopping, housework, and gardening, and in leisure time, where sport and outdoor activities are popular (WHO, 2020).

Apparently, data suggest that increased physical exercise is linked to lower anxiety, depression symptoms, stress-related facilitate weight management and improve bone and muscle strength conditions and is a preventative measure that can help decrease obesity trends (Arem et al., 2015; Bhutia & Singh; Ball, et al., 2017; Kopczynski, et al., 2014). Low levels of physical activity have also been connected to conditions that impact psychological well-being (Teixeira, 2012). The prevalent psychological issues of depression and anxiety are also at the top of the list (Stubbs et al., 2017).

Researchers have shown, for example, that interventions aimed at increasing physical activity engagement can lessen the chance of people getting these life-threatening medical and mental illnesses (Centers for Disease Control and Prevention [CDC], 2020; Lee et al. 2021). Furthermore, research has presented that regular physical activity can reduce the severity of certain chronic illnesses in persons who are already suffering from them (Anderson & Durstine, 2019). Although evidence that physical activity can protect against and help manage the most common life-threatening non-communicable health risks is critical, monitoring of patterns of leisure-time physical activity participation indicates that this knowledge has not resulted in an increase in the prevalence or intensity of physical activity participation. In fact, involvement is decreasing over the world (WHO, 2020).

## Background of the Study

Filipinos of all ages and walks of life have shown a trend toward obesity and overweight. This is attributable in part to the prevalence of sedentary behavior. Hypokinesia (a lack of, or insufficient regular exercise and movement of the body) and hypokinetic conditions are on the rise in the Philippines, highlighting the need to increase physical activity. Sedentary behavior is a significant health concern for the vast majority of people (HEALTHbeat, 2019).

Physical activity and/or exercises are unquestionably important for everyone, including middle-aged people, students, and members of the community. Furthermore, exercise is really important in our society. That is, the more physical activity one engages in, the higher his chances of living a healthy lifestyle and living a long life are. With the rising occurrence of lifestyle-related diseases around the world, researchers are becoming more interested in understanding why people exercise and participate in physical activity outside of competitive

sports (Roychowdhury, 2020).

There is currently considerable evidence that physical activity plays an important role in promoting physical and mental health, and that motivation is a powerful predictor of physical activity involvement. Given that nearly half of the world's adult population does not engage in enough sustained physical activity to achieve health benefits (WHO, 2020), and that children and adolescents' participation in traditional forms of physical activity and sport is decreasing (Hu et al., 2018), promoting long-term adherence to and participation in physical activity is critical. As a result, it's important to track motivations for engagement and link them to patterns of participation. This will not only help to develop motivating patterns that will increase physical activity involvement, but it will also help to connect motivational patterns to appropriate kinds of physical activity. Despite the fact that exercise motivation is a well-established research area in exercise and sports psychology in the West, there is little work on this topic in the Philippines (Cagas, et al., 2014).

In the year 2012, the Department of Education (DepEd) of the Republic of the Philippines implemented the "K to 12 Basic Education Program". The Physical Education curriculum, which includes 'Rhythms and Dance' is based on the principle "Move to Learn, Learn to Move" with the main objective of achieving lifelong fitness (Department of Education (2012) as cited by Domingo, 2015).

According to Smith, et al. (2017), education is considered as a crucial site of socialization, which pertains to the processes by which people acquire and internalize the beliefs, expectations, knowledge, values, habits, skills and practices that are prevalent in their groups and societies (either directly or indirectly, explicitly or implicitly, intentionally or unintentionally). This is the most notable case in physical education, which entails the socialization of young people into sports and physical activity cultures as well as the knowledge and skills that sustain them. Socialization in sport and physical activity in schools can come in many forms: single subjects requiring active participation, such as Physical Education; other curricula that provide access to knowledge about physical activity (e.g. science); cross-curricular subjects (e.g. Personal, Social, and Health Education) that promote knowledge of physical activity in the context of broader lifestyles; and other activities as part of a supposedly whole school approach to physical activity (such as extra-curricular activities).

Dance is frequently classified as an art form, alongside crafts, theatre, painting, and music. The report conducted by Peerbhoy, Smith and Birchall (2002) found that dance had a positive impact on the quality of life. 'Dance is one of the best-placed art forms to work in all aspects of health across cultures, communities, disabilities, and capacities according to Durdey (2006). On the other hand, dance has a link to exercise. Dance and physical activity are two of what human pursuits that fall within the broad category of physical activity (Calcutt, 2021).

In view of the aforementioned concept, the researcher was motivated to conduct a study on the related variables that may influence the physical activity and exercise participation of Grade 10 students of Cagbalete Island Mauban, Quezon towards their dance performance. The findings of this study may elicit recommendations that might improve the physical activity programs for high school students. Thus, in the light of this premise the study was proposed.

## **Theoretical Framework**

Researchers in the field of physical activity have recently began to look into motivational factors. Cluster analysis was used to create profiles based on Self- Determination Theory (SDT). Cluster analysis is a

statistical technique that divides people into groups based on shared traits (Hair & Black, 2000, Hair et al. 1998 as cited by Friederichs, et al., 2015). In recent years, SDT has risen to prominence as a key motivational theory that has gotten a lot of research attention. The theory propositions are concerned with how social and cultural elements influence people's sense of volition and initiative, as well as their well-being and performance quality (Hirvensalo & Lintunen, 2011).

SDT appears to be a relevant theoretical framework for understanding the psychological processes that underlie involvement in and evaluation of PE experiences at the present time. SDT explains how particular environments can support or hinder the satisfaction of an individual's basic psychological needs, which are regarded foundational elements in the development of well-being (Deci and Ryan, 2002 as cited by Ferriz, et al., 2019 and Ball, et al., 2017). SDT emphasizes three major motivations for human behavior: autonomy, or the desire for self-direction in controlling behaviors; competence, or the want to interact well with one's environment; and relatedness, or the desire to feel connected to others. Internal regulation is satisfied when these three criteria are met, and involvement in an activity is organically motivated (Ryan & Deci, 2006, Edmunds et al., 2006 as cited by Feito, 2018).

Jaurigue (2011) argued that according to self-determination theory, an individual will be more intrinsically motivated if his needs for competence, autonomy, and relatedness are addressed. If the environment, a teacher, a coach, or a boss assists him in meeting his needs, he will progress up the continuum toward intrinsic motivation. He will proceed down the continuum towards external regulation or motivation if his needs are not supplied. As a result, if a teacher, coach, or manager wishes to enhance intrinsic motivation, he should empower his subordinates by allowing them to make decisions, assisting them in becoming competent, and connecting with them.

The Self-Determination Theory of Deci & Ryan as cited by Ackerman (2020), has become popular for studying motivational challenges in physical activity. SDT is a "macro theory of human motivation (intrinsic and extrinsic) and personality that concerns people's underlying growth tendencies and innate psychological needs." It links personality, human motivation, and optimal functioning. It claims that there are two types of motivation: intrinsic and extrinsic, and that both are powerful influences in determining who we are and how we are.

In engaging in physical activity, motives are assumed as better predictors of exercise participation. Markland and Ingledew as cited by Cagas, et al. (2014), have developed Exercise Motivation Inventory- 2(EMI-2) based on Self-Determination Theory. It is reliable in measuring exercise motives for both habitual exercises and nonexercisers. The EMI-2 provides the broadest range of reasons for exercise participation. It is also one of the most commonly used measures of exercise participation motives in the research literature (Ednie & Stibor, 2017; Feito, et al., 2018; Guedes, et al., 2013; Cagas, et al. 2014; Kilpatrick, et al., 2015; Cerar, et al., 2017).

Its codes are: (a) stress management, (b) revitalization, (c) enjoyment, (d) challenge, (e) social recognition, (f) affiliation, (g) competition, (h) health pressures, (i) ill-health avoidance, (j) positive health, (k) weight management, (l) appearance, (m) strength and endurance, and (n) nimbleness. Its 14 subscales have also been classified into three higher order themes using factor analysis: (a) health and fitness motives (i.e. health-pressure, ill-health avoidance, nimbleness, positive health, stress management and strength and endurance) (b) social engagement motives (i.e. affiliation, challenge, competition and social recognition; (c) appearance and weight motives (i.e. appearance and weight management). Other items in the full version of the EMI-2 outside this three-factor structure include motives related to enjoyment and to revitalization (Cagas, et al., 2014).

Each subscale comprises two to four items rated on a 6-point Likert-type scale (0 being “not at all true for me” and 5 being “very true for me”), which required participants to reply to statements concerning reasons why they currently exercised and whether they exercised regularly or not.

On the other hand, in AQA Realizing Potential (2022) website, there is a developed rubric for dance performance where learners must be assessed on their ability to demonstrate their physical, technical, and expressive skills. Physical skills include posture alignment, balance, coordination, control, flexibility, mobility, strength, stamina, extension, and isolation; Technical skill includes action content, dynamic, spatial content, relationship content (for duet/trio performance only), timing content, rhythmic content, movement in a stylistically accurate way; and Expressive skills include projection, focus, spatial awareness, facial expression, phrasing, and for duet/trio performance only such as musicality, sensitivity to other dancers, communication of choreographic intent, including mood(s), meaning(s), idea(s), theme(s) and/or style/style fusion(s). These are the indicators of the rubrics used by the researcher in assessing students’ dance performance.

## Statement of the Problem

The study attempted to identify the different motives of Grade 10 students in physical activity and exercise participation.

Specifically, it sought to answer the following questions:

1. What is the perceived level of physical activity and exercise participation motives of student-respondents in terms of:
  - 1.1 Health and Fitness Motives;
  - 1.2 Social Engagement Motives;
  - 1.3 Appearance and Weight Motives;
  - 1.4 Revitalization; and
  - 1.4 Enjoyment?
2. What is the level of the students’ dance skills performance in terms of:
  - 2.1 Physical;
  - 2.2 Technical; and
  - 2.3 Expressive Skills?
3. Is there a significant relationship between the perceived level of physical activity and exercise participation motives and the students’ dance skills performance?

## Research Methodology

### Research Design

This study used the descriptive research method in analyzing the data about the perceived motives of the student-respondents in physical activity and exercise.

Descriptive study tries to characterize a population, situation, or phenomenon in a methodical and precise manner. It can answer the questions of what, where, when, and how, but not why. A descriptive research plan can study one or more variables using a range of research methods. Unlike experimental research, the researcher does not influence or change the variables; instead, they are observed and measured. When the goal of the study is to discover characteristics, frequencies, trends, and categories, descriptive research is a good

option. It is useful when there is not a lot of information on a topic or problem (McCombes, 2019).

A researcher's job is to collect data using research instruments such as tests, questionnaires, interviews, and even observation. The fundamental objective of descriptive research is to depict the current phenomena efficiently under examination (Atmowardoyo, 2018).

### Respondents of the Study

The respondents of the study were the Grade 10 students of Cagbalete Island National High School. The respondents were given a survey questionnaire to determine their participation motives in physical activity and exercise and their perceived level of dance performance. A sample size of  $n=40$  respondents was taken from three sections of Grade 10 students from different sitios of Brgy. Cagbalete I Mauban, Quezon. The researcher utilized 40 respondents from the three sections with gadgets that they used in the submission of their dance performance video.

**Table 1. Distribution of Respondents by Section**

Sections	Population	Sample
1. Aguinaldo	29	13
2. Bonifacio	26	15
3. Rizal	28	12
Total	83	40

The table shows that from the 83 students in Grade 10, the researcher was able to set only 40 respondents with available gadgets and access to the internet or the global computer network. They used their mobile phones and tablets in sending video of their dance performance. Majority used their own data connection and looked for the appropriate place where the internet connection is strong and constant.

### Research Instrument

**Construction of Survey Instrument.** To identify the motives in physical activity and exercise participation, the researcher will adapt a survey questionnaire for the purpose of the study. Participatory motives will be measured using the Exercise Motivation Inventory (EMI-2) of Markland (1997). Then, a survey questionnaire will be provided to the students consisting of 48 items divided to the three higher order themes of EMI-2: (a) Health Fitness Motives, 3 items (Ill-Health Avoidance), 3 items (Nimbleness), 3 items (Positive Health), 4 items (Stress Management), 4 items (Strength and Endurance); (b) Social Engagement Motives, 4 items (Affiliation), 4 items (Challenge), 4 items (Competition), 4 items (Social Recognition); (c) Appearance and Weight Management, 4 items (Appearance), 4 items (Weight Management); (d) Other Motives, 3 items (Revitalization), 3 items (Enjoyment).

In the study of Ingledew and Sullivan (2002) as cited by Bangor University, one of the Appearance items was changed, from 'To help me look younger' to 'To help me look better' and the Health Pressures scale was omitted entirely because the items seemed inappropriate for adolescents.

**Validation of Constructed Survey Instrument.** To ensure the questionnaire's congruency and

accuracy, the researcher will submit it to the thesis adviser and other panel members for corrections and suggestions on its enhancement. The researcher will also request the content validation of the questionnaire by two head teachers and one master teacher to ensure the validity of questions and its alignment to the subject matter and students under study.

## Research Procedure

Upon the conceptualization of the variables of the study and the refinement of the instrument, the procedure in conducting this study include the following steps:

**Implementation.** The researcher prepared a request letter for gathering data from the participant school. The letter was sent to the principal, and to the respondents for the conduct of the study. After the approval of the principal and respondents, the researcher conducted the study by following this procedure: first, the researcher provided the questionnaire to the grade 10 advisers. Second, the adviser distributed the survey questionnaire to the students at the middle of third quarter grading period. Lastly, the class adviser retrieved all the accomplished instruments.

**Data Analysis.** The researcher compiled the instruments and gathered all the needed data. The data were sent to the Statistics Center for treatment. Tables were prepared by the researcher and were analyzed to broaden the knowledge on the main focus of the study.

**Ethical Consideration.** The researcher made sure of the confidentiality of the respondents' results and information. The results of the data in the survey questionnaire were made accessible only to the researcher and the thesis adviser for the privacy reason.

## Statistical Treatment of Data

Descriptive and inferential statistics were used in computing, analyzing, and interpreting the data retrieved from the respondents.

To determine the motives of Grade 10 students in participation to physical activity and exercise, mean and standard deviation were computed.

To determine the level of dance skills performance of the students, rubric scoring, mean statistics, and standard deviation were used.

In response to the hypotheses set in the study whether the perceived physical activity and exercise motives have a significant relationship with the dance skills performance of the students, Pearson Product-Moment Correlation Coefficient was employed.

## Findings and Discussion

This chapter presents the statistical analysis of data, the corresponding interpretation, and the discussion of findings. The data collected, analyzed, and interpreted were the basis of conclusions and recommendations of the study that focus on the relationship of physical activity and exercise participation motives on the students' dance skills performance.

## Perception on the Level of Physical Activity and Exercise Participation Motives



**Table 2. Level of Physical Activity and Exercise Participation Motives in terms of Health and Fitness Motives**

Statements	Mean	SD	Verbal Interpretation
Personally, I exercise (or might exercise) to ...			
<b>III- Health Avoidance</b>			
1. avoid ill-health	4.03	1.12	True for me
2. prevent health problems	3.75	1.15	True for me
3. avoid heart disease	3.08	1.67	Moderately true for me
<b>Nimbleness</b>			
4. stay/ become flexible	3.43	1.58	Moderately true for me
5. maintain flexibility	3.40	1.57	Moderately true for me
6. stay/ become more agile	3.63	1.33	True for me
<b>Positive Health</b>			
7. have a healthy body	4.65	0.58	Very true for me
8. maintain good health	4.58	0.64	Very true for me
9. feel more healthy	4.20	0.94	True for me
<b>Stress Management</b>			
10. give me space to think	3.43	1.32	Moderately true for me
11. help reduce tension	3.58	1.24	True for me
12. help manage stress	3.88	1.22	True for me
13. release tension	3.48	1.40	Moderately true for me
<b>Strength Endurance</b>			
14. build up my strength	3.98	1.10	True for me
15. increase my endurance	3.95	1.18	True for me
16. get stronger	4.15	0.95	True for me
17. develop and build my muscles	3.35	1.46	Moderately true for me
Overall	3.79	0.75	True for me

Legend: 4.50-5.00 Very true for me, 3.50-4.49 True for me, 2.50-3.49 Moderately true for me, 1.50-2.49 Rarely true for me, 1.00-1.49 Not at all true for me

Table 2 presents the mean distribution on the perceived level of physical activity and exercise participation motives in terms of health and fitness motives. It shows that all the statements garnered a mean that falls under the interpretation “true for me” with the overall mean of 3.79. It implies that the students value the importance of exercise and physical activity on being healthy and be physically fit, whether they are exercisers on non-exercisers.

The statement “to have a healthy body” coded as Positive Health appears to be the top motive with a mean of 4.65 that falls to the interpretation of “very true for me”. It suggests that the students prioritize having



a healthy body if ever or whenever they are engaging in exercise and physical activity. It shows that learners know the implication of having positive health in everyday lives and that having it will help them accomplish things without easily being fatigued and will help them perform better on and off the school.

Kurtus (2022) stated that being healthy entails that the body and mind work as they should. It is critical that the students are physically and emotionally healthy to be able to accomplish well in school. Healthy living will make them feel good and will allow them to perform better. This supports the claim that having positive health that they may gain in participating to exercises and physical activities, allow learners to do better.

On the other hand, the statement “to avoid heart disease” coded as Ill-Health Avoidance, got the lowest mean of 3.08. Despite having the lowest mean, the students are still considering this motive as moderately true for them. Although most of the students have normal BMI, the result provides the researcher that learners are aware of health problem that may occur and are seeing exercise and physical activity engagement as a way of preventing health issues to happen.

**Table 3. Level of Physical Activity and Exercise Participation Motives in terms of Social Engagement Motives**

Statements	Mean	SD	Verbal Interpretation
Personally, I exercise (or might exercise) to ...			
<b>Affiliation</b>			
18. spend time with friends	3.43	1.22	Moderately true for me
19. enjoy the social aspects of exercising	3.28	1.52	Moderately true for me
20. have fun being active with other people	3.73	1.22	True for me
21. make new friends	3.30	1.47	Moderately true for me
<b>Challenge</b>			
22. give me goals to work towards	3.73	1.28	True for me
23. give me personal challenges to face	3.63	1.27	True for me
24. develop personal skills	4.00	1.13	True for me
25. measure my personal standards	3.65	1.23	True for me
<b>Competition</b>			
26. win in physical activities	3.33	1.64	Moderately true for me
27. enjoy the spirit of competition	3.18	1.45	
28. enjoy physical competition	3.38	1.41	Moderately true for me
29. have fun, especially when competition is involved	3.55	1.52	True for me
<b>Social Recognition</b>			
30. show my worth to others	3.28	1.38	Moderately true for me
31. compare my abilities with other peoples'	2.40	1.92	Rarely true for me
32. gain recognition for my accomplishments	2.88	1.64	Moderately true for me
33. accomplish things that others are incapable of	3.00	1.48	Moderately true for me

Overall 3.36 0.97 Moderately true for me

Legend: 4.50-5.00 Very true for me, 3.50-4.49 True for me, 2.50-3.49 Moderately true for me, 1.50-2.49 Rarely true for me, 1.00-1.49 Not at all true for me

Table 3 presents the mean distribution on the perceived level of physical activity and exercise participation motives in terms of social engagement motives. Based on the interpretation in the table, it shows that the motives are moderately true with the overall mean of 3.36. It implies that the students regard exercise and physical activity participation as means of displaying competence (from learning new skills), experiencing challenges and success as well as acquiring social benefits that arise from affiliation to others.

The statement “to develop personal skills” coded as Challenge and with the interpretation as “true for me”, appears to be the highest valued factor with a mean of 4.00. It suggests that students are up in challenging themselves when it comes in enhancing their personal abilities to do things and they believe that they will be able to develop it through engaging in exercises and physical activity.

Physical education in schools has the potential to promote good youth development by assisting students in developing life skills and psychosocial and behavioral attributes that can be transferred to other relevant domains (school, home, and employment) over the life span. Teacher’s behaviors, classroom structure, and students’ activities may help equip students with attributes, skills, competencies, and values that will help them become productive, socially conscious, and healthy citizens (Weiss, 2012). This statement supports the claim that exercises and physical activity will help the students in developing their skills.

Moreover, the statement “to compare my abilities with other people” coded as Social Recognition got the lowest mean of 2.40, revealed that it is rarely true. It implies that most of the students did not consider this motive of comparing one’s abilities to others if ever or whenever they are engaging in exercise and physical activity. It posits that students are not viewing others as their competitors with regards to their skills that supports the result of their top motive stated, “to develop personal skills”. This results also shows that students are engaging or will engage in exercise in physical activity because they are challenged to develop their skills personally, not to compare their abilities to others and be socially recognized .

**Table 4. Level of Physical Activity and Exercise Participation Motives in terms of Appearance and Weight Motives**

Statements	Mean	SD	Verbal Interpretation
Personally, I exercise (or might exercise) to ...			
<b>Appearance</b>			
34. help me look better	3.73	1.34	True for me
35. have a good body	4.30	0.91	True for me
36. improve my appearance	3.75	1.28	True for me
37. look more attractive	3.40	1.41	Moderately true for me
<b>Weight management</b>			
38. stay slim	3.38	1.31	Moderately true for me
39. lose weight	2.63	1.75	Moderately true for me
40. help control my weight	3.90	1.15	True for me

41. help me burn calories through exercise	3.28	1.71	Moderately true for me
Overall	3.55	0.89	True for me

Legend: 4.50-5.00 Very true for me, 3.50-4.49 True for me, 2.50-3.49 Moderately true for me, 1.50-2.49 Rarely true for me, 1.00-1.49 Not at all true for me

Table 4 presents the mean distribution on the perceived level of physical activity and exercise participation motives in terms of appearance and weight motives. Based on the interpretation in the table, it shows that the motives are true with the overall mean of 3.55. It suggests that they desired to improve their physical appearance and manage their weight.

The statement “to have a good body” coded as Appearance got the highest mean of 4.30 which revealed that it is true. It posits that learners value the importance of exercise and physical activity in having a good body. Moreover, it suggests that how a person feel about their body can influence their physical activity participation. Greenleaf supports this claim where he mentioned that people who have a positive body image are more likely to engage in physical activity than those who have a negative body image. This is one of the reasons it's so important to focus on feeling good about being active (regardless of your shape or size) and proud of yourself for doing so.

Moreover, the statement “to lose weight” coded as Weight Management and with the lowest mean of 2.63, revealed that it is moderately true. Based on the result, losing weight is not one of the top priorities of the students since most of them have normal Body Mass Index (BMI) and are motivated only in maintaining it. There are no overweight and obese in the student-respondents so this result show that somehow, in participating in exercise and physical activity, some of them still considered losing weight because it is up to themselves of how they view their body regardless of having normal BMI.

**Table 5. Level of Physical Activity and Exercise Participation Motives in terms of Revitalization**

Statements	Mean	SD	Verbal Interpretation
Personally, I exercise (or might exercise) to ...			
42. feel good	4.33	1.02	True for me
43. find exercise invigorating	3.58	1.22	True for me
44. recharge my batteries (to rest and relax)	3.98	1.17	True for me
Overall	3.96	0.84	True for me

Legend: 4.50-5.00 Very true for me, 3.50-4.49 True for me, 2.50-3.49 Moderately true for me, 1.50-2.49 Rarely true for me, 1.00-1.49 Not at all true for me

Table 5 presents the mean distribution on the perceived level of physical activity and exercise participation motives in terms of revitalization. Based on the interpretation in the table, it shows that the motives are true with the overall mean of 3.96.

The statement “feel good” got the highest mean of 4.33 which revealed that it is true. It implies that students are engaging in exercise and physical activity to feel happier and less anxious about things especially now that we are still experiencing pandemic. It is supported by Spraul (2020) who mentioned that regular exercise helps to stimulate certain chemicals in the brain, which makes a person feel more relaxed and happier

than he did before he started working out. Additionally, regular exercise will make a person feel and look better. This, in turn, can aid in the development of confidence and self-esteem. It can even help to prevent or treat depression.

Despite of having the lowest mean of 2.58, the statement “find exercise invigorating” revealed that this motive is also true, and which also indicates that students consider exercise and physical activity as way of unwinding and relaxation and a powerful energizer.

Table 6 presents the mean distribution on the perceived level of physical activity and exercise participation motives in terms of enjoyment. Based on the interpretation in the table, it demonstrates that the motives are true with overall mean of 3.98.

The statement “feel my best when exercising” which is the top motive with a mean of 4.23, revealed that it is true. It reveals that students enjoy exercises and physical activity for they are feeling good about themselves when doing it. It allows students to give their best while having fun that motivates them to do better.

**Table 6. Level of Physical Activity and Exercise Participation Motives in terms of Enjoyment**

Statements	Mean	SD	Verbal Interpretation
Personally, I exercise (or might exercise) to ...			
45. enjoy the feeling of exerting myself	3.90	1.26	True for me
46. find exercising satisfying	3.70	1.16	True for me
47. enjoy the experience of exercising	4.10	1.17	True for me
48. feel my best when exercising	4.23	1.03	True for me
Overall	3.98	0.96	True for me

Legend: 4.50-5.00 Very true for me, 3.50-4.49 True for me, 2.50-3.49 Moderately true for me, 1.50-2.49 Rarely true for me, 1.00-1.49 Not at all true for me

According to Cagas, et al. (2015), enjoyment is a powerful driver of physical activity as a representation of intrinsic motivation. Individuals readily engage in an activity with playfulness, enthusiasm, and dedication when it is enjoyable, challenging, and fun; they require little or no extrinsic incentives to do so. It supports the claim that the more the students are enjoying the exercise and physical activity, the more they are inclined to do so.

Moreover, the statement “find exercising satisfying” despite having the lowest mean of 3.70, also falls to the interpretation of “true for me”. It suggests that the students are exercising or might exercise because they find it rewarding and fulfilling.

### Level of Dance Skills Performance

**Table 7. Level of Students' Dance Skills Performance in terms of Physical Skills**

Indicators	Mean	SD	Verbal Interpretation
1. Posture	4.33	0.69	Very Good
2. Alignment	4.30	0.69	Very Good
3. Balance	4.45	0.68	Very Good

4. Coordination	4.40	0.74	Very Good
5. Control	4.40	0.67	Very Good
6. Flexibility	4.23	0.77	Very Good
7. Mobility	4.18	0.59	Very Good
8. Strength	4.48	0.68	Very Good
9. Stamina	4.73	0.55	Excellent
10. Extension	4.05	0.85	Very Good
11. Isolation	3.88	0.79	Very Good
Overall	4.31	0.62	Very Good

Legend: 4.50-5.00 Excellent, 3.50-4.49 Very Good, 2.50-3.49 Good, 1.50-2.49 Fair, 1.00-1.49 Poor

Table 7 shows the assessment of the students' dance performance with regards on physical skills they executed. With an average rating of 4.31, it implies a very good descriptive rating in the output of the students.

The Stamina with a rating of 4.73 is marked as an excellent performance for the students. It indicates that the students still have the strength and energy needed to exert oneself for an extended period of time. It also implies that they have good cardiovascular and respiratory health, and a strong musculoskeletal system. Moreover, based from the result, doing physical activity like walking in the neighborhood since places in the locale (e.g., school, grocery stores and resorts) are walking distance only and dancing simple dance (e.g., Tik-tok dances which are popular to students nowadays), helped improved stamina that also contributed to their dance performance.

Moreover, the Isolation despite having a lowest rating of 3.88 is marked as a very good performance. It indicates that the students are well aware of their movement where they are able to shift a particular part of the body such as hands, shoulder, head and hips while keeping the rest of the body still.

**Table 8. Level of Students' Dance Skills Performance in terms of Technical Skills**

Indicators	Mean	SD	Verbal Interpretation
1. Action Content	4.33	0.76	Very Good
2. Dynamic Content	3.60	0.74	Very Good
3. Spatial Content	4.60	0.63	Excellent
4. Relationship Content	4.73	0.64	Excellent
5. Rhythmic Content	4.58	0.68	Excellent
6. Movement in a Stylistic Accurate Way	3.78	0.66	Very Good
Overall	4.27	0.61	Very Good

Legend: 4.50-5.00 Excellent, 3.50-4.49 Very Good, 2.50-3.49 Good, 1.50-2.49 Fair, 1.00-1.49 Poor

Table 8 shows the assessment of the students' dance skills performance with regard to technical skills they executed. With an average rating of 4.27, it implies a very good descriptive rating in the output of the students. The result reveals that students have the sensed creativity in the execution of their dance.

The Relationship Content with a rating of 4.73 is marked as excellent performance for the students. It shows that the students are excellent in spatial relationships, time relationships, relationship to music, and to

other dancer that makes the dance clear. It is observed in their group dance performance when they dance with others that even though most of them are not a true dancer, they can still execute the choreography properly with the help of their group or classmates. These help them to deliver the dance well. Dancing with others make arrange of dance movement. This claim is supported by BBC (2022) website that It is often essential to dance in pairs and groups. Working with others requires a combination of ideas, to create an outstanding performance.

Moreover, the Dynamic Content that has a lowest rating of 3.60 is still marked as a very good performance. It implies that the energy, effort, and weight applied in every movement are observable in their dance performance.

**Table 9. Level of Students' Dance Skills Performance in terms of Expressive Skills**

Indicators	Mean	SD	Verbal Interpretation
1. Projection	4.13	0.61	Very Good
2. Focus	4.00	0.64	Very Good
3. Spatial Awareness	4.63	0.63	Excellent
4. Facial Expression	3.85	0.70	Very Good
5. Phrasing	4.28	0.72	Very Good
6. Musicality	4.68	0.57	Excellent
7. Sensibility to Other Dancers	4.80	0.52	Excellent
8. Communication of Choreographic Intent	3.88	0.72	Very Good
Overall	4.28	0.52	Very Good

Legend: 4.50-5.00 Excellent, 3.50-4.49 Very Good, 2.50-3.49 Good, 1.50-2.49 Fair, 1.00-1.49 Poor

Table 9 shows the assessment of the students' dance skills performance with regard to expressive skills they executed. With an average rating of 4.28, it implies a very good descriptive rating in the output of the students. It indicates that the students' performance is interesting to watch and imitate.

The Sensibility to Other Dancers with a rating of 4.80 is marked as excellent performance for the students. It implies that the students' awareness towards others (for dual, tri or group) are there. Most students may not be a dancer but they are sensible and sensitive to one another resulting on not bumping or colliding to others and good dance performance.

Furthermore, even with the lowest rating of 3.85, the Facial Expression is still marked as a very good performance. It entails that the students are very good in using their face to indicate emotions to communicate and express themselves. They use their facial expression to make their performance engaging and interesting.

### Test of Relationship Between Variables

**Table 10. Correlation between the Level of Physical Activity and Exercise Participation Motives and Dance Skills Performance**

	Physical Skills	Technical Skills	Expressive Skills
--	-----------------	------------------	-------------------

Health and Fitness Motives	0.217	0.123	0.183
Social Engagement Motives	0.176	0.108	0.169
Appearance and Weight Management Motives	0.000	0.007	0.035
Revitalization	0.193	0.205	0.202
Enjoyment	.327*	0.231	0.288

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

Table 10 presents the relationship of the physical activity and exercise participation motives and the dance skills performance of the students. It can be observed from the given table that there is a significant positive relationship between the enjoyment and the physical skills of the students. It shows that the motive of enjoying the physical activity is what motivates the students to participate. Despite having modular learning where students study at home without interaction to other students and teachers, some still managed to perform as a group, mostly those who are at the same sitios. They are more motivated to perform when they are accompanied by their friends or other classmates mainly because they find it enjoyable and they can overcome their shyness when they perform with their group. Taylor (2020) cited that in one study, motivation was related to success. The more motivated the dancers were, which in this study are the students, the better they performed. In this study also, they are intrinsically motivated. It is enjoyment that plays an influential role in physical activity participation. He further added that dance classes should be fun and interesting.

Vitali, et al. (2019) as cited by Michael, et al. (2015) suggest that enhancing enjoyment for physical education and their actual and perceived physical abilities are expected to stimulate the adoption of an active lifestyle and improve health-related quality of life. Moreover, their study's results illustrate that adolescents' enjoyment may play a crucial role in their physical activity participation. In addition, enjoyment served as a mediator, indicating that a variety of physical activities were associated with enjoyment, which, in turn, was associated with physical activity participation. Schools are the ideal place to support these opportunities, especially in physical education class where physical education teachers can offer a variety of age-appropriate physical activities, allowing students to identify those that enjoy as their physical activity motor skills develop.

Furthermore, the salient findings show that there are no significant relationship between participation motives to the technical and expressive skills. This indicates that the participation motives did not affect the students' dance in terms of technical and expressive skills. Students did not emphasize proper execution of the dance steps that could also impact in expressing emotions that their dance performance should portray. It is observable because most of the students are not dancers and some of them are timid or shy. It is also noticeable that the students performed a dance because it is a performance task in Physical Education subject.

## Conclusion

Based on the findings of the study, the conclusion is stated below:

Significant relationship exists between the perceived level of physical activity and exercise participation motives and the level of dance skills performance of the student-respondents. Therefore, the null hypothesis stating that "there is no significant relationship between perceived level of physical activity and exercise participation motives and the students' dance skills performance" is not sustained.



## Recommendation

Based on the above findings and conclusions, the following recommendations are given:

1. To ensure enjoyment in Physical Education for students, teachers may consider certain enjoyment processes, particularly activity-related excitement, when structuring PE activities or program. Attending trainings and seminars that focus on class teaching strategies and instructions are also suggested to the teachers on providing quality teaching deliberation.
2. Since enjoyment found to be the top motive in physical activity and exercise participation, students may engage in Physical Education activities that are enjoyable for them depending on their interests and abilities to be more motivated in becoming physically fit.
3. Future researchers may use the results of this study as a guide in exploring other ways of developing learners' dance skills performance in Physical Education. They may also replicate this study using other locales and with increased number of respondents as well as having gender as variable in identifying the physical activity and exercise participation motives.

## Acknowledgement

First and foremost, the researcher expresses her gratefulness to Almighty God, for His guidance, unfathomable favors, limitless blessings and unending love. A deep sense of gratitude and appreciation is extended to the following persons for their priceless supervision in the completion of this study;

**Dr. Eden C. Callo**, Vice President for Academic Affairs and the statistician of the study, for showing her mastery ideas for the improvement of the paper, for interpreting the data, and sharing her invaluable time and providing assistance during the development of the paper;

**Dr. Edilberto Z. Andal**, Dean of Graduate Studies and Applied Research and her research adviser, for sharing his expertise, for his generous attitude of being approachable and humble all the time, for his unlimited patience in coaching and mentoring the researcher, and also for his uplifting words and support;

**Dr. Perla M. Guevarra**, technical editor, for her proficiency in constructively critiquing and grammatically correcting the errors in the contents of this research paper, and for being approachable;

**Prof. Darwin D. Ofrin**, subject specialist, for sharing his cognitive ability in Physical Education and for his kindhearted personality;

## References

- Ackerman, C.E. (2020). Self-Determination Theory of Motivation: Why Intrinsic Motivation Matters. PositivePsychology.com. Retrieved on January 10, 2022 from <https://positivepsychology.com/self-determination-theory/>
- Anderson, E., & Durstine, J. (2019). Physical Activity, Exercise, and Chronic Diseases: A Brief Review. *Sports Medicine and Health Science*, 1, 3–10. <https://doi.org/doi:10.1016/j.smhs.2019.08.006>
- AQA Realising Potential (2022). GCSE Dance. Retrieved on January 20, 2022 from <https://www.aqa.org.uk/subjects/dance/gcse/dance8236/scheme-of-assessment>

- AQA Realising Potential (2022). GSCE Dance. Retrieved on January 20, 2022 from <https://www.aqa.org.uk/subjects/dance/gcse/dance8236/subject-content/performance>
- Arem, H., Moore, S. C., Patel, A., Hartge, P., De Gonzalez, A. B., Visvanathan, K., & Matthews, C. E. (2015). Leisure Time Physical Activity and Mortality: a detailed pooled analysis of the dose-response relationship. *JAMA internal medicine*, 175(6), 959-967.
- Atmowardoyo, H. (2018) Research Methods in TEFL Studies: Descriptive Research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, 9(1), 197-204.
- Ball, et al. (2017). Exploring the Relationship between Self-Determination Theory, Adults' Barriers to Exercise, and Physical Activity. *The Health Educator*. Retrieved on January 11, 2022 from <https://files.eric.ed.gov/fulltext/EJ1156136.pdf>
- BBC (2022). Dance- Essential Skills and Techniques. Retrieved on May 21, 2022 from <https://www.bbc.co.uk/bitesize/guides/zc6mtyc/revision/5>
- Bhutia, C.D & Singh, R. M. An Analysis of Motivation Among Women Towards Physical Exercise in Relation to their BMI. *Sport And Exercise Psychology*. Retrieved on January 10, 2021 from [https://www.academia.edu/31615928/AN\\_ANALYSIS\\_OF\\_MOTIVATION\\_AMONG\\_WOMEN\\_TOWARDS\\_PHYSICAL\\_EXERCISE\\_IN\\_RELATION\\_TO\\_THEIR\\_BMI](https://www.academia.edu/31615928/AN_ANALYSIS_OF_MOTIVATION_AMONG_WOMEN_TOWARDS_PHYSICAL_EXERCISE_IN_RELATION_TO_THEIR_BMI)
- Box, A. G., Feito, Y., Brown, C., & Petruzzello, S. J. (2019). Individual Differences Influence Exercise Behavior: How Personality, Motivation, and Behavioral Regulation Vary Among Exercise Mode Preferences. *Heliyon*, 5(4), e01459. <https://doi.org/10.1016/j.heliyon.2019.e01459>
- Cagas, et al. (2014). Why do Filipinos Exercise? Exploring Motives from the Perspective of Filipino Youth. *Youth in Physical Education and Sport*. Retrieved on January 10, 2022 from [https://www.academia.edu/240463/Why\\_do\\_Filipinos\\_Exercise\\_Exploring\\_Motives\\_from\\_the\\_Perspective\\_of\\_Filipino\\_Youth](https://www.academia.edu/240463/Why_do_Filipinos_Exercise_Exploring_Motives_from_the_Perspective_of_Filipino_Youth)
- Cagas, J., et al. (2014). "Pampapayat, Para Lumakas, To Be Healthy": Exploring Filipino Motives For Exercise. *Philippine Journal of Psychology*. Retrieved May 21, 2020 from [https://pages.upd.edu.ph/sites/default/files/ejmanalastas/files/cagas\\_torre\\_manalastas\\_2014\\_pjp\\_exercise\\_motives.pdf](https://pages.upd.edu.ph/sites/default/files/ejmanalastas/files/cagas_torre_manalastas_2014_pjp_exercise_motives.pdf)
- Calcutt, S.(2021). Physical Activity: A Comparison Between the Perceived Benefits of Participating in Dance and Physical Exercise. Retrieved on January 21, 2022 from [https://www.academia.edu/5578772/Perceived\\_Benefits\\_of\\_Dance\\_and\\_Exercise](https://www.academia.edu/5578772/Perceived_Benefits_of_Dance_and_Exercise)
- Carraro, A., Gobbi, E., Ferri, I., Benvenuti, P., & Zanusso, S. (2014). Enjoyment Perception During Exercise With Aerobic Machines 1. *Perceptual and Motor Skills*, 119(1), 146–155. <https://doi.org/10.2466/29.06.PMS.119C15Z3>
- Centers for Disease Control and Prevention (2020). Physical activity prevents chronic disease. Retrieved on June 19 from <https://www.cdc.gov/chronicdisease/resources/infographic/physicalactivity.htm#:~:text=Regular%20physical%20activity%20helps%20improve,depression%20and%20anxiety%2C%20and%20dementia>
- Cerar, K., Kondrič, M., Ochiana, N., & Sindik, J. (2017). Exercise Participation Motives and Engaging In Sports Activity among University of Ljubljana Students. *Open Access Macedonian Journal of Medical Sciences*, 5(6), 794–799. <https://doi.org/10.3889/OAMJMS.2017.159>
- Domingo, J.P.R. (2015). Profile and Teaching Styles of Dance Educators in the Philippines. Retrieved on January 21, 2022 from [https://www.academia.edu/40831274/Profile\\_and\\_Teaching\\_Styles\\_of\\_Dance\\_Educators\\_in\\_the\\_Philippines](https://www.academia.edu/40831274/Profile_and_Teaching_Styles_of_Dance_Educators_in_the_Philippines)
- Ednie, A. & Stibor, M. (2017). Influence and Interpretation of Intrinsic and Extrinsic Exercise Motives. *Journal of Human Sport and Exercise*, vol. 12, núm. 2, pp. 414-425. Retrieved on January 13, 2022 from <https://www.redalyc.org/pdf/3010/301051757018.pdf>
- Feito Y, Brown C, Box A, Heinrich KM, Petruzzello SJ. (2018). An Investigation Into How Motivational Factors Differed Among Individuals Engaging in CrossFit Training. *SAGE Open*. doi:10.1177/2158244018803139
- Ferriz, R. (2013). Predicting Satisfaction in Physical Education Classes: A Study Based on Self-Determination Theory. *The Open Education Journal*, 6(1), 1–7. <https://doi.org/10.2174/1874920820130705001>
- Frederiks, J. (2012). Musicality. WDC Education Department. Retrieved on March 15, 2022 from <https://wdced.com/2012/02/musicality-by-jesper-frederiksen/>
- Gavin, J., Keough, M., Abravanel, M., Moudrakovski, T., & Mcbrearty, M. (2014). Motivations for Participation in Physical Activity Across the Lifespan. *International Journal of Wellbeing*, 4(1), 46-61. doi:10.5502/ijw.v4i1.3
- Gillison, F. B., Standage, M., & Skevington, S. M. (2011). Motivation and Body-Related Factors as Discriminators of Change in Adolescents' Exercise Behavior Profiles. *Journal of Adolescent Health*, 48(1), 44–51. <https://doi.org/10.1016/J.JADOHEALTH.2010.05.006>
- Guedes, D. P., Legnani, R. F. S., & Legnani, E. (2012). Exercise Motives in College Students and Associated Factors. *Revista Brasileira de Educação Física e Esporte*, 26, 679-689. <https://www.scielo.br/j/rbefe/a/tKbzh3hYbd4yT6zbnX8mTm/abstract/?format=html&lang=en>

- Guedes, D. P., Legnani, R. F. S., & Legnani, E. (2012). Reasons for Physical Exercise Practice in University Students According to Body Mass Index. *Revista Brasileira de Atividade Física & Saúde*, 17(4), 270-274.
- HEALTHbeat (2019). Department of Health- National Center for Health Promotion. Retrieved January 13, 2022 from <https://www.doh.gov.ph/sites/default/files/publications/HBEAT58a.pdf>
- Hirvensalo, M., & Lintunen, T. (2011). Life-Course Perspective for Physical Activity and Sports Participation. *European Review of Aging and Physical Activity*, 8(1), 13–22. <https://doi.org/10.1007/S11556-010-0076-3>
- Kilpatrick, M. W., Greeley, S. J., & Collins, L. H. (2015). The Impact of Continuous and Interval Cycle Exercise on Affect and Enjoyment. *Research Quarterly for Exercise and Sport*, 86(3), 244–251. <https://doi.org/10.1080/02701367.2015.1015673>
- Jaurigue, J. (2011). Exercise Motivation and Exercise Attribution of Recreational Athletes. Retrieved on January 10, 2022 from [https://www.academia.edu/49224827/Exercise\\_Motivation\\_and\\_Exercise\\_Attribution\\_of\\_Recreational\\_Athletes](https://www.academia.edu/49224827/Exercise_Motivation_and_Exercise_Attribution_of_Recreational_Athletes)
- Kilpatrick, M. & Mears, J. Motivation for Exercise: Applying Theory to Make a Difference in Adoption and Adherence. *ACSM's Health & Fitness Journal*. Retrieved on January 10, 2022 from [https://www.academia.edu/18235421/MOTIVATION\\_FOR\\_EXERCISE\\_Applying\\_Theory\\_to\\_Make\\_a\\_Difference\\_in\\_Adoption\\_and\\_Adherence](https://www.academia.edu/18235421/MOTIVATION_FOR_EXERCISE_Applying_Theory_to_Make_a_Difference_in_Adoption_and_Adherence)
- Kopczynski, S., Kellmann, M., & Chen-Stute, A. (2014). Attitudes Towards Physical Activity and Exercise Participation – a Comparison of Healthy-Weight and Obese Adolescents. *Deutsche Zeitschrift Für Sportmedizin*, 2014(05). [https://www.academia.edu/18235421/MOTIVATION\\_FOR\\_EXERCISE\\_Applying\\_Theory\\_to\\_Make\\_a\\_Difference\\_in\\_Adoption\\_and\\_Adherence](https://www.academia.edu/18235421/MOTIVATION_FOR_EXERCISE_Applying_Theory_to_Make_a_Difference_in_Adoption_and_Adherence)
- Kurtus, R. (2022). Importance of Being Healthy. Retrieved on June 6, 2022 from [https://www.school-forchampions.com/grades/importance\\_of\\_being\\_healthy.htm#\\_Yqsz6nZBzIU](https://www.school-forchampions.com/grades/importance_of_being_healthy.htm#_Yqsz6nZBzIU)
- McCombes, S. (2019). Descriptive research. Retrieved on January 10, 2022 from <https://www.scribbr.com/methodology/descriptive-research/>
- Michael, Shannon, et al. (2015). Variety, Enjoyment, and Physical Activity Participation Among High School Students. *National Library of Medicine*. Retrieved on June 6, 2022 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5295133/>
- Morris, T., & Roychowdhury, D. (2020). Physical Activity for Health and Wellbeing: The Role of Motives for Participation. *Health Psychology Report*, 8(4), 391–407. <https://doi.org/10.5114/HPR.2020.100111>
- Murphy, S. L., & Eaves, D. L. (2016). Exercising for the Pleasure and for the Pain of it: The Implications of Different forms of Hedonistic Thinking in Theories of Physical Activity Behavior. *Frontiers in Psychology*, 7, Article 843. doi:10.3389/fpsyg.2016.00843
- Romaguera, D., Tauler, P., Bannasar, M., Pericas, J., Moreno, C., Martinez, S., & Aguilo, A. (2011). Determinants and Patterns of Physical Activity Practice Among Spanish university students. *Journal of sports sciences*, 29(9), 989–997. <https://doi.org/10.1080/02640414.2011.578149>
- Roychowdhury, D. (2020). Using Physical Activity to Enhance Health Outcomes Across the Life Span. *Journal of Functional Morphology and Kinesiology*, 5, 1–13. <https://doi.org/10.3390/jfmk5010002>
- Silva, D., Naghavi, M., Duncan, B., Schmidt, M., de Souza, M., & Malta, D. (2019). Physical Inactivity as Risk Factor for Mortality by Diabetes Mellitus in Brazil in 1990, 2006, and 2016. *Diabetology & Metabolic Syndrome*, 11, 23. <https://doi.org/10.1186/s13098-019-0419-9>
- Smith, A., Green, K., & Thurston, M. (2017). Education, physical education and physical activity promotion. *Routledge Handbook of Physical Activity Policy and Practice*, 249–257. <https://doi.org/10.4324/9781315672779-17>
- Spraul, T. (2020). Why is Exercise Important?. *Exercise.com*. Retrieved on June 6, 2022 from <https://www.exercise.com/learn/why-is-exercise-important/>
- Stubbs, B., et al. (2017). Physical Activity and Anxiety: A Perspective from the World Health Survey. *Journal of Affective Disorders*, 208, 545–552. <https://doi.org/10.1016/j.jad.2016.10.028>
- Taylor, J. (2020). Motivation. Dr. Jim Taylor. Retrieved on June 6, 2022 from <https://www.drjimtaylor.com/4.0/motivation/>
- Teixeira, P., et al. (2012). Exercise, Physical Activity, and Self-Determination Theory: A Systematic Review. *International Journal of Behavioral Nutrition and Physical Activity*.
- Wardoku, R., Blair, C., Demmer, R., & Prizment, A. (2019). Association Between Physical Inactivity and Health-Related Quality of Life in Adults with Coronary Heart Disease. *Maturitas*, 128, 36–42. <https://doi.org/10.1016/j.maturitas.2019.07.005>
- Weiss, M. (2012). Teach the Children Well: A Holistic Approach to Developing Psychosocial and Behavioral Competencies Through Physical Education. Retrieved on June 6, 2022 from <https://doi.org/10.1080/00336297.2011.10483663>
- World Health Organization (2011). Global Strategy on Diet, Physical Activity and Health. Retrieved on January 12, 2022 from <http://www.who.int/dietphysicalactivity/pa/en/index.html>
- World Health Organization (2020). Global Recommendations on Physical Activity for Health. Retrieved from <https://www.who.int/dietphysicalactivity/publications/9789241599979/en/> [accessed January 11, 2022].

