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HEALTH PRACTICES OF FRESHMEN STUDENTS AT NUEVA ECIJA UNIVERSITY OF SCIENCE AND TECHNOLOGY: BASIS FOR PHYSICAL FITNESS PLAN

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ABSTRACT

This study aimed to determine the health practices of freshmen students at the Nueva Ecija University of Science and Technology during the First Semester of AY 2022-2023.

The study utilized descriptive research design with questionnaire as the main instrument in gathering data from freshmen student-respondents who were randomly selected from Sumacab and Gen. Tinio Campuses, respectively.

The students' profiles considered in the study were limited to their age, sex, height, weight, body mass index, monthly family income, body mass index and physical activities. The extent of preference of the respondents on health practices was assessed in terms of physical activity as maximum health benefit and distinct types of physical activity to address unique health concerns and contribute in distinct ways to student's health, and performance related fitness. The study revealed that the majority respondents were female in their early teenage hood, with average height, weight, normal body mass index and inadequate family monthly income. There is a significant difference when grouped according to age, body mass index and family income respectively towards physical activity and health practices. There is significant difference when grouped according to height, weight, body mass index and family monthly income towards overall general knowledge and awareness on fitness physical activity and health practices and there is a high positive relationship between the level of awareness and the level of sports participation.

Based on summary of the investigation conducted and the conclusions arrived at, the researcher have offered the following recommendations to consider, healthy body a great treasure and to start engaging in physical activities that help and regulate good sound and healthy body instead of engaging in activities as drinking liquor or smoking that may cause severe illness or death; to encourage the respondents not to skip meals for better life and healthy body; to seek advises from health professionals or medical doctors before engaging in heavy sports activities; to assure rendering from gradual to complex physical activities; that a physically fit person eating a nutritionally adequate diet can have improved performance in school; to improve quality of life, one must practice and observe healthy living; and finally to conduct a parallel or similar study with in-depth and broader scope so as to validate and confirm the findings obtained in the study.

KEYWORDS: *Health Practices, Physical Activities, Health Benefits.*

INTRODUCTION

Health is a multifaceted concept. It is not simply the condition of being well or unwell. Health can be a personal perspective which is affected by society and social conditions. Health is affected by genetic factors, lifestyle factors, environmental factors, culture, socioeconomic conditions and health care services and programs.

WHO further clarified that health is: "A resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities." This means that health is a resource to support an individual's function in wider society. A healthful lifestyle provides the means to lead a full life, (Nordqvist, 2017). More recently, researchers have defined health as the ability of a body to adapt to new threats and infirmities. Physical health refers to the fitness, physical activities and health practices of an individual, in which physical is one of the two most commonly discussed types of health. The importance of the research problem stems from modern society's needs for the maintenance of the physical and mental health, the development of physical education systems in educational institutions, and the promotion of a healthy lifestyle. The need for knowledge and understanding of physical education as safety, quality of life, and individual in today's world. In all countries, governmental policies on population sports education are primarily directed at young people. The study of theoretical and methodological bases for monitoring the formation of recreational physical culture in society contributed to the study of modern youth's physical health, which contributed to the study of theoretical and methodological bases for monitoring the formation of recreational physical

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culture in society. This is related to the growing importance of the issue of self-identification in the process of familiarizing young people with physical education as a disease prevention tool. This type of juvenile physical activity reduces unfavorable phenomena in the younger generation significantly (stress, lack of exercise, drug addiction, etc.). Competent physical fitness and public awareness of the importance of physical activities.

Physical activity is essential for good health, and its significance goes far beyond its role in achieving energy balance in the prevention and treatment of obesity and overweight. Adequate daily physical activity enhances cardiovascular, metabolic, cognitive and behavioral health, and musculoskeletal health—benefits that can be achieved at any age, according to new research.

STATEMENT OF THE PROBLEM

This study aimed to determine the health practices of Freshmen students at Nueva Ecija University of Science and Technology.
Specifically, it sought answers to the following questions:

1. How may the profile of the respondents be described in terms of:
    - 1.1. Age;
    - 1.2. Sex;
    - 1.3. Height;
    - 1.4. Weight;
    - 1.5. Body Mass Index?
2. How may the level of participation of the students to physical fitness be described in terms of:
    - 2.1. physical activities; and
    - 2.3. health practices?
3. What sort of action should be employed to improve the health practices of students?
4. Is there a significant relationship on the health practices to the physical fitness level?

SCOPE AND DELIMITATION OF THE STUDY

The study determined the health practices of Freshmen students at Nueva Ecija University of Science and Technology.

The students' profiles considered in the study were limited to their age sex, height, weight, body mass index, participation in organized and unorganized sports, leisure time and diet.

This study aims to explore the fitness, physical activity and health practices of freshmen students at NEUST.

METHODOLOGY

This portion of the study presents the methodology applied which includes the research design, the instruments, data gathering procedures and data analysis procedure.

Research Design

The study used the descriptive-survey research design with survey questionnaires as main instrument in gathering the required data. Descriptive-survey method was used in order to describe the fitness, physical activity and health practices.

According to Shrutika Sirisilla, 2023, Descriptive research design is a powerful tool used by scientists and researchers to gather information about a particular group or phenomenon. This type of research provides a detailed and accurate picture of the characteristics and behaviors of a particular population or subject. By observing and collecting data on a given topic, descriptive research helps researchers gain a deeper understanding of a specific issue and provides valuable insights that can inform future studies. Surveys are a type of descriptive research that involves collecting data through self-administered or interviewer-administered questionnaires. Additionally, they can be administered in-person, by mail, or online, and can collect both qualitative and quantitative data.

Dovetail Editorial Team (2023) opined descriptive research as an exploratory research method. It enables researchers to precisely and methodically describe a population, circumstance, or phenomenon. As the name suggests, descriptive research describes the characteristics of the group, situation, or phenomenon being studied without manipulating variables or testing hypotheses. This can be reported using surveys, observational studies, and case studies. You can use both quantitative and qualitative methods to compile the data. Besides making observations and then comparing and analyzing them, descriptive studies often develop knowledge concepts and provide solutions to critical issues. It always aims to answer how the event occurred, when it occurred, where it occurred, and what the problem or phenomenon is.

Respondents and Location

The respondents of this study were drawn from 4,979 students of Nueva Ecija University of Science and Technology, Sumacab and General Tinio Campuses. The respondents were chosen through Roasoft formula thus 4,979 students were trimmed down to 357 students and then used stratified sampling technique. Stratified random sampling was used when the researcher wants to highlight a specific subgroup within the population. This technique was useful in such research because it ensured the presence of the key subgroup within the sample. Researcher also employ stratified random sampling when they want to observe existing relationships between two or more subgroups. With stratified sampling, the researcher had the sample even the smallest and most inaccessible subgroups in the population. This allowed the researcher to sample even the rare extremes of the given population. With this technique, the researcher has a higher statistical precision compared to simple random sampling. This was because the variability within the subgroups is lower compared to the variations when dealing with the entire population. Because this technique has a high statistical precision,

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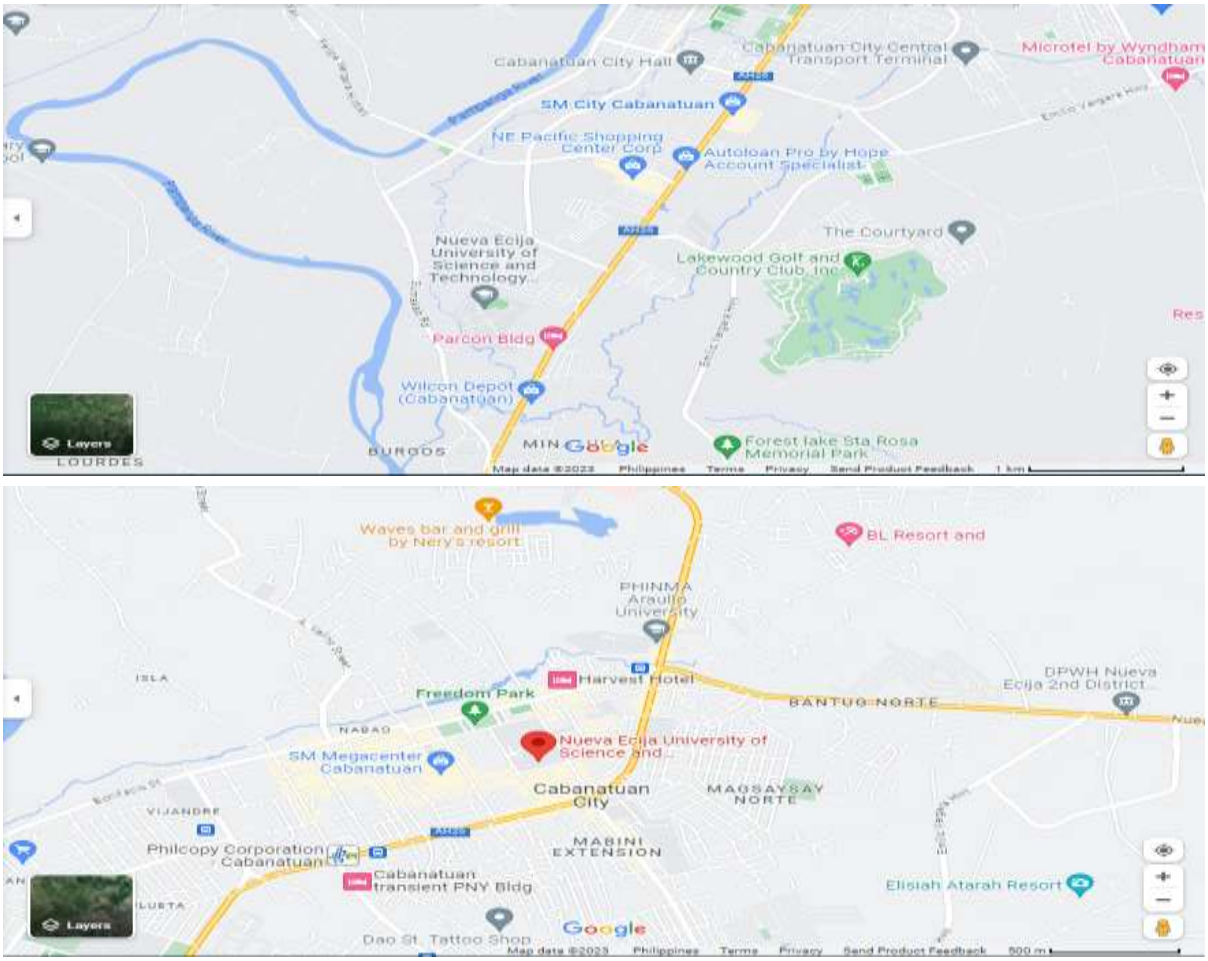
it also meant that it required a small sample size which saved a lot of time, money and effort of the researcher.

Table 1. Frequency Distribution of Respondents

Freshmen Students in NEUST	Number of Respondents	Percentage	Sample
General Tinio Campus	**1,327**	26.65%	**95**
CAS	686	(52)	49
CIT	360	(27)	26
CON	281	(21)	20
Sumacab Campus	**3,652**	73.35%	**262**
COA	353	(9.66)	25
COC	346	(9.47)	25
COED	1,238	(33.90)	89
CICT	550	(15)	39
CMBT	973	(26.64)	70
CPADM	192	(5.26)	14
Total	**4,979**	**100**	**357**

The student-respondents were given researcher made survey-questionnaire to determine the fitness, physical activity and health practices. The study was conducted at NEUST Sumacab and General Tinio Campuses respectively, for the school year 2022-2023. Figure 2 shows the location of the selected schools in NEUST, Cabanatuan City.

Figure 1. Map of NEUST Sumacab and General Tinio Campuses



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RESULTS AND DISCUSSIONS

1. Profile of the Respondents

Table 2. Distribution on the Respondents' Profile

Profile Variables		Frequency	Percent
Age Mean age= 16.06	14	62	18
	15	30	8
	16	190	53
	17	8	1
	18	33	10
	19 Above	34	10
Sex	Male	177	49
	Female	180	51
Height Mean= 1.54 meters	1.2-1.27	5	1
	1.28-1.35	4	1
	1.36-1.43	13	4
	1.44-1.51	95	27
	1.52-1.59	178	49
	1.60-1.67	46	13
	1.68-1.75	9	3
	1.76-1.83	3	1
	1.84-1.91	4	1
Weight Mean= 45.07	10-40kgs.	69	19
	41-50kgs.	236	66
	51-60kgs.	49	14
	61-70kgs.	2	1
	81-90kgs.	1	0
Family Income Mean= Php 23.1674.6	Low Income (Php 0 to Php11,914.50)	79	22
	Moderate Income (Php11,915 to Php49,526)	257	72
	High Income (Php50,000 and up)	21	6
Body Mass Index Mean= 19.84 Normal	Obese (30.0-34.9)	13	4
	Normal (18.5-24.9)	261	73
	Overweight (25.0-29.9)	19	5
	Underweight (<18.5)	64	18
	TOTAL	357	100

Table 2 shows the distribution on the respondents' profile variables of age, sex, height, weight, family income and body mass index respectively.

Age. Most of the three hundred fifty-seven student-respondents, there were 62 or equivalent to 18% are from age group of 14 years old; 30 or 8%, 15 years old; 190 or 53%, 16 years old; 8 or 1%, 17 years old; 33 or 10%, 18 years old and 34 or 10%, from 19 years old and above. The computed mean age of the respondents was 16 years old. The data demonstrate that the respondents were very young in their teenage hood.

Sex. Mainly with the three hundred fifty-seven student-respondents, there were 177 or equivalent to 49% are males and 180 or 51% are females. As shown from the table that majority of the respondents were female and this could be ascribed on the dominance of the female students in the school enrolment. This observation is almost similar where female dominates in the enrolment.

Height. From the most part of three hundred fifty-seven student-respondents, there were 5 or equivalent to 1% with height of 1.20-1.27 meters; 4 or 1%, 1.28-1.35 meters and 1.84-1.91 meters respectively; 13 or 4%, 1.36-1.43 meters; 95 or 27%, 1.44-1.51 meters; 178 or 49%, 1.52-1.59 meters; 46 or 13%, 1.60-1.67 meters; 9 or 3%, 1.68-1.75 meters; and 3 or equivalent to 1%, with 1.76-1.83 meters. The computed mean height of the respondents is 1.54 meters. The data suggests that the respondents have a promising height in relations to their age. They are still young and will continue to increase their height until the age of 21 years old. This could be ascribed on hereditary and biological factor added with the discipline and eating balanced food.

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Weight. Mainly of the three hundred fifty-seven student-respondents, there were 69 or equivalent to 19% with kilograms weights of 30-40 kilograms; 236 or 66%, 41-50 kilograms; 49 or 14%, with 51-60 kilograms; 2 or 1%, 61-70 kilograms and only 1 or 0% with 81-90 kilograms. The computed mean weight of the respondents was 45 kilograms. The data implies that the respondents were on their normal weight in relation to their age and height

Family Income. Among the three hundred fifty-seven student-respondents, there were 79 or equivalent to 22% with low family income of Php0.00-Php11,914.50; 257 or 72%, moderate income ranges from Php11,915.00 to Php49,526.00; and 21 or 6% with high income from Php50,000 and above. The computed mean of family income was 23,1674.60 monthly. The data implies that the respondents' family income considered an average income enough to sustain for food, clothing and shelter for 5 members in the family.

Body Mass Index. Most of the three hundred fifty-seven student-respondents, there were13 or equivalent to 4% classified as obese (30.00-24.90) body index; 261 or 73% are normal which ranges form (1850-24.90) body index; 19 or 5% as overweight ranges from (25.00-29.90) body mass index; and 64 or equivalent to 18%, classified as underweight which ranges from (<18.50) body index. The computed Body mass index was 19.84 with normal body index.

As revealed from the table that majority of the respondents were on the normal body index. Many school systems struggle with the decision to eliminate physical education from their curriculum of the repercussions of those decisions. As obesity levels and health issies are rising among young children and teens across the country, schools are implementing new health and physical education programs to help prevent illnesses while striving promote wellness. Some studies report that the new health programs not only help children to improve physically, but school's wellness plan can also help students improve emotionally, behaviorally, and academically as well (Grace Chen, 2023). Decreased physical fitness levels, overweight, and obesity often result when students have few opportunities to be physically active; these physical symptoms often impact student motivation, thinking, and learning.

2. Level of Participation to Physical Fitness

2.1 Physical Activities

Table 3. Level of Participation on Physical Activity in School

Physical Activities	WM	QI	Rank
1. I sit	4.37	A	1
2. I stand	3.99	O	3
3. I walk	4.09	O	2
4. I lift heavy loads (bags with books and notebooks, lunch bag, tumbler)	3.77	O	4
5. I sweat (classroom activities, energizers)	3.67	O	5.5
6. After such activities, I'm tired.	3.67	O	5.5
Overall Weighted Mean	3.93	O	

Table 3 shows the level of participation on physical activity in school. The respondents assessed *"always"* on physical activity as sitting manifested in its high mean value of 4.37 and ranked 1st while assessed "often" on sweating and fell tires after the activities with equal weighted mean of 3.67 and ranked 5.5th respectively. The computed mean of the responses towards physical activities was 3.93 with qualitative interpretation of *"often"*.

Participation in regular physical activity contributes to health promotion, improving physical fitness, and prevention diseases and illnesses. The level of inactivity is reported to be high globally. Thus, motivating schools to participate in physical activity by finding which factors influence participation in physical activity is important to improve the health and to mitigate the global burden of chronic diseases. There are several theories that describe behavioral models of physical activity, and it is common to incorporate ideas from these theories into ecological models. According to an ecological model, factors which influence health behavior consisted of intra-personal, inter-personal, and environmental factors. Personal factors include demographic and biological factors, psychological, cognitive and emotional factors, behavioral factors, and social and cultural factors. Environment factors include the facility, neighborhood, safety, home environment, location of region, and climate. (Jaesung Choi, et.al., 2017).

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3. Assessment on Health Practices

Table 4. Health Practices of the Responses

Health Practices	WM	QI	Rank
1. Drinking enough fluids so that your urine is pale yellow color? *(Normal color of urine)*	4.01	A	6
2. Do regular diet.	3.88	A	8
3. Minimize intake of sweets specially candy and carbonated drinks and avoid adding sugar to foods.	3.99	A	7
4. Diet should be well-balanced (including fruits, vegetables, cereals, breads, dairy products and good sources of protein).	4.23	SA	2
5. Limit intake of saturated fats (butter, cheese, cream, fatty meats).	4.03	A	5
6. Three meals a day (breakfast, lunch, dinner).	4.36	SA	1
7. Three meals and am/pm snacks.	4.12	A	3
8. Skipping main meals.	3.08	MA	9
9. Normal body mass index is a goal.	4.05	A	4
Overall Weighted Mean	**3.97**	A	

Table 4 shows the personal assessment of the respondent's health practices. The respondents perceived *"strongly agree"* on the two indicators, "Diet should be well-balanced (including fruits, vegetables, cereals, breads, dairy products and good sources of protein)", and "Three meals a day (breakfast, lunch, dinner)", manifested in the weighted mean of 4.23 and 4.36 and was good to ranked 2nd and 1st respectively. The respondents "moderately agree" on skipping meals with mean of 3.08 and ranked 9th. The computed overall weighted mean on the responses towards health status was 3.97 with qualitative interpretation of "agree".

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Based on the summary of the investigations conducted, the researcher has concluded that:

1. The respondent is a typical female in their early teenage hood, with average height, weight, normal body mass index and inadequate family monthly income.
2. The respondents assessed "often" with moderate physical activities, with 15-30 minutes moving a day and medium in the conduct of aerobic or Zumba while "agree" on the health practices.
3. The respondents perceived "agree" on the overall general knowledge and awareness on health practices.
4. There is significant difference when grouped according to age, body mass index and family income respectively towards physical activity and health practices while significant on body mass index towards leisure time.
5. There is significant difference when grouped according to height, weight, body mass index and family monthly income towards overall general knowledge and awareness on health practices.

Recommendations

Based on summary of the investigation conducted and the conclusions arrived at the re-
searcher have offered the following recommendations to wit:

1. Consider healthy body a great treasure and start engaging in physical activities that help and regulate good sound and healthy body instead of engaging in activities as drinking liquor or smoking that may cause severe illness or death.
2. Encourage the respondents not to skip meals for better life and healthy body.
3. Seek advises from health professional or medical doctors before engaging heavy sports activities to assure rendering from gradual to complex physical activities.
4. A physical fit person eating a nutritionally adequate diet can have improved performance in school.
5. In order to improve quality of life, one must practice and observe healthy living.
6. To conduct a parallel or similar study with comprehensive and extensive latitude so as to validate and confirm the findings obtained in the study.

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