

Impact of Physical Activities at Home Amidst The Covid 19 Pandemic Basis for Holistic Development of Bped Students

Samantha S. Acera

Provincial Facilitating Teacher
Deped
Maloma Community Elementary School

ABSTRACT

This study aimed to determine the impact of physical activities at home amidst the COVID-19 pandemic basis for the holistic development of BPED students.

The respondents were the BPED students 60 selected first-year students from the Department of Physical Education, PRMSU-Iba, Zambales. The survey questionnaire method was used in data gathering composed of 2 parts: (1) the profile of the respondents, and (2) the impact of physical activities at home amidst the COVID-19 pandemic.

The findings show that most of the respondents were females, belonging to the age group of 19 years old and above with mean age of 19.35 years old, and earning a monthly income of P5,000 and below with a mean income of P7,166.78. The respondents strongly agree on the physical and social aspects of physical activities at home amidst the COVID-19 pandemic, but they agree on the mental and emotional aspects, respectively. And lastly, there was no significant difference on the impact of physical activities at home amidst the COVID-19 pandemic when grouped according to the respondents' profile variables.

Therefore, it was recommended that the respondents should continually engage in any form of physical activity even at home such as doing stretching for 15 mins and doing household chores, as it would improve their ability to do everyday activities. The respondents may invite their friends in their homes to do Zumba, it would be beneficial not to be just physically healthy, but also to be mentally, emotionally, and socially healthy. And lastly, the respondents should apply what they have been learned in school the proper ways in doing physical activities and encourage their family members to do the same so that the whole family would be holistically healthy.

Keywords: Impact, Physical Activities, Amidst, Covid, Pandemic

Introduction

According to Westerterp, (2013), Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. There are many techniques for the assessment of physical activity ranging from behavioral observation and self-report to motion sensors. The accepted criterion to validate techniques of estimating habitual physical activity, based on the definition of physical

activity, is calorimetry. As such, the doubly labeled water method has become the gold standard for the validation of field methods of assessing physical activity.

In addition, "Physical activity", "exercise", and "physical fitness" are terms that describe different concepts. However, they are often confused with one another, and the terms are sometimes used interchangeably. The energy expenditure can be measured in kilocalories. Physical activity in daily life can be categorized into occupational, sports, conditioning, household, or other activities. Physical activities improve our thinking and health particularly in reducing the risk of acquiring various diseases. However, due to global outbreak of COVID-19 pandemic has forced the closure of gyms, stadiums, pools, dance and fitness studios, physiotherapy clinics, parks, and playgrounds. As a result, many people are unable to actively participate in their regular individual or group sporting and physical outdoor activities. Under such circumstances, they tend to be less physically active, spend more time on screens, have inconsistent sleep patterns as well as worse diets, resulting in weight gain and loss of physical fitness (Maugeri et al., 2020).

The impact of this physical inactivity may very likely be seen in many areas such as health and social care and the mental well-being of people across the globe. The extensive social distancing policies put in place to limit the spread of COVID-19 mean most people would have to spend much, if not all, their time at home (Emmanuel et al., 2020).

Thus, this study was conducted to determine the impact of physical activities at home amidst the COVID 19 pandemic basis for holistic development of Bachelor of Physical Education Students.

Statement of the Problem

This study aimed to determine the impact of physical activities at home amidst the COVID 19 pandemic basis for holistic development of BPED students.

Specifically, it sought to answer the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1 Sex;
 - 1.2 Age; and
 - 1.3 Monthly Income?
2. What is the impact of physical activities at home in the holistic development of students amidst COVID-19 pandemic in terms of:
 - a. Physical impact;
 - b. Mental impact;
 - c. Emotional impact; and
 - d. Social impact?
3. Is there a significant difference between impact of physical activities at home in the holistic development of students amidst COVID-19 pandemic when grouped according to profile variables?

Methodology

The researchers used the descriptive method of research. This method is designed to describe the impact of physical activities at home amidst the COVID 19 pandemic basis for holistic development of BPED students.

According to Voxco (2021), descriptive research was quantitative in nature as it attempts to collect information and statistically analyze it. Descriptive research was a powerful research tool that permits a researcher to collect data and described the demographics of the same with the help of statistical analysis. Thus, it was a quantitative research method.

Table 1
Frequency Distribution of Respondents

BPED STUDENTS	Frequency (f)	Percentage (%)
BPED 1A	30	50
BPED 1B	30	50
TOTAL	60	100

The table 1 above shows the frequency and percentage of the freshman students. As can be gleaned from the table, the BPED 1A registered frequency of 30 or 50 percent and BPED 1B registered frequency of 30 or 50 percent. A total of 60 respondents. The study was conducted at the College of Teacher Education, President Ramon Magsaysay State University, Iba Campus.

The researcher utilized random sampling in choosing the respondents from the BPED students. Sixty (60) respondents were given a survey questionnaire.

Table 2
Reliability Test

Reliability Statistics			
	Cronbach's Alpha	N of Items	Interpretation
Physical	0.747	5	Acceptable
Mental	0.728	5	Acceptable
Emotional	0.766	5	Acceptable
Social	0.843	5	Acceptable

The table 2 shows the reliability test in Impact of Physical Activities at Home Amidst Covid 19 Pandemic Basis for Holistic Development of BPED Students. As can be gleaned from the table in terms of Physical the Cronbach alpha is 0.747 and the number of items is 5 and the interpretation is acceptable, Mental is 0.728, number of items 5, interpretation acceptable, Emotional is 0.766, number of items 5, interpretation acceptable and Social is 0.843, number of items 5, interpretation acceptable. All the questions presented in the survey were essential and reliable.

Results and Discussion

This chapter presents the gathered data in tabular form analyzed and interpreted to provide clear understanding on the problems.

1. Profile of the respondents. Table 3 shown the frequency and percentage distribution of the respondents according to their profile variables.

Table 3

Frequency and Percentage Distribution of the Respondents

According to their Profile Variables

Profile Variables		Frequency (f)	Percentage (%)
Sex	Male	24	40.00
	Female	36	60.00
	Total	60	100.00
Age Mean=19.35 years old or 19	18 years old	6	10.00
	19 years old and above	54	90.00
	Total	60	100.00
Monthly Income Mean=P7,166.78	P5,000 and below	46	76.67
	P5,001 - P10,000	6	10.00
	P10,001 - P15,000	2	3.33
	P15,001 - P20,000	3	5.00
	P20,001 - P25,000	1	1.67
	P25,001 - P30,000	2	3.33
	Total	60	100.00

1.1 Sex. Out of sixty (60) respondents, the majority with 36 or equivalent to 60.00% were females, and 24 or equivalent to 40.00% were male. The results showed that majority of the respondents were females, taking Bachelor of Physical Education which want to explore and try what's new where women are not totally into.

According to Ellner (2020) the female or women nowadays explore the trends that led to women's roles and expectations in physical education and sport during this time period. By exploring trends in physical education and sport, how women were treated, the expectations of women by society, and the views of women in sports are critically examined as of today

1.2 Age. Out of sixty (60) respondents, the majority of the respondents belong to the age group of 19 years old and above with 54 or 90.00%, while the least are 18 years old bracket with 6 or 10.00%. The computed mean age of the respondents was 19.35 or 19 years old. The data clearly demonstrated that the respondents were relatively a young adulthood period which wants to explore things with their abilities and capacities. According to Sanchez-Elvira Paniaguao, 2018), the young adult thinking capacities, relationship skills, and ability to regulate emotions are unlikely to be at a developmental level where they can cope easily with the demands of a diverse, global, technological, rapidly changing world. If all goes well, biology and environment bring a surge of growth paralleling those of childhood and adolescence.

1.3 Monthly Income. Out of sixty (60) respondents, most of the respondents earned below P5,000 and below monthly income with 46 or 76.67%, while others earned an income of P20,001-P25,000 monthly with 1 or 1.67%, respectively. The computed average monthly income of P7,166.78. The monthly income of the respondents is categorized as poor. Which their income is not enough to sustain their needs. The current average estimated poverty threshold in the Philippines is P12,082, which the minimum amounts a family of five needs in amount to buy their basic foods and non-food items (Zoleta, 2022).

2. The Impact of Physical Activities at Home in the Holistic Development of Students amidst the Covid-19 Pandemic

2.1. Physical Impact. Table 4 shows the responses of the respondents on the impact of physical activities at home amidst the COVID-19 pandemic in terms of physical aspect.

Table 4

The Impact of Physical Activities at Home in terms of Physical Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic

Statements	Weighted Mean	Qualitative Interpretation	Rank
1. Doing vigorous physical activities such as jogging, running, aerobics, etc.	3.13	Agree	5
2. Doing sports or physical activities at home during leisure time.	3.22	Agree	4
3. Doing moderate physical activities such as moving a table, pushing a chair, etc.	3.28	Strongly Agree	3
4. Doing physical activities at home would improve respiratory, cardiovascular functions, and overall health.	3.45	Strongly Agree	2
5. Doing physical activities at home help me boost my strength.	3.47	Strongly Agree	1
Overall Weighted Mean	3.31	Strongly Agree	

The data revealed that the topmost result, indicator 5 “Doing physical activities at home help me boost my strength” get an average weighted mean of 3.47 with the qualitative interpretation of strongly agree (rank 1). While the top least result, indicator 1 “Doing vigorous physical activities such as jogging, running, aerobics, etc.” get an average weighted mean of 3.13 with the qualitative interpretation of agree (rank 5). The overall weighted mean of The Impact of Physical Activities at Home in terms of Physical Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic was 3.31 with the qualitative interpretation of strongly agree. Based on the results the physical aspect of physical activities at home helps the respondents to be physically active and healthy.

According to McKenzie (2012) physical activities can increase the endurance and strength of the respiratory muscles, making them more efficient. In addition, physical activities have a positive effect on the immune system response to viral antigens, lowering the incidence of viral infections across the lifespan (Campbell & Turner, 2018).

2.2. Mental. Table 5 show the responses of the respondents on the impact of physical activities at home amidst the COVID-19 pandemic in terms of mental aspect.

Table 5

The Impact of Physical Activities at Home in terms of Mental Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic

Statements	Weighted Mean	Qualitative Interpretation	Rank
1. Doing physical activities at home my mood alleviated.	3.30	Strongly Agree	1
2. Doing physical activities at home provides comfort.	3.25	Strongly Agree	3.5
3. Doing physical activities at home gives positive view in life.	3.27	Strongly Agree	2
4. Doing physical activities at home is highly likeable.	3.07	Agree	5
5. Doing physical activities at home, improves my memory and brain functioning.	3.25	Strongly Agree	3.5
Overall Weighted Mean	3.23	Agree	

The data revealed the top most result, indicator 1 “Doing physical activities at home my mood alleviated” get an average weighted mean of 3.30 with the qualitative interpretation of strongly agree (rank 1). While the least most result, indicator 4 “Doing physical activities at home is highly likeable get an average weighted mean of 3.07 with the qualitative interpretation of agree (rank 5). The overall weighted mean of The Impact of Physical Activities at Home in terms of Mental Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic was 3.23 with the qualitative interpretation of agree.

The result indicates that physical activities at home during this time has positive effects most especially in change of moods.

Taylor et. al (2019) stated in psychology that the mental health should not be overlooked during any phase of pandemic management that is, regular participation in physical activity has long been recognized for its physical health benefits such as positive vibes and creates positive mood. Furthermore, these benefits of physical activity have been observed across diverse psychiatric and neurological conditions, such as anxiety, post-traumatic stress disorder.

2.3. Activities. Table 6 shows the mean rating on the online learning experiences of the respondents during the Covid-19 pandemic in terms of activities.

2.3. Emotional. Table 6 shows responses of the respondents on the impact of physical activities at home amidst the COVID-19 pandemic in terms of emotional aspect

Table 6

The Impact of Physical Activities at Home in terms of Emotional Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic

Statements	Weighted Mean	Qualitative Interpretation	Rank
1. Doing physical activities at home help reduce feeling of loneliness and depression.	3.30	Strongly Agree	1
2. Doing physical activities at home help find inner peace and sense of satisfaction.	3.20	Agree	4
3. Doing physical activities at home lead to be emotionally matured and adjusted in making decisions.	3.23	Agree	2.5
4. Doing physical activities help to be more empathic and considerate.	3.18	Agree	5
5. Doing physical activities at home reduce hatred and negativity.	3.23	Agree	2.5
Overall Weighted Mean	3.23	Agree	

The data revealed the topmost result, indicator 1 “Doing physical activities at home help reduce feeling of loneliness and depression” get an average weighted mean of 3.30 with the qualitative interpretation of strongly agree (rank 1). While the least most result, indicator 5 “Doing physical activities help to be more empathic and considerate” get an average weighted mean of 3.18 with the qualitative interpretation of agree (rank 5). The overall weighted mean of The Impact of Physical Activities at Home in terms of Emotional Aspect in the Holistic Development of Students amidst the Covid-19 Pandemic was 3.23 with the qualitative interpretation of agree. The findings show that engaging into physical activities at home reduce the feeling of loneliness, hatred, and negativity, as the pandemic is happening.

Physical activities help lessen these vulnerable feelings such as reducing the feeling of loneliness and the like that made them happy and positively motivated to go on with their lives (Xiang et al., 2020).

In addition, young people now actively participate in pleasant, non-competitive, or rhythmic physical activity, it will produce apparent short-term emotional effects, thereby promoting the formation of a good emotional state. Studies on adults found that physical activities significantly negatively correlate with negative emotional scores—the more adults engage in physical activity, the lower their negative emotional scores. A meta-analysis found that physical activity is closely related to emotional intelligence, and individual psychological characteristics are more marked after physical activity (Wang, K. et al. 2021).

2.4. Social. Table 7 show the responses of the respondents on the impact of physical activities at home amidst the COVID-19 pandemic in terms of social aspect.

Table 7
The Impact of Physical Activities at Home in the Social Holistic Development of Students amidst the Covid-19 Pandemic

Statements	Weighted Mean	Qualitative Interpretation	Rank
1. Doing physical activities at home with family and relatives increases confidence and acceptance.	3.32	Strongly Agree	4
2. Doing physical activities at home is enjoyable with peers/ classmates, and family.	3.35	Strongly Agree	2
3. Doing physical activities at home help build closer ties with family members.	3.32	Strongly Agree	4
4. Doing physical activities help to develop interpersonal skills.	3.37	Strongly Agree	1
5. Doing physical activities help establish harmonious relationship with other people.	3.32	Strongly Agree	4
Overall Weighted Mean	3.33	Strongly Agree	

They similarly strong agree that doing physical activities help to develop interpersonal skills with the highest weighted mean of 3.37 and ranked 1st; strongly agree that doing physical activities at home is enjoyable with peers/ classmates, and family with a mean of 3.35 and ranked 2nd; strongly agree that doing physical activities at home with family and relatives increases confidence and acceptance, help build closer ties with family members, and help establish harmonious relationship with other people with the lowest weighted means of 3.32 and ranked 3rd, 4th, 5th, respectively. The respondents strongly agree on the social aspect of physical activities at home with an overall weighted mean of 3.33.

The result averred those physical activities delivers social health benefits that develop one's interpersonal skills.

Physical activities help improves not only self-confidence and self-sufficiency, but also the interpersonal skills which can be achieved from participation at any age. Also, these benefits are amplified throughout the community at large through socialization and integration (ECA, 2017). Moreover, among the non-health effects, physical activity improves life satisfaction, happiness, subjective well-being, and interpersonal relations (Alm, Bloomquist, & McKee, 2015).

In addition, according to Westerterp, (2013), increased confidence, peer acceptance, leadership skills, and empathy; these are just four of the social benefits children receive from sports and physical activity. Physical activity delivers social benefits for adults as well. Improved self-confidence and self-sufficiency can be achieved from participation in physical activity at any age. As adults grow older, physical activity can also provide opportunities for social interaction and can decrease feelings of loneliness or exclusion.

Table 8 shows the summary on the impact of physical activities at home amidst the COVID-19 pandemic. The respondents Strongly agree on the physical and social aspects of physical activities at home, while agree on the mental and emotional aspects.

Table 8
**Summary on The Impact of Physical Activities at Home
in the Holistic Development of Students amidst the Covid-19 Pandemic**

		Weighted Mean	Qualitative Interpretation
1.	Physical	3.31	Strongly Agree
2.	Mental	3.23	Agree
3.	Emotional	3.23	Agree
4.	Social	3.33	Strongly Agree

The emerge of COVID-19 pandemic in December 2019 suddenly changed the lifestyle of all people in the world, as we are all prohibited to go out; and efforts to allow people to stay physically active, many opportunities, such as fitness centers, athletic programs, and sports clubs, have been suspended. (Zhou et, al. 2020). However, physical activities can be done at home to be holistically healthy and sound which a way or another helps us battle the health pandemic. according to Huang et al., 2020, physical activities reduced the risks of depression; type 2 diabetes and cancer (Patterson et al., 2018); coronary vascular disease, and mortality (Stamatakis et al., 2019). Also, physical activities can increase the endurance and strength of the respiratory muscles, making them more efficient (McKenzie, 2012). Thus, regular physical activities have positive effects on the immune system (Dorneles et al., 2020).

3. Test of Differences on the Impact of Physical Activities at Home in the Holistic Development of Students amidst COVID-19 Pandemic according to their Profile Variables

3.1 Impact of Physical Activities at Home and Sex Profile Variable. Table 9 shows the test of significant differences on the impact of physical activities at home amidst COVID-19 pandemic when grouped according to their sex profile variable.

The computed value of $p=0.543$ for physical, $p=0.567$ for mental, $p=0.818$ for emotional, and $p=0.453$ for social aspects was greater than $>$ the 0.05 Alpha level of significance, therefore, the null hypothesis was accepted, hence, there is no significant difference on the impact of physical activities at home when grouped according to their sex profile variable.

Table 9
Test of Differences on the Impact of Physical Activities at Home in the Holistic Development of Students amidst COVID-19 Pandemic according to their Sex Profile Variable

Sources of Variations		SS	df	MS	F	Sig.	Decision
Physical	Between Groups	0.064	1	0.064	0.375	0.543	Accept Ho Not Significant
	Within Groups	9.890	58	0.171			
	Total	9.954	59				
Mental	Between Groups	0.075	1	0.075	0.331	0.567	Accept Ho Not Significant
	Within Groups	13.162	58	0.227			
	Total	13.237	59				

Emotional	Between Groups	0.016	1	0.016	0.054	0.818	Accept Ho Not Significant
	Within Groups	17.330	58	0.299			
	Total	17.346	59				
Social	Between Groups	0.136	1	0.136	0.571	0.453	Accept Ho Not Significant
	Within Groups	13.837	58	0.239			
	Total	13.973	59				

Based on the results, it indicates that the impact of physical activities at home in the holistic development of the respondents did not varies according to their sex, that is, physical fitness can boost self-esteem and improve positive self-image regardless if you are male or female, the outcome would be the same.

As explained by Craft et al (2014), that regardless of gender, exercise can quickly elevate a person's perception of his/her attractiveness, which is, self-worth. Furthermore, this finding can be considered to recommend increased physical activity participation for college student who face self-esteem problems (Elmagd, Abubakr, Manal, Elmarsafawy, & Aljadaan, 2015).

3.2 Impact of Physical Activities at Home and Age Profile Variable. Table 10 shows the test of significant differences on the impact of physical activities at home amidst COVID-19 pandemic when grouped according to their age profile variable.

The computed value of $p=0.576$ for physical, $p=0.565$ for mental, $p=0.863$ for emotional, and $p=0.112$ for social aspects was greater than $>$ the 0.05 Alpha level of significance, therefore, the null hypothesis was accepted, hence, there is no significant difference on the impact of physical activities at home when grouped according to their age profile variable.

Table 10

Test of Differences on the Impact of Physical Activities at Home in the Holistic Development of Students amidst COVID-19 Pandemic according to their Age Profile Variable

Sources of Variations		SS	df	MS	F	Sig.	Decision
Physical	Between Groups	0.054	1	0.054	0.316	0.576	Accept Ho Not Significant
	Within Groups	9.900	58	0.171			
	Total	9.954	59				
Mental	Between Groups	0.076	1	0.076	0.334	0.565	Accept Ho Not Significant
	Within Groups	13.161	58	0.227			
	Total	13.237	59				
Emotional	Between Groups	0.009	1	0.009	0.030	0.863	Accept Ho Not Significant
	Within Groups	17.337	58	0.299			
	Total	17.346	59				
Social	Between Groups	0.600	1	0.600	2.602	0.112	Accept Ho Not Significant
	Within Groups	13.373	58	0.231			
	Total	13.973	59				

The results averred that the impact of physical activities at home in the holistic development of the respondents does not varies according to their age, that is, engaging into physical movement benefited a person holistically regardless of the ages, whether young or adult. Furthermore, Weyh et al. (2020) noted that physical activities may restrain the immunosenescence generally seen during aging stage. Also, it can enhance the immune response to viral antigens, lowering the incidence of viral infections across the lifespan of an individual (Campbell & Turner, 2018).

3.3 Impact of Physical Activities at Home and Monthly Income Profile Variable. Table 12 shows the test of significant differences on the impact of physical activities at home amidst COVID-19 pandemic when grouped according to their monthly income profile variable.

The computed value of $p=0.240$ for physical, $p=0.543$ for mental, $p=0.680$ for emotional, and $p=0.900$ for social aspects was greater than > 0.05 Alpha level of significance, therefore, the null hypothesis was accepted, hence, there is no significant difference on the impact of physical activities at home when grouped according to their monthly income profile variable.

Table 11

Test of Differences on the Impact of Physical Activities at Home in the Holistic Development of Students amidst COVID-19 Pandemic according to their Monthly Income Profile Variable

Sources of Variations		SS	df	MS	F	Sig.	Decision
Physical	Between Groups	1.141	5	0.228	1.398	0.240	Accept Ho Not Significant
	Within Groups	8.813	54	0.163			
	Total	9.954	59				
Mental	Between Groups	0.931	5	0.186	0.817	0.543	Accept Ho Not Significant
	Within Groups	12.306	54	0.228			
	Total	13.237	59				
Emotional	Between Groups	0.951	5	0.190	0.627	0.680	Accept Ho Not Significant
	Within Groups	16.395	54	0.304			
	Total	17.346	59				
Social	Between Groups	0.401	5	0.080	0.319	0.900	Accept Ho Not Significant
	Within Groups	13.573	54	0.251			
	Total	13.973	59				

The results showed that the impact of physical activities at home in the holistic development of the respondents does not varies according to their monthly income, that is, during the pandemic people are prohibited to go outside to engage in physical activities, thus, doing it indoor would not cost any amount.. Engaging to this would also interrupt prolonged sitting time, as this is beneficial for metabolic health (Loh et al., 2020). Therefore, a regular interruption of 3-min of light-intensity activities during 210 min of sedentary time can diminish the glycemic response following a high-energy meal, valuable for glycemic control (Climie et al., 2018).

Conclusion and Recommendations

Based on the summary of the investigations conducted, the researchers have concluded that most of the respondents were females, belonging to the age group of 19 years old and above with mean age of 19.35 years old, and earning an income of P5,000 and below monthly with mean income of P7,166.78. The respondents strongly agree on the physical and social aspects of physical activities at home amidst the COVID-19 pandemic. There is no significant difference on the impact of physical activities at home amidst the COVID-19 pandemic when grouped according to the respondents' profile variables.

Based on the gathered data and findings of the study, the researchers have formulated the following recommendations, The respondents may continually engage in any form of physical activity even at home such as doing stretching for 15mins and doing household chores, as it would improve the ability to do everyday activities. The respondents may invite their friends in their homes to do Zumba and other physical activities, it would be beneficial not to be just physically healthy, but also to be mentally, emotionally, and socially healthy; because doing exercises releases happy hormones and reduces the stress level. The respondents should apply what they have learned in school the proper ways in doing physical activities and encourage their family members to do the same so that the whole family would be holistically healthy. Furthermore, follow-up studies may be conducted to validate the findings stated.

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