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Research Article

An Assessment of the Physical Fitness of Senior High School Learners: Basis for the Development of a Home-Based Physical Fitness Plan

Noel L. Dominado*

Division of Pampanga, Philippines, Senior High School in Magalang Stand Alone 2, San Pedro 2, Magalang, Pamapanga 2011

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**Corresponding author:*
E-mail:
noel.dominado@pcu.edu.ph

ABSTRACT

This study was conducted to determine the Physical Fitness Levels of Learners during the Lockdown Period: Basis for the Development of a Home-Based Physical Fitness Plan: To achieve the purpose of the study, the descriptive research design was used. Seventy-six (76) eleventh graders Health Optimizing Physical Education Accountancy, Business Management learners of Senior High School in Magalang Stand Alone 2 in the School Year 2020-2021 served as respondents of the study. The result revealed that body mass index marked a case of overweight and underweight, the respondents' health-related fitness show above normal, needs improvement cardiovascular endurance, fair and needs improvement muscular strength. However, some are fair and need improvement in hamstring flexibility, and needs improvement in left shoulder girdle flexibility. Furthermore, the skill-related fitness of the respondents shows poor, fair, and needs improvement agility. Furthermore, poor and needs improvement balance, fair and needs improvement coordination. However, needs improvement and developing performance speed. Lastly, needs improvement in the leg, while needs improvement in reaction time. It is suggested the development of effective preventive strategies for all unfit students who are at high risk of being underweight and overweight and the design of programs that will enhance the fitness of students' health and skill-related fitness.

Keywords: *Assessment, Fitness, Learners, Physical Fitness Plan*

Introduction

Around 1.5 billion children worldwide, or 87 percent of the world's student population, experienced a degree of school interruption because of the coronavirus. When COVID-19 lockdowns remained obligatory in March 2020 throughout the nation, curricula in most institutions were caught off guard on how to move

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forward with student learning without compromising the well-being of the students and teachers (Strauss, 2020). The COVID-19 has brought in a school shutdown globally. As a result, the instruction set has extremely changed, with the phenomenal rise of blended learning, distance learning, and homeschooling, whereby teaching and learning take on remote and digital platforms (Li & Lalani, 2020). Inline the lockdown directives, outdoor activities, no face-to-face classroom setting, limiting actions and regular bodily activities, and exercise of the learners distract the day-to-day actions of most of the learners.

The nonexistence of the protective injection prompted authorities to strict social distancing or a lockdown approach. It was handed down by the government to the people, applying travel bans, and closing congested open places, and schools. The lockdown during a pandemic not only distracts people's physical but also mental health due to physical inactivity (Srivastav et al., 2021). Also, lockdown restricting outdoor events and regular bodily activity and movements will disturb the regular activities of most individuals (Pulla, 2020). Thus, COVID-19 possibly turns into permanently established, leading to a risk of cardiovascular disease, diabetes, and obesity in learners (Dunton et al., 2020). Also, it is mentioned that bodily activity is serious to cardiovascular health and believed vital in the time of the pandemic. Measure to lessen the shakeout of COVID-19 is through social distancing; however, home quarantine hastens the danger of decreasing learners' physical activity with possible long-term concerns. Every individual evolved as a bodily active human, and consistent physical activity is in our nature (Booth et al., 2000). Inactivity can alter the epigenome, the chemically altered portion of DNA that regulates how genes are expressed, according to Gorbunova, and Selhub, (2020).. Chronic disorders like heart disease, stroke, type 2 diabetes, and some types of cancer are more likely to develop as a result of these alterations. It is reported in the study of Owen et al.(2010) that prolonged periods of lockdown during the time of pandemic may lead to inactive behaviors, decreasing outdoor activity, watching television, playing online games, and spending more time on setting routines leads to an increased risk of health conditions. Previous studies stated that around 35% of individuals live through psychological stress, and female shows higher psychological stress than male (Que et al., 2020). Besides, reading about COVID-19 from the news can be stressful. Stress may lead to overeating, especially comfort foods with high sugar content, described as food cravings (Yilmaz &Gokmen, 2020). Foods, mostly rich in carbohydrates can diminish pressure because of the production of serotonin with a beneficial outcome on mindset (Ma et al., 2017). On the other hand, the effects of carbohydrates through food cravings are relative to the blood sugar level indicator of food that is connected with the expanded danger of creating cardiovascular illness, obesity, and more severe problems (Wu et al., 2020). During the lockdown period, all individuals in the community, regardless of age, sex, socioeconomic status, and background, should maintain good health by following the World Health Organization physical activity recommendations of 150 minutes of moderate-intensity or 75 minutes of dynamic physical activity per week, or a combination muscle and bone-strengthening activities. A balanced diet full of fruits, vegetables, and whole grains can help to strengthen the immune system and ward off infection, according to one study. A bad diet that is high in processed foods and sugary drinks might weaken the immune system and make people more vulnerable to illness, the study also revealed Kwak, and Kim, (2022).. However, all studies were conducted at the earlier point of the pandemic. There is a lack of study investigating the fitness levels during the lockdown period. Thus, this study will try to establish evidence of learners' physical fitness health and skill-related fitness levels during the lockdown period.

Determining the prevalence of physical fitness health and skill-related fitness levels may help conceptualize and plan towards improving learner's fitness health. As a result, the motivation of this study is to assess the physical fitness levels of learners' during the lockdown period.

Statement of the Problem:

This study aims to determine the physical health condition of eleventh graders' in A

ccountancy, Business, and Management at Senior High School in Magalang Stand Alone 2, Division of Pampanga as the basis for the development of a home-based physical fitness plan during the school year 2020-2021.

Specifically, it seeks to measure the level of physical fitness through the following:

1. How may the physical fitness of the learners be described in terms of:
   1.1 health-related fitness;
   1.2 skill – related fitness
2. Based on the findings of the study what home-based physical fitness plan may be proposed to enhance the fitness of the learners?

Methods

Research Design

The descriptive research design was used in this study. According to McCombes (2020), descriptive research is a quantitative research method that attempts to collect quantifiable information for statistical analysis of the population sample. It is a popular market research tool that allows us to collect and describe the demographic segment's nature. The researcher provided a set of physical fitness tests to the respondents of Accountancy, Business Management Health Optimizing Physical Education eleventh graders of Senior High School in Magalang Stand Alone 2 taking health optimizing physical education 1 and 2 school year 2020-2021 by using Google forms. The fitness test will take 3 days to complete. This study is in compliance with the Data Privacy Act (DPA) of 2012, and its Implementing Rules and Regulations (IRR) which took effect September 9, 2016, authorizing the researcher to use the data from this survey to assess the physical fitness of the learners. Store the data for the analysis of results and accomplishment of the research study. Only respondents who qualified in the research are included. Respondents will be oriented about the objective of the study and will be guaranteed confidentially. To establish the respondents for data collection, a schedule was given to them two days before the set date. The researcher will likewise provide a concise introduction about the directions of the study.

Respondents of the Study

The respondents of this study were the 76 eleventh graders Health Optimizing Physical Education Accountancy, Business Management learners during the school year 2020-2021.

Sampling Method

The total enumeration was used in selecting the respondents of the study. Total enumeration sampling is a sort of purposive sampling where the entire population interest (i.e., a group whose members all share a given qualities) is studied (Lavrakas, 2008). Therefore, as implied by the sampling technique, the researcher purposively selected the 76 eleventh graders Health Optimizing Physical Education learners of the total population of Senior High School in Magalang Stand Alone 2 Accountancy, Business and Management.

Source of Data

The respondents of this study were the learners of the Senior High School Accountancy, Business Management Department. The respondents are the eleventh graders who are currently enrolled for the school year 2020-2021.

Instruments

The researcher made a self-administered questionnaire to obtain the quantitative data on profile and physical fitness tests (health-related and skill-related fitness).

The research used a mixture of closed questions and fitness test questions. The questionnaire is composed physical assessment test. The survey contained physical fitness skill-related (agility, balance, coordination, power, reaction time, and speed) and health-related (cardiovascular endurance, flexibility, muscular endurance, and muscular strength). This portion was adapted from the Department of Education physical fitness manual introduced by Mequi, A. (2004) former Chair of, the Philippine Sports Commission (PSC) and Director of, the Bureau of Physical Education and School Sports (BPESS). Concurrent validity was established by comparing the instrument's scores to the findings of the Senior Fitness Test. The inter-rater reliability was excellent for all components, ranging from 0.91 to 0.99, and the intra-

rater reliability was likewise good for all components, ranging from 0.94 to 1.00. The correlations were all very significant and varied from 0.35 to 0.79.

Data Collection Procedure

Consent to conduct the study was asked from the school head of Senior High School in Magalang Stand Alone II and advisers of the respondents before the data gathering. After the approval has been granted, data collection will begin on the first week of the class. The researcher will explain the study to the respondents through online synchronous sessions. To test their physical fitness, 3-minute step test, 90-degree push-up, basic plank, shoulder flexibility test, and sit-and-reach, for health-related fitness. Skill-related fitness will be assessed through the following: hexagon agility test, stork balance stand test, juggling, standing long jump, stick drop, and 40-meter sprint. The scoring and recording of the fitness score in physical fitness skill-related and health-related fitness will be demonstrated step by step by the researcher to the respondents via Zoom session. As stated in DepEd Regional Memorandum Order number 228 series of 2020 there will be absolutely no face-to-face school activities. Therefore, the physical fitness test scorecard of the respondents will be sent through email or messenger of the researcher to avoid physical contact. All data collected will be tabulated and subjected to statistical computation to aid in the analysis and interpretation.

Data Analysis

Descriptive research statistics such as frequency, percentage distribution, weighted mean, and standard deviation were used to analyze the data. The following scale and interpretation with the corresponding point values were used.

Result and Discussion

A. Health-Related Fitness

The health–related fitness of the respondents is determined by their body mass index, cardiovascular endurance, muscular endurance, muscular strength, and flexibility.

Table 1. Body mass index of the respondents

Classification	Frequency	Percentage	Mean	Std. Dev.
Underweight	16	21.05%	17.07	1.38
Normal	37	48.68%	20.21	1.39
Overweight	23	30.26%	26.34	1.74
Total	**76**	**100%**	**21.20**	

The respondents' body mass index is shown in Table 1. They are classified as underweight, normal, overweight, and obese. The computed mean of the respondents' body mass index was 26.34; this means 23 or (30.26%) of respondents were classified as ***overweight***, a mean of 20.21 means 37 or (48.68%) respondents were described to be ***normal***, 17.07 means 16 or (21.05%) were ***underweight***. This simply shows that the body mass index of the respondents marked a case of overweight and underweight due to inactivity during the lockdown.

The coronavirus disease (COVID-19) lockdown affected the body mass index of younger adults globally. Significantly stated that body mass index was increased during lockdown due to physical inactivity. This overall effect is alarming due to the risk of overweight, obesity, and their relevant comorbidities. Moreover, the body mass index loss observed in one study in older adults may be an alarming sign of lockdown-related risk of weight loss and malnutrition in older adults according to Bakaloudi, D.R., Barazzoni, R., Bischoff, S., Breda, J., Wickramasinghe, K., Chourdakis, M., (2021).

Table 2. Cardiovascular endurance of the respondents (Heart rate, Minute)

Scale	Frequency	Percentage	Mean	Std. Dev.
Needs Improvement	7	9.21%	87.28	3.03
Below Normal	23	30.26%	98.82	15.04
Normal	4	5.26%	100	1.5
Above Normal	42	55.26%	122.3	11.06
Total	**76**	**100%**	**102.07**	

Table 2 reveals the test results on the cardiovascular endurance of the respondents. Data shows the computed mean of 122.3 means 42 or (55.26%) of respondents whose physical fitness was described as ***above normal***. In addition, 100 means 4 or (5.26%) respondents were found to have in ***normal*** heart rate, and 98.82 means 23 or (30.26%) respondents were classified ***below normal***. Lastly, 87.28 means 7 or (9.21%) of respondents in the ***needs improvement*** category. A manifestation is that lack of physical activity may affect the cardiovascular efficiency of the individual. In most people, the lockdown has likely resulted in a stressful circumstance, which could lead to bad psychological effects and/or poor cardiovascular health, as well as a higher resting heart rate in the supine position.

Table 3. Muscular endurance of the respondents (Number of push-ups made)

Scale	Frequency	Percentage	Mean	Std. Dev.
Needs Improvement	35	46.05%	6.08	1.46
Fair	20	26.31%	11.2	2.14
Good	15	19.73%	18.33	2.58
Very Good	6	7.89	26	2
Total	**76**	**100%**	**15.40**	

As per the results of the respondents' muscular endurance test, Table 3 shows that the computed mean was 26. This means that 6 or (7.89%) respondents had a ***very good*** performance; 15 or (19.73%) respondents with ***good*** performance, with a mean of 18.33. On the other hand, 20 or (26.31%) respondents described having ***fair*** performance, with a mean of 11.2, and 35 or (46.05%) respondents were into ***needs improvement***, with a mean of 6.08. This simply shows that respondents with very good, and good performance possess muscular strength of the upper body muscles which they need to perform activities continuously for long periods without becoming tired. Respondents with fair, and needs improvement performance cannot sustain the long-continued contraction of the muscles resulting in fatigue. According to the study of Cui, and Zhang, (2022)., the depletion of energy reserves, the buildup of metabolic waste products, and the activation of signaling pathways that result in muscle cell injury are all important contributors to muscle tiredness. The study also discovered that muscular tiredness can lead to a number of detrimental effects, including decreased exercise performance, an increased risk of injury, and poorer muscle function.

Table 4. Muscular strength of the respondents (Basic plank time)

Scale	Frequency	Percentage	Mean	Std. Dev.
Needs Improvement	31	40.78%	4	3.10
Fair	10	13.15%	28.4	11.69
Good	14	18.42%	40.57	4.76
Excellent	21	27.63%	60.38	10.88
Total	**76**	**100%**	**33.33**	

As revealed in Table 4 the basic plank test. The data shows that the highest computed mean was 60.30. This means that 21 or (27.63%) respondents had ***excellent*** performance; 14 or (18.42%) respondents had ***good*** performance, with a computed mean of 40.57. Furthermore, 10 or (13.15%) respondents described a ***fair*** category, with a computed mean of 28.4, and 31 or (40.78%) respondents described ***needs improvement***, with a mean of 4. An implication is that respondents with excellent and good performance possess hold-back/core muscle stability. Seemingly, respondents with fair and needs improvement performance display weak back/core muscle stability. The impact of muscle strength on numerous aspects of performance, as well as the advantages of increasing physical strength and improved force-time qualities, which contribute to individual total performance, are significantly linked to increased muscle strength.

Table 5. Flexibility of the respondents (Sit-and-reach, centimeter)

Scale	Frequency	Percentage	Mean	Std. Dev.
Fair	15	19.73%	27	3.04
Needs Improvement	4	5.26%	8.75	6.65
Good	26	34.21%	37.80	4.83
Very Good	25	32.89%	51.32	5.31
Excellent	6	7.89%	64.33	3.66
Total	**76**	**100%**	**39.04**	

Table 5 the shows flexibility test of the hamstring muscles. The highest mean flexibility of the respondents was 64.33, which means that 6 or (7.89%) respondents had ***excellent*** flexibility, 25 or (32.89%) respondents had ***very good***, with a mean of 51.32, and 26 or (34.21%) respondents were in ***good*** flexibility, with a mean of 37.80. In addition, 4 or (5.26%) respondents were into ***needs improvement***, with a mean of 8.75. Lastly, 15 (19.74%) respondents were classified into a ***fair*** category, with a mean of 27. This implies that respondents with excellent, very good, and good flexibility reach maximum performance, individuals must utilize the full length of muscles to exhibit power and strength. On the other hand, fair and needs improvement category flexibility hold muscles are too tight, they may not be able to provide the explosiveness required for a specific movement. During the lockdown sitting is a component of a sedentary lifestyle, and it can promote stiffness in the hamstring muscle, which can cause a reduction in range of motion and contribute to a variety of musculoskeletal issues (Yadav, & Basista, 2020).

Table 6. Flexibility of the respondents' right shoulde girdle (Zipper test, centimeter)

Scale	Frequency	Percentage	Mean	Std. Dev.
Good	27	35.52%	2.77	0.42
Very Good	33	43.42%	4.66	0.47
Excellent	16	21.05%	6.25	1.06
Total	**76**	**100%**	**4.56**	

Table 6 revealed the respondents' flexibility in the right shoulder girdle. The highest computed mean was 6.25, which means that 16 or (21.05%) respondents had excellent shoulder flexibility, 33 or (43.42%) respondents were on a very good scale, with a mean of 4.66, and 27 or (35.52%) respondents into good category, with a mean of 2.77.

As shown in Table 7, the zipper test was used to assess the left shoulder girdle flexibility of the respondents. The highest mean score of the test was 4.35, which means 20 or (26.31%) had very good left shoulder flexibility, 46 or (60.52%) respondents had good flexibility, with a mean of 2.63, and 10 or (13.15%) respondents were into needs improvement

category, with a mean of 0.7. The shoulders are vital, yet often overlooked, regions of the body. Your shoulders assist individual daily duties, such as reaching for objects, lifting objects, and performing exercises. Flexible shoulders are highly significant since they will help you gain overall body strength (Health Status Team, 2021).

B. Skill-Related Fitness

The skill–related fitness of the respondents is determined by their agility, balance, coordination, power, reaction time, and speed.

As shown in Table 8, the hexagon tests were used to assess the counterclockwise agility of the respondents. The highest computed score of the test was 43.37, meaning 8 (10.52%) respondents had ***poor*** agility, 17.30 or 31 (40.78%) respondents were described as ***fair***, and 23.4 or 10 (13.15%) respondents were described ***needs improvement***. Furthermore, 13.25 or 12 (15.78%) respondents described **good**. Lastly, 19.73% or 15 (19.73%) described **very good**. This implies that respondents with better agility can change position in space with the quickness of movement.

Table 8. Agility of the respondents (Counterclockwise, seconds)

Scale	Frequency	Percentage	Mean	Std. Dev.
Poor	8	10.52%	43.37	12.32
Fair	31	40.78%	17.38	1.22
Needs Improvement	10	13.15%	23.4	1.42
Good	12	15.78%	13.25	1.65
Very Good	15	19.73%	8.28	2.30
Total	**76**	**100%**	**21.13**	

As shown in Table 8, the hexagon tests were used to assess the counterclockwise agility of the respondents. The highest computed score of the test was 43.37, meaning 8 or (10.52%) respondents had ***poor*** agility, 17.30 or 31 (40.78%) respondents' were described as ***fair***, 23.4 or 10 (13.15%) respondents' were described ***needs improvement***. Furthermore, 13.25 or 12 (15.78%) respondents' described **good**. Lastly, 19.73% or 15 (19.73%) describing **very good**. This implies that respondents with better agility can to change position in space with the quickness of movement.

Table 9. Agility of the respondents (Clockwise, seconds)

Scale	Frequency	Percentage	Mean	Std. Dev.
Poor	9	11.84%	42.22	12.25
Fair	16	21.05%	17.68	1.35
Good	19	25%	13.47	1.64
Very Good	26	34.21%	7.03	1.28
Excellent	6	7.89%	3.33	0.51
Total	**76**	**100%**	**16.74**	

As reflected in Table 9, the hexagon tests were used to assess the clockwise agility of the respondents. Data shows that the highest computed mean was 42.22, which means 9 or (11.84%) of respondents had ***poor*** agility. 16 (21.05%) respondents were described as ***fair***, with a mean of 17.68. On the other hand, 19 or (25%) respondents were described as ***good***, with a mean of 13.47, followed by 26 or (34.21%) respondents were described as ***very good***, with a mean of 7.03. Lastly, 6 or (7.89%) respondents describe ***excellent***. A manifestation that agility improves performance in activities that demand quick direction changes while maintaining balance, strength, speed, and body control. According to Machado et.al (2022), agility is a sophisticated skill that is crucial for soccer success. The study also discovered that speed, balance, coordination, and agility are all related to one another.

Table 10. Balance of the respondents' right leg (Stork balance stand test, seconds)

Scale	Frequency	Percentage	Mean	Std. Dev.
Fair	16	21.05%	52.43	15.58
Needs Improvement	33	43.42%	20.06	19.19
Good	15	19.73%	47.27	45.51
Very Good	12	15.78%	6.43	17.49
Total	**76**	**100%**	**31.54**	

The right leg balance of the respondents' was assessed through the stork balance test. Table 10 shows that the mean score of 52.43 implies 16 or (21.05%) respondents were described to be ***fair***, 20.06 meaning 33 or (43.42%) respondents were described ***needs improvement***. Furthermore, 47.27 which means 15 or (19.73%) of respondents described were ***good***. Lastly, 6.43 indicating 12 or (15.78%) respondents were described as ***very good***. Movement is essential to perform any daily task. Our ability to move efficiently requires control of the body's postural alignment. To move efficiently strong balance is needed.

Table 11. Balance of the respondents' lift leg (Stork balance stand test, seconds)

Scale	Frequency	Percentage	Mean	Std. Dev.
Fair	9	11.84%	53.72	5.88
Needs Improvement	25	32.89%	15.64	12.69
Good	25	32.89%	9.80	26.93
Very Good	17	22.36%	1.56	0.32
Total	**26**	**100%**	**20.18**	

As shown in Table 11, the lift leg balance of the respondents' was assessed through the stork balance test. The highest computed score was 53.72 describing 9 or (11.85%) respondents were described as ***fair***, 15.64 meaning 25 or (32.89%) respondents were described ***needs improvement***. In addition, 25 (32.89%) respondents were described as ***good***, with a mean of 9.80. Lastly, 17 or (22.36%) respondents describe ***very good***. This implies that Lack of balance, such as walking, jumping, running, and throwing would be extremely challenging to perform. It takes excellent balance to move effectively. Walking, jumping, running, and throwing would be very difficult to do while out of balance. Balance and stability have a significant impact on individual performance. They increase the person's center of gravity, enabling them to move with greater strength, force, and accuracy. Your performance will be at its peak if you have both balance and stability (Harper, 2016).

Table 12. Coordination of the respondents (Juggling, number of times athlete hit)

Scale	Frequency	Percentage	Mean	Std. Dev.
Fair	19	25%	15.21	3.37
Needs Improvement	29	38.15%	5.51	2.99
Good	15	19.73%	25.33	2.52
Very Good	13	17.10%	39.30	7.79
Total	**76**	**100%**	**21.26**	

Table 12 shows that the coordination test obtained the highest mean score was 39.30, indicating that 13 or (17.10%) of respondents were described as ***very good***. In addition, 25.33 or 15 (19.73%) respondents were described as ***good***. Furthermore, 15.21 or 19 (25%)

respondents were described as ***fair***, and 5.51 or 29 (38.51%) respondents were described to need ***improvement***. This implies that well-coordinated respondents also display good timing. Good coordination can help us perform better in our regular activities. It can help individuals stay more successful by preventing many types of injuries (Perea, 2018).

Table 13. Speed of the respondents (40-meter sprint, seconds)

Scale	Frequency	Percentage	Mean	Std. Dev.
Fair	4	5.26%	7.51	0.73
Needs Improvement	46	60.52%	11.80	2.22
Good	9	11.84%	6.19	0.18
Very Good	17	22.36%	5.20	0.35
Total	**76**	**100%**	**7.67**	

The speed of the respondent was assessed through the 40-meter sprint. Table 13 shows the highest computed mean score was 11.80, which means 46 or (60.52%) of respondents were described to ***needs improvement***, followed by 7.51, which means 4 or (5.26%) respondents were described as ***developing***. On the other hand, 9 or (11.84%) respondents described to be in a ***good*** performance, with a mean of 6.19, and 17 or (22.36%) respondents described ***very good***, with a mean of 5.20. Respondents with good and very good speed imply the ability to perform a motor skill as rapidly as possible. The respondents to move quickly, which is essential in individual daily activities. This study discovered that children and adolescents who were kept at home during the COVID-19 pandemic had lower levels of physical activity and higher levels of sedentary behavior. The study also discovered that children from lower-income families and younger children had a stronger connection Silva, et.al (2022).

Table 14. Leg power of the respondents (Standing long jump, meters)

Scale	Frequency	Percentage	Mean	Std. Dev.
Needs Improvement	32	42.10%	56.15	7.70
Good	9	11.84%	136.22	11.47
Very Good	26	34.21%	174	16.42
Excellent	9	11.84%	220	11.11
Total	**76**	**100%**	**146.59**	

As shown in Table 14, the highest mean score of respondents' leg power was 220. This suggests that 9 or (11.84%) respondents were described as ***excellent***, 26 or (34.21%) respondents described ***very good***, with a mean of 174, followed by 9 or (11.84%) respondents were described as ***good***, with a mean of 136.22. Lastly, 32 (42.10%) respondents have described ***needs for improvement***, with a mean of 56.15. Respondents with excellent, very good, and good performance imply that the better the leg power of the respondents', the better their physical activity. As inactivity continues, muscle strength in the arms and legs will decrease. According to Gariartr (2012), power is a significant factor determining physical performance, and an attribute may have an even greater influence.

Table 15. Reaction time of the respondents (Stick drop test, inches)

Scale	Frequency	Percentage	Mean	Std. Dev.
Needs Improvement	20	26.31%	14.05	1.05
Good	25	32.89%	11.76	1.87
Very Good	24	31.57%	7.62	1.24

Scale	Frequency	Percentage	Mean	Std. Dev.
Excellent	7	9.21%	4	1.15
Total	**76**	**100%**	**9.35**	

Reflected in Table 15 are the mean scores of the respondents' reaction time. The highest mean was 14.05 or 20 (26.31%) respondents were described to ***needs improvement***, 11.76 or 25 (32.89%) respondents were described as ***good***, 7. 62 or 24 (31.57%) respondents were described as ***very good***, and 4 or 7 (9.21%) respondents were described ***excellent***. This implies that reaction time is an inherent ability, but the overall response can be improved by practice. This study discovered by Gan, et.al (2022) that both toddlers and adults' reaction times can be enhanced by exercising. The study also discovered that the duration, intensity, and kind of exercise all have an impact on how quickly one's response time improves.

Conclusion

The Physical Fitness of the Respondents

A. Health-related fitness

The body mass index classification is classified as underweight, normal, overweight, and obese. 23 or 30.26% of respondents were classified as overweight; 37 or 48.68% were described as normal; 16 or 21.05% were underweight. When it comes to cardiovascular endurance 42 or 55.26 respondents were above normal; 23 or (30.26%) respondents were classified below normal; 4 or (5.26%) respondents were found to be normal; 7 or (9.21%) respondents in the needs improvement category. For muscular endurance 6 or (7.89%) respondents had a very good performance; 15 or (19.73%) respondents with good performance. On the other hand, 20 or (26.31%) respondents described having fair performance, and 35 or (46.05%) of respondents were into needs improvement. Furthermore, regarding muscular strength 21 (27.63%) respondents had excellent performance; 14 (18.42%) respondents were into good performance; 10 (13.15%) respondents described a fair category; 31 (40.78%) respondents described needs improvement. Subsequently, the hamstring flexibility of the respondents 6 or (7.89%) respondents had excellent flexibility; 25 or (32.89%) respondents were very good; 26 or (34.21%) respondents had good flexibility; 4 or (5.26%) respondents were into needs improvement; 15 or (19.74%) respondents were classified into a fair category. In addition, the flexibility in the right shoulder girdle. 16 or (21.05%) respondents had excellent shoulder flexibility; 33 or (43.42%) respondents were on a very good scale; 27 or (35.52%) respondents into the good category. Moreover, 20 or (26.31%) had very good left shoulder flexibility, 46 or (60.52%) respondents had good flexibility; and 10 or (13.15%) respondents were in the needs improvement category.

B. Skill-Related Fitness

The skill–related fitness of the respondents is determined by their agility, balance, coordination, power, reaction time, and speed. The skill-related fitness findings show that the counterclockwise agility test had 8 or (10.52%) respondents who had poor agility; 17.30 or 31 (40.78%) respondents were described as fair; 23.4 or 10 (13.15%) respondents were described needs improvement; 13.25 or 12 (15.78%) respondents' described good; 19.73% or 15 (19.73%) describing very good. On the other hand, in the clockwise test of the respondents 9 or (11.84%) respondents had poor agility; 16 or (21.05%) respondents were described as fair; 19 or (25%) respondents were described as good; 26 or (34.21%) respondents were described very good; 6 or (7.89%) respondents' describe excellent. Furthermore, the right leg stork balance test had 16 or (21.05%) respondents described it to be fair; 33 or (43.42%) respondents described needs improvement; 15 or (19.73%) respondents described were good; 12 or (15.78%) respondents were describing very good. Likewise, the left leg stork balance test of the respondents posted 9 or (11.85%) respondents were described as fair; 25 or (32.89%) respondents were described needs improvement; 25 or (32.89%) respondents were described as good; 17 (22.36%) respondents describe very good. Meantime, the coordination 13 or (17.10%) respondents were described as

very good; 25.33 or 15 (19.73%) respondents were described as good; 15.21 or 19 (25%) respondents were described as fair, and 5.51 or 29 (38.51%) respondents were described to need improvement. However, the speed had 46 or (60.52%) respondents were described as needing improvement; 4 or (5.26%) respondents described developing; 9 or (11.84%) respondents described to be in good performance; 17 or (22.36%) respondents described very good. For the leg power, 9 or (11.84%) respondents were described as excellent, 26 or (34.21%) respondents were described as very good; 9 or (11.84%) of respondents were described as good; 32 or (42.10%) of respondents were described as needs improvement. Lastly, reaction time 20 or 26.31% of respondents were described to needs improvement; 25 or 32.89% of respondents described as good; 24 or (31.57%) respondents were described as very good; 7 or 9.21% of respondents were described as excellent.

Home-Based Physical Fitness Plan with Light, Moderate to Vigorous Intensity

FITT Formula	1st Month Light	2nd Month Moderate	3rd Month Vigorous
Frequency	1-2x/week	3-4x/week	4x or more/week
Intensity	Rate of Perceived Exertion (RPE) of about 1-3	The rate of Perceived Exertion (RPE) of about 4-6	Rate of Perceived Exertion (RPE) of about 7-8
Time	30 minutes and up	45 minutes and up	1 hour and up
Types	Flexibility Cardiovascular endurance Muscular strength and muscular endurance Agility Balance Coordination Reaction time Circuit training	Flexibility Cardiovascular endurance Muscular strength and muscular endurance Agility Balance Coordination Reaction time Circuit training	Flexibility Cardiovascular endurance Muscular strength and muscular endurance Agility Balance Coordination Reaction time Circuit training

Note:

2-3 Light activity
- Feels like you can maintain for hours easily and carry on a conversation

4-6 Moderate activity
- Breathing heavily can hold a short conversation. Still somewhat comfortable, but becoming noticeably more challenging.

7-8 Vigorous activity
- Borderline uncomfortable. Short of breath, ca speak a sentence

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