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Physical Activity Level among University of Bohol College Students during Flexible Learning

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ABSTRACT: *Physical activity is/are any bodily movement produced by the skeletal muscles that involve energy expenditure. The study intended to evaluate the level of physical activity among University of Bohol college students during flexible learning. The research utilized a quantitative descriptive normative survey design with the International Physical Activity Questionnaire (IPAQ). The sample size was 353 respondents chosen at random from the target population with a 95% level of confidence and a 5% risk of sampling error. Using weighted mean, college students' level of physical activity during flexible learning is high or active, which means they engage in vigorous-intensity activity at least three days per week and accumulate at least 1500 MET – minutes per week. The level of physical activity with age and the college to which they belong showed an insignificant relationship. Furthermore, there is no statistically significant difference between sex and level of physical activity.*

I. Introduction

All aspects of human activities around the world, ranging from education, science, sports, entertainment, travel, worship, social gathering/interactions, economy, industry, and politics, were affected by the outbreak of COVID-19 (Haleem, A., Javaid, M., & Vaishya, R., 2020). COVID-19 is the major challenge encountered by the national education systems. For most of their students, many governments have required institutions to stop face-to-face training, forcing them to turn to online teaching and interactive education almost overnight (Daniel, J.,2020). Students' lives have been affected in various ways due to the COVID-19 pandemic, depending not just on their degree and course of study but also on where they are in their programs (Daniel, J., 2020). Higher education worldwide is impacted by thousands of school closures followed quickly to introduce social distancing steps (Toquero, C. M.,2020). In response to the pandemic, nearly 1.268 billion students are currently impacted due to school closures. One hundred seventy-seven countries are currently implementing national closures, according to UNICEF monitoring, and 13 are implementing local closures, affecting about 73.5 percent of the world's student population (Verma, A., & Prakash, S., 2020).

According to Zenic, N., et al. (2020), the COVID-19 pandemic and social distancing were enforced and have impacted physical activity levels. The WHO urged people of all ages to "be active and stay healthy at home." The World Health Organization (2020) states that adults should perform at least 2 hours and 30 minutes (150 minutes) to 5 hours (300 minutes) of moderate-intensity per week or 1 hour and 15 minutes (75 minutes) to 2 hours and 30 minutes (150 minutes) of vigorous aerobic physical activity per week or an equal combination of moderate and vigorous aerobic activity for significant health benefits. Since schools have been closed due to the COVID-19 pandemic, physical activity engagement has been disrupted, increasing the risk of long-term sedentary behavior (Ammar, A, et al., 2020). Physical inactivity is being recognized as a significant health problem globally. According to WHO, physical inactivity is estimated to have killed 3.3 million individuals worldwide per year, making it the fourth leading cause of death. It has been shown that physical activity has benefits for 23 diseases and conditions (Pratt, Norris, Lobelo, Roux, & Wang, 2014).

Physical therapists can help individuals overcome personal and environmental barriers to an active lifestyle by encouraging active living, providing early disease diagnosis and prescribing targeted activity interventions to improve fitness and participation, and assisting them in overcoming personal and environmental barriers to an active lifestyle (Quinn, L., & Morgan, D., 2017). Physical therapists are in an ideal position to help their patients and clients achieve

health and fitness. By offering patient and client information, prescribing physical activity and exercise, and implementing noninvasive, hands-on therapies by a biopsychosocial paradigm, physical therapists can lower risk factors and prevent and cure non-communicable diseases (Bezner, J. R., 2015).

This study aimed to assess the physical activity level of college students during the COVID-19 pandemic. Also, there is no published research data and information about the physical activity level among University of Bohol college students during the COVID-19 pandemic. As a result, another aim of this research is to fill in gaps in information and data about students' levels of physical activity during the pandemic.

The results of this study will be used by educational institutions in awareness of the need of the university college students to implement programs to give importance, promote physical activity, and healthy well-being to their students during flexible learning during the time of the pandemic.

II. Literature Review

The World Health Organization (2020) defines physical activity as any bodily movement produced by skeletal muscles that involve energy expenditure. Physical activity relates to all movements, including transportation to and from locations, as part of a person's job, or even during leisure time. According to Piercy, Troiano, R. P., et al. (2018), multiples of the metabolic equivalent of task (MET) are used to measure energy expenditure, with 1 MET representing the amount of energy expenditure when sitting at rest. Non-sedentary waking actions such as cooking tasks, light household chores, or walking at a slow or leisurely pace (2 mph or less) that involve less than 3.0 METs are referred to as light-intensity activity. Playing doubles tennis, walking briskly (2.5 to 4 mph), or raking the yard that involves 3.0 to less than 6.0 METs are referred to as moderate-intensity activity. Jogging, hiking, carrying heavy groceries or other loads upstairs, shoveling snow, or engaging in a strenuous fitness class that involves 6.0 or more METs are referred to as vigorous-intensity activities. Most people can sing during light-intensity activities, can talk but not sing during moderate-intensity, and talking is even difficult during vigorous activities (Yang, 2019). Moderate-to-vigorous physical activity is a physical activity intensity level that is more than three times the amount of energy used when relaxing. It has been shown that this form of physical activity is good for cardiovascular health. Brisk walking, running, jumping, and dancing is examples of moderate-to-vigorous physical activity (Meeusen, Schaefer, Tomporowski, & Bailey, 2017).

Job-related physical activity would almost certainly comprise a wide range of diverse behaviors and movements. For example, the job-related physical activity for people working on a construction site can involve frequent bouts of low to moderate intensity movements, such as lifting, walking, and standing (White et al., 2020). Static and repetitive working postures and heavy lifting are frequent in job-related PA (Feig et al., 2019).

Transportation Physical Activity. Taking public transportation can be just successful as active transportation in terms of accumulating transportation-related physical activity to attain a health-promoting level (Liao et al., 2016). Public transportation encouragement utilization could increase physical activity and be a promising method of overweight prevention in men and women (Liao et al., 2016). For both men and women, the average daily step count and frequency of physical activity outside the home declined as they became older. Physical activity levels decreased with age, with women experiencing a higher decline (Li et al., 2017).

Gardening had a significant positive effect on a wide range of physical (e.g., level of physical activity, body mass index) and mental stability outcomes (e.g., well-being, mood, cognitive functioning, and life satisfaction), as well as enhancing a sense of community and life satisfaction, according to meta-analytic findings. Overall, the literature shows that gardening has a favorable impact on both physical and mental health (Spano et al., 2020). In the study by Guidetti et al., (2021), it was concluded that during social restrictions, their sample was physically active, performing high levels of exercise in home and garden tasks, and also during leisure time.

Reductions were higher for occupational vs. leisure time, young and old vs. middle-aged people, and previously more active vs. less active people, but men and women had similar reductions. The results indicated that PA levels had fallen dramatically worldwide during the COVID-19 pandemic (Wike et al., 2021). In the study by Nguyen and Pojani (2022), they found out that during the Covid-19 pandemic, recreational cycling has become much more popular in Hanoi, with morning hours being the ideal time for this activity (to avoid heavy traffic). Since the first lockdown in April 2020, a quarter of the participants have started cycling recreationally, and around three-quarters have noticed an increase in bicycle activity near them (Nguyen and Pojani, 2022). According to the study conducted in France and Switzerland by Cheval et al. (2020), while the lockdown harmed some leisure behaviors, such as a reduction in vigorous physical activity and an increase in sedentary behavior, it also had a positive impact by increasing the amount of time doing moderate physical activity and spent time walking.

Barkley, Lepp, Glickman, Farnell, Beiting, Wiet, & Dowdell (2020), found out that undergraduate students significantly decreased mild physical activity, participants who were most engaged in physical activity decreased overall physical activity before the pandemic, and the overall sample showed a substantial rise in sedentary conduct. Gallè et al. (2020) found out in their study that there is a reduction of PA (Physical activities) among Italian undergraduates in home confinement due to the COVID-19 pandemic. A study conducted in Southern Croatia by Sekulic, Blazevic, Gilic, Kvesic, and Zenic (2020) found that PALs decreased significantly among adolescents from southern Croatia during the COVID-19 pandemic, the changes were primarily affected by a decrease in PALs in boys. A journal by Castañeda-Babarro et al. (2020) found out in their study that self-reported PA significantly decreased during the lockdown in all the population, of which vigorous and walking activities decreased the most and mild activities changed barely. The effect on active and sedentary activity was high among men, young people, students, and the physically highly active population.

III. Methodology

The study used a quantitative descriptive normative type of research design using the International Physical Activity Questionnaire (IPAQ) long-form as a tool to assess the physical activity level among University of Bohol college students. The study was conducted at the University of Bohol. The University of Bohol is a private, non-sectarian, co-educational higher education institution situated in Tagbilaran City, Bohol, Philippines. The main building, with some colleges in the vicinity, is located along Dr. Cecilio Putong Street. The educational institution has 13 colleges, namely the College of Arts and Science (CAS), College of Business and Accountancy (CBA), College of Hospitality Management, Tourism, and Nutrition (CHMTN), College of Nursing (CON), College of Pharmacy (COP), College of Architecture and Fine Arts (CAFA), College of Engineering and Technology (CET), College of Criminal Justice (CCJ), College of Physical Therapy and Occupational Therapy (CPTOT), College of Midwifery (COM), College of Law (COL), Teachers College (TC), and Graduate School and Professional Studies. The study excluded the College of Law and Graduate School and Professional Studies.

A random sampling method was carried out using a sample size calculator, aimed at a 95% confidence level and 5% error margin, to determine respondents' target quantity. The total number of respondents was equally distributed per department and the researchers were able to gather 353 out of 4,249 college students enrolled for the school year 2021-2022 at the University of Bohol. However, upon the conduction of research, only 72 respondents from CET since 1 respondent refused to participate. The respondents were able to meet the inclusion criteria which include currently enrolled college students of the University of Bohol for the school year 2021-2022, age 18 and over, and taking at least 20 and above units. College students with part-time jobs and post-graduate students are excluded from this study.

Table 1. Distribution of Respondents

College	Population	Sample Size
CAFA	195	16
CAS	124	10
CBA	443	37
CET	871	73
CHMTN	436	36
CPTOT	51	4
CCJ	744	62
COM	38	3
CON	592	49
COP	201	17
TC	554	46
Total	**4249**	**n=353**

A formal letter of request for permission to conduct the study was given first to the Vice-President for Academics. After the approval, letters were disseminated to the Deans of each college department and were granted to officially conduct the study. Due to the COVID-19 pandemic, an online questionnaire with the aid of Google-Forms was administered to observe safety prevention protocols, and it is sent to the Facebook Messenger profiles of the college student of the University of Bohol, their responses are given voluntarily. The questionnaire was answered asynchronously by the respondents based on their availability during the testing period. Research underwent any ethical concerns before the study was conducted. The conduct of the study proceeded upon the approval of the UB Research Ethics Committee.

The instrument utilized in the study is the International Physical Activity Questionnaire (IPAQ) long form which is primarily designed for population surveillance of physical activity between adults aged 15 to 69 years old. Researchers were able to use the instrument with the permission from Hagströmer, M., Oja, P., & Sjöström, M. (2006). The International Physical Activity Questionnaire (IPAQ) long-form is composed of 27 items that are intended to answer the physical activity of the respondents as part of their everyday lives. The questionnaire has five domains of physical activity, including job-related, transportation, housework, house maintenance, and caring for family, recreation, sport, and leisure time, and time spent sitting. The questions asked in the form are about the days and minutes spent on doing physical activity with a time frame of recall for the last 7 days. The results are computed by converting all activities to minutes and multiplying their corresponding amount of MET. To get the total MET minutes of physical activity a week, add the MET minutes achieved in each category (walking, moderate activity, and vigorous activity). To get the total physical activity level of the respondents, METs from all questions were directly added together. According to the study conducted by Craig et al. (2003), results show the IPAQ questionnaires provided repeatable results (Spearman's correlation was about 0.8) with data from the short and long forms being comparable. The median criterion validity was about 0.30, which was like most other self-report validation studies. The reliability of telephone administration was comparable to the self-administered mode, and the "usual week" and "last 7 days" reference periods performed similarly.

A simple percentage and frequency were used to interpret the obtained data from the profile of the respondents. Frequency, percentage, and mean were used to interpret the obtained data from the physical activity level of the respondents. The Chi-Square, Pearson r, and Spearman Rho were used to identify a significant degree of relationship between age and the level of physical activity and college program and the level of physical activity. The T-test and Mann Whitney U were used to identify a significant degree of difference between sex and the level of physical activity of the respondents.

IV. Results and Discussions

Presented are the analyzed results of the respondent's overall responses to the given questionnaires. The results have been tallied and statistically analyzed using simple percentage, frequency, mean, ranking, Chi-Square, Pearson r, Spearman rho, t-test, and Mann-Whitney U to answer the questions on the statement of the problem.

Table 2. Profile of the Respondents

N=352

Age	**f**	**Percentage**	**Rank**
18-21	312	88.64	1
22-25	37	10.51	2
26-29	2	0.57	3
30-34	1	0.28	4
TOTAL	352	100	
Sex			
Male	136	38.64	2
Female	216	61.36	1
TOTAL:	352	100%	
College			
CBA	37	10.51	5
CAFA	16	4.55	8
TC	46	13.07	4
CET	72	20.45	1
CCJ	62	17.61	2
CPTOT	4	1.14	10
CON	49	13.92	3
COM	3	0.85	11
CAS	10	2.84	9

CHMTN	36	10.22	6
COP	17	4.83	7
TOTAL:	352	100	

Age. There were 312 respondents (88.64%) whose ages ranged from 18-21 years old, making it the first in rank. Followed by 37 respondents (10.51%) whose age is from 22-25 years old, which ranked second, then 2 respondents (0.57%) have ages ranging from 26-29 years old, which ranked third. Lastly, followed by one respondent (0.28%) ranged from 30-34 years old ranking forth.

Sex. 216 respondents (61.36%) were female, which ranked first, then 136 respondents (38.64%) were male, which ranked second.

College. 72 respondents (20.45%) were from the CET, which ranked first. Followed by 62 respondents (17.61%) who were from the CCJ, which ranked second, then 49 respondents (13.92%) were from the CON, which ranked third. Forty-six respondents (13.07%) were from the TC, which ranked fourth, then 37 respondents (10.51%) were from the CBA, which ranked fifth. The CHMTN was ranked sixth with 36 respondents (10.22%), then ranked seventh with 17 respondents (4.83%) from the COP. Ranked eighth were the CAFA with 16 respondents (4.55%), then ranked ninth were the CAS with 10 respondents (2.84%). 4 respondents (1.14%) were from the CPTOT, ranked as tenth, then three respondents (0.85%) were from the COM ranked as eleventh.

Table 3. Level of Physical Activity

DOMAIN	LEVEL	TOTAL METs Consumed Per domain	f	%	MEAN AVERAGE	LEVEL OF PA
Job-Related Physical Activity	HIGH	0	0	0	0	LOW
	MODERATE	0	0	0		
	LOW	0	352	100		
Transportation Activity	HIGH	122137.5	28	7.95	732.58	MODE RATE
	MODERATE	100911.3	77	21.88		
	LOW	34819.5	247	70.17		
Housework, House Maintenance, And Caring for Family	HIGH	390125.5	74	21.02	1846.60	MODE RATE
	MODERATE	233157.5	154	43.75		
	LOW	26720	124	35.23		
Recreation, Sport, And Leisure-Time Physical	HIGH	321419	51	14.49	1388.94	MODE RATE
	MODERATE	134608.6	89	25.28		
	LOW	32878	212	60.23		

Activity						
TOTAL LEVEL OF PHYSICAL ACTIVITY	HIGH	1166330.9	159	45.17	3968.12	HIGH
	MODERATE	213251.5	123	34.94		
	LOW	17194.5	70	19.89		
TOTAL:		1396776.9	N=352	100%		

Parameters:

Level/Category	Criteria	Interpretation
HEPA Active/High Scoring HIGH on the IPAQ engage in:	7 or more days of any combination of walking, moderate-intensity or vigorous-intensity activities achieving at least 3000 MET minutes/week minimum total physical activity.	Exceed the minimum public health physical activity
Minimally Active/Moderate Scoring MODERATE on the IPAQ engage in:	5 or more days of any combination of walking, moderate intensity or vigorous intensity activities achieving a minimum total physical activity of at least 600 MET minutes/week.	More than the minimum level of activity
Inactive/Low	Scoring a LOW physical activity level on the IPQ means that you are not meeting any of the criteria for either MODERATE of HIGH levels of physical activity.	Considered to have a sedentary lifestyle.

Level of Physical Activity Per Domain

Job-Related Physical Activity. The results on the job-related physical activity indicate that none of the respondents have any job or unpaid work outside their home.

Transportation Physical Activity. With regard to transportation using the bicycle, 9.09% of the respondents are doing for 2 days a week, 6.82% for 1 day, 4.26% for 3 days, 2.27% for 4 days, and 0.57% for 5, 6, 7 days. During the last 7 days, 75.85% have not engaged in bicycling for 10 minutes at a time. The time spent using a bicycle from place to place, 11.08% of the respondents use a bicycle for 10-40 minutes, 6.53% for 41-60mins, 4.26 for 161-180mins, 1.99% for 101-120mins, 0.28% for 81-100mins. 75.85% of the respondents do not have time to bicycle. With regard to transportation by just walking, 14.69% of the respondents walk for 7 days, 11.65% for 2, 3 days, 9.38% for 5 days, 7.67% for 4 days, 4.83% for 1 day, 1.99% for 6 days. For the last 7 days, 38.85% have not walked for 10 minutes at a time. The time spent walking from place to place, 40.91% of the respondents walk for 10-40mins, 9.09% for 41-60mins, 6.82% for 161-180mins, 3.13% for 101-120mins, 0.85% for 141-160mins, 0.57% for 81-100mins, 0.28 for 61-80mins. 38.35% of the respondents have no time for walking. The result of this domain shows that walking is the most engaged transportation activity by college students. A study by Cheval et al. (2020) indirectly supports this result, stating that while the lockdown harmed some leisure behaviors, such as a reduction in vigorous physical activity and an increase in sedentary behavior, it also had a positive impact by increasing the amount of time doing moderate physical activity and spent time walking.

Housework, House Maintenance, And Caring for Family. With regard to housework doing vigorous activities, 14.20% of the respondents for 2 days, 9.94% for 3 days, 5.68% for 1 day, 3.13% for 4 days, 2.84% for 5 days, 1.70% for 6 days, and 59.38% of the respondents did not engage in vigorous physical activities in the house during the last 7 days. The time spent doing vigorous activities, 16.76% of the respondents for 10-40mins, 11.08% for 41-60mins, 6.82% for 101-120mins, 5.11% for 161-180mins, 0.57% for 81-100mins, 0.28% for 61-80mins and 141-160mins. 59.38% of the respondents did not do housework activities. With regards, the house maintenance doing

moderate activities, 16.76% of the respondents for 7 days a week, 14.20% for 3 days, 12.78% for 2 days, 9.38% for 5 days, 6.25% for 6 days, 3.41% for 6 days, 2.84% for 1 day, and 34.38% of the respondents did not engage in moderate physical activities during the last 7 days. The time spent doing moderate activities, 37.78% for 10-40mins, 15.06% for 41-60mins, 5.97% for 101-120mins, 5.68% for 161-180mins, 0.57% for 61-80mins and 81-100mins and 141-160mins and, 34.38% for those did not spend doing house maintenance activities. With regard to caring for family doing moderate, 17.90% of the respondents for 7 days, 15.63% for 3 days, 13.64% for 2 days, 10.51% for 5 days, 6.25% for 4 days, 5.11% for 6 days, 4.83% for 1 day, and 26.14% did not engage in any moderate activities. The time spent doing caring for family activities, 32.39% for 10-40mins, 18.18% for 41-60mins, 10.80% for 141-160mins, 8.81% for 101-120mins, 2.84% for 81-100mins, 0.57% for 141-160mins, 0.28% for 61-80mins and, 26.14% for those did not do caring for family activities.

Recreation, Sport, and Leisure-Time Physical Activity. With regard to recreation doing activities in their leisure time, 15.63% of the respondents walked for 2 days, 9.38% for 7 days, 9.38% for 3 days, 6.53% for 5 days, 5.68% for 1 day, 5.40% for 4 days, 2.56% for 6 days, and 45.45% did not engage in walking. The time spent doing recreation activities, 33.81% for 10-40mins, 10.80% for 41-60mins, 4.83% for 161-180mins, 3.98% for 101-120mins, 0.57% for 121-140mins, 0.28% for 141-160mins and, 45.45% for those did not do the activity. With regard to sports doing vigorous physical activities, 13.92% of the respondents for 2 days, 10.23% for 3 days, 7.67% for 1 day, 3 .69% for 4 days, 2.56% for 5 days, 1.42% for 7 days, 1.14% for 6 days, and 59.38% did not engage in vigorous physical. The time spent doing sports, 18.75% for 10-40mins, 7.95% for 41-60mins, 6.82% for 161-180mins, 6.25% for 101-120mins, 0.28% for 81-100mins, 121-140mins and 141-160mins and, 59.38% for those don't do sports. With regard to leisure-time physical activity doing moderate physical, 10.51% of the respondents for 2 days, 9.38% for 1 day, 4.83% for 3 days, 3.13% for 4 days, 1.70% for 5 days, 1.42% for 7 days, 0.85% for 6 days, and 68.18% did not engage in moderate physical activities. The time spent caring for family activities, 12.78% for 10-40mins, 6.53% for 101-120mins and 161-180mins, 0.28% for 81-100mins and 121-140mins and, 68.18% for those who did not do the activity. The result shows that the majority of the respondents engaged more in walking than bicycling. The results are in contradict with the study of Nguyen and Pojani (2022) that found out in their study that during the Covid-19 pandemic, recreational cycling has become much more popular in Hanoi, with morning hours being the ideal time for this activity (to avoid heavy traffic).

Summary of the Level of Physical Activity per domain. For the Job-Related Physical Activity, the level of physical activity is low with a zero-mean average. For the Transportation Activity, the level of physical activity is moderate with a mean MET of 732.58 mins/week. Most of the respondents have greater physical activity in the Housework, House Maintenance, and Caring for Family. The level of physical activity in this domain is moderate with a mean MET of 1,846.60 mins/week. For the Recreation, Sport, and Leisure-Time Physical Activity, the level of physical activity is also moderate with a mean MET of 1,388.94 mins/week.

Total Level of Physical Activity. The outcome of the analysis presented showed a high level of physical activity with a mean MET of 3,968.12 mins/week which means that the person achieved at least 3000 MET minutes in or more days of any combination of walking, moderate-intensity, or vigorous-intensity activities. The results of this study show that the overall physical activity level of college students is high. These results clearly contradict some earlier research studies that show a reduction in physical activity among undergraduate students during the COVID-19 pandemic. (Galle et al. 2022; Castañeda-Babarro et al. 2020, Srivastav et al. 2020)

Table 4. Relationship between Age and Level of Physical Activity

Age * Level of Physical Activity Crosstabulation

Count

		Age				Total
		18-21 yrs. Old	22-25 yrs. old	26-29 yrs. old	30-34 yrs. old	
Level of Physical	High (3000 and above METS)	140	17	2	0	159
	Moderate (2999-	108	14	0	1	123

Activity	600 METS)					
	Low (599 and below METS)	64	6	0	0	70
Total		312	37	2	1	352

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.711[a]	6	.581
Likelihood Ratio	5.717	6	.456
Linear-by-Linear Association	.526	1	.468
N of Valid Cases	352		
RESULT: INSIGNIFICANT			

Ho: ACCEPTED

Relationship between Age and Level of Physical Activity. The computed value P-value of .581 (Asymp. Sig. 2-sided) denotes that the age of the respondent has no significant relationship with regard to their level of physical activity. The results imply that age does not affect the level of physical activity of the respondent. Thus, accepting the null hypothesis that there is no significant degree of relationship between the profile of the respondent and the level of physical activity with regard to age. This finding contradicted the results of the study of Li et al., (2017) concluded that for both men and women, the average daily step count and frequency of physical activity outside the home declined as they became older. Physical activity levels decreased with age, with women experiencing a higher decline.

Table 5. Relationship between College and Level of Physical Activity

Crosstab

Count

Level of Physical Activity	College										Total
	CBA	CAFA	TC	CET	CCJ	CP TOT	CO N	CAS	CHMTN	COP	
High (3000 and above METS)	19	4	19	37	38	2	16	3	16	3	159
Moderate (600-2999 METS)	10	6	17	21	19	2	23	5	13	6	123
Low (599 and below METS)	8	6	10	14	5	0	10	2	7	8	70
Total	37	16	46	72	62	4	49	10	36	17	352

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	30.896[a]	20	.057
Likelihood Ratio	32.040	20	.043
Linear-by-Linear Association	2.020	1	.155
N of Valid Cases	352		
RESULT: INSIGNIFICANT			
Ho: ACCEPTED			

Relationship between College and Level of Physical Activity. The computed value P-value of .057 (Asymp. Sig. 2-sided) is more significant than the significance level of 0.05, it failed to reject the null hypothesis. It means that there is no significant degree of relationship between college respondents and the level of physical activity with regard to the college programs.

Table 6. Difference between Sex and Level of Physical Activity

Tests of Normality							
	Kolmogorov-Smirnova			Shapiro-Wilk			**Result**
	Statistic	df	Sig.	Statistic	df	Sig.	
MET Score	.197	352	.000	.740	352	.000	Skewed

Ranks

Sex		N	Mean Rank	Sum of Ranks
Level of Physical Activity	Male	136	166.88	22695.00
	Female	216	182.56	39433.00
	Total	352		

Test Statistics[a]	
	Level of Physical Activity
Mann-Whitney U	13379.000
Wilcoxon W	22695.000
Z	-1.521
Asymp. Sig. (2-tailed)	.128
RESULT: INSIGNIFICANT	
Ho: ACCEPTED	

Difference between Sex and Level of Physical Activity. The computed value P-value of .128 (Asymp. Sig. 2-sided) is greater than the significance of 0.05, it failed to reject the null hypothesis of no significant difference in the level of physical activity between female and male respondents.

V. Conclusion and Recommendations

Based on the aforementioned findings, the following conclusions were drawn:

The College Students of the University of Bohol are physically active even during flexible learning during the pandemic. Job-related physical activity has low since the majority of the population are still college students who do not have a job or any unpaid work outside their homes. Transportation activity, Housework, House Maintenance, and Caring for Family, and Recreation, Sport, and Leisure Time Physical activity appears to be moderate in level of physical activity considering that most of them walk or use bicycles to go to their desired destinations and may still able to perform moderate and vigorous physical activities in the last 7 days. Between males and females, there is no significant difference in their level of physical activity. There is no significant degree of relationship between age and physical activity level, and college program to the level of physical activity. After a thorough analysis of data, the researchers recommend to the College students of the University of Bohol, to increase physical activity, a combination of active transport and public transport when it needs to cover a longer distance, emphasize increasing physical activities in their respective household by scheduling a time ahead for each day for a household activity (heavy lifting, chopping wood, shoveling snow and digging in the yard), maintenance work (sweeping, washing windows, and raking in the garden) and caring for a family (scrubbing, cooking, washing dishes). If a conflict comes up, reschedule the work to be done on other days and not just cancel them, and be informed about the health benefits when engaging in physical activities. This would increase their health awareness and participation in recreation, sports, and leisure activities. The researchers would like to recommend for future researchers in conducting more studies related to physical activity in a specific population during the pandemic. They can also come up with more ideas for the population to maximize their resources to stay physically active during the pandemic. Also, the researchers would like to recommend that the department should promote more on the impact of physical activity on its students, even on the health aspect. They can allow more programs, talks, and interactions that would engage the student to not only maximize their resources to be physically active but to also be aware of their health. Lastly, the researchers would like to recommend that school administrators conduct symposiums and additional physical activity programs that would motivate and encourage college students to increase their interest and engagement in physical activity.

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