Physical Wellness Activities: Engagement and Attitude of School Personnel

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Abstract*-A well-being of an employee is an organization occurrence issue and not only a matter of personal fitness. This study aimed to determine the physical wellness attitude and engagement of State College personnel regarding physical fitness activities and create a physical wellness program for the institution. A descriptive survey method was utilized and the respondents consisting of 79 teaching and non-teaching personnel with permanent status from the total population of 148. Statistical analysis of date which requires the use of descriptive statistics for cross tabulation to determine the proportion of samples, coefficient, and SPSS was utilized in this study. The findings revealed that male group has limited engagement in physical activities than female group. Both groups carry a positive attitude in their health and fitness, appearance, social, competition, feeling good, outdoor enjoyment and challenge. They consider Social Influence, Lack of Time, Lack of Will Power, Lack of Energy, and Lack of Resource as an important barrier that prevents them to engage in wellness activities. The result of the study suggests that Administrators, Deans, Human Resource, Health Services and Sports Office should come up with a long term wellness program that encourages personnel to engage in wellness activities for their mental, physical, occupational, emotional and spiritual well-being that can increase productivity, lessen the cost of health care, and improve inter-personal relationships.*

Keywords*: Wellness, Physical Activities, School Personnel, Philippines*

INTRODUCTION

Physical wellness is described as an individual's capacity to function adequately in day to day demands and to utilized spare time productively [1]. Research indicates decreased in human physical activity engagement and growing sedentary behaviour during the previous decades is highly noticeable [2]. Chronic lifestyle conditions top the leading causes of death replacing infectious diseases [1]. World Health Organization expresses that lacking physical activity is a key hazard factor for non-communicable diseases (NCDs). In Asia, half of the cases of Cardio Vascular Diseases (CVD) are estimated to occur in Asian countries. Higher stroke mortality and morbidity other than of coronary heart disease (CHD) have the characteristic feature in some Asian countries such as Hong-Kong, Taiwan, China, Republic of Korea, Japan and Thailand [3]. In the Philippines, health authorities said that three out of 10 adult Filipinos are now obese based on the 2013 National Nutrition Survey conducted by the Food and Nutrition Research Institute (FNRI) [4]. There is a 14% increase in the number of obese Filipinos from 1993 to 2013 and at least 93% of Filipinos, based on the said survey, that don't take part in recreational physical activities [4]. The 2013 number of deaths from disease of the heart is 6,159 deaths (5.4%) followed by Cardio Vascular System (68,325; 12.9%) [6]. A 2016-2018 data from Northern Negros State College of Science and Technology (NONESCOST) Clinic shows cough, sinusitis, and throat infection tops the most commonly complained symptoms followed by headache and common colds respectively.

Body Mass Index (BMI) is used to measure body fat based on height and weight of the school personnel. It is the standard used for defining anthropometric height/weight characteristics in adults. BMI is widely accepted and used as a risk factor for the development of or the existing of several health issues [7]. There are many studies that link between BMI and the risk of several diseases. High BMI contributed to an estimated 4 million deaths globally in 2015 [8].

Physical activity varies within genders and age categories. Any bodily movement result in energy expenditure is considered as physical activity [9]. Both male and female are predisposed to engage in different types and intensity of physical activity [10]. But health benefits of physical activity differ for males and females according to level, mode and intensity [10]. Motivation and attitude in physical activities varies differently in gender and age [11]. Physical engagement declines into adulthood because

of our modern way of life. Understanding motivation to engage in physical activity is crucial in developing intervention programs to promote healthy lifestyle.

A well-designed wellness program can intensify productivity, lessen the cost of health care, boost morale and increase personnel retention [12]. Incorporating physical activity and production time can prompt higher efficiency and abstaining from sick leaves [13]. Just as exhaustion and despair were mostly grounded among employees who shut off exercises [14]. Physical wellness is a preventive measure on the onset of diseases, boosting the immune system, and an early detection of any diseases before it becomes full blown [15]. Applying a wellness approach can be useful in nearly every human endeavour. Physical wellness recognizes the need for physical exercises.

It is the intention of the researcher to determine Physical Wellness Attitude and Engagement of School Personnel regarding physical fitness activities. The study will answer the level of their engagement and drafting of physical wellness activities to be included in the wellness program of NONESCOST Personnel. The outcome of the research will support the office of human resource to draft, implement and award those who actively support and maintain their fitness level. Most of all, healthy organizations forge an enduring link between employee well-being and performance; prevention is always better than cure.

OBJECTIVE OF THE STUDY

The primary objective of the study is to determine the Body Mass Index (BMI) of the NONESCOST Personnel, the personnel level of physical wellness activities and the attitudes towards wellness engagement, the factors that prevents them to engage in physical activities and design a physical wellness program for NONESCOST Personnel.

METHODS

Research Instruments

The research instrument utilized in this study was adapted and modified from the book of Concepts of Fitness and Wellness; A Comprehensive Lifestyle Approach, 8th Edition, and Centers for Disease Control and Prevention, Barriers to Physical Activity Quiz. The questionnaire has three parts. The first part is the profile of the respondents, the second part is the physical fitness engagement was divided into five categories; A. Exercise for Flexibility B. Exercise for Strength and Muscular Endurance, C. Active Aerobic Activity, D. Active Sports and Recreation, E. Moderate Physical Activity (including lifestyle activities). The third part is attitude of personnel toward physical fitness and the last part are the factors that prevent the personnel to engage in physical activities.

Participants

The respondents are the permanent Teaching and Non-Teaching Personnel of NONESCOST. A total of 148 subject-respondents from the Human Resource Office for the school year 2018-19 are determined through the official lists of employed personnel of NONESCOST. Convenience sampling technique was used. A total of 79 respondents out of 148 personnel answered the questionnaires.

Validity of the Instrument

The adapted instrument was modified in one parameter in terms of types of sports and recreational activities the personnel involved to suit the games commonly played in the locality. The instrument undergoes face and content validation. The result of expert validation shows that the instrument is valid to a very high degree.

Reliability of the Instrument

To ascertain the reliability of the research instrument, it was tested to the faculty and staff of another school. The reliability was determined using Cronbach's Alpha for the 20 Physical Fitness Engaged by the school personnel, 18 Physical Fitness Attitude of school personnel and 21 Factors that Prevent the school personnel to Engage in Physical Fitness Activities items were interpreted as highly reliable.

Data Gathering Procedure

The draft research proposal was submitted to the Research Office and after careful review, it was issued a notice to proceed by the Research Director. The researcher reproduced the questionnaires and visited every offices of the school. Before administering the questionnaires, an orientation about the nature of research and purpose was given. Some questionnaires were retrieved, and the data was analysed, tallied and interpreted.

Data Analysis

Descriptive-survey method was utilized to address various problems presented in this study. Statistical analysis of date which requires the use of descriptive statistics for mean, cross tabulation to determine the proportion of samples, coefficient, and Statistical Package for Social Science (SPSS) was utilized in this study.

Ethical Consideration

In the course of conducting the study, ethical guidelines and voluntary participation of the respondents were observed. They were informed about the research process and that the data being gathered were solely for research and treated with utmost confidentiality. The researcher personally administered the questionnaires to the respondents.

RESULTS AND DISCUSSION

Table 1 shows the profile of the respondents in terms of sex, age and their BMI interpretation. The data shows that out of 79 respondents, 30 are males and 49 are females. In terms of age, there are 39 respondents who are between 22-33 years old and there are 40 respondents who are between 34-50 years old. When they are grouped according to sex, the BMI status of 1 or 3.3% of the males is considered as underweight, 9 or 30% is normal, 7 or 23.3% is overweight, 12 or 40% is pre-obese and 1 or 3.3% is obese type 1. While for females, 5 of 10.2% are underweight, 20 or 40.8% are normal, 7 or 14.3% are overweight, 13 or 26.5% are pre-obese and 4 or 8.2% are considered as obese type 1.

In the Philippines, it is a common practice that women, other than their office works, do the household chores, childcare and other duties lying outside their job description. Filipinos have extended families, thus, it is expected for women in their families to become the primary caregivers to their old parents and younger siblings. Multi-tasking can increase women's physical activities while men's focus is solely on providing financial and material support to the family. The school management is gender equal in terms of leadership but the mid-level management is slightly dominated by women. Both genders have different stress coping mechanisms and motivations to get physically active and gender roles influence fitness level. In designing a wellness program, both sexes' demands should be addressed to cater their needs. Further research about after office activities for both sexes is necessary to determine lifestyle and motivation.

When they are grouped according to age, the BMI status of 5 or 12.5% of 23-33 years old are categorized as underweight, 19 or 14.7% as normal, 7 or 7.1% as overweight, 8 or 12.7% as pre-obese and 1 or 2.5% as obese type 1. It is common knowledge that young ones have more energy and spare time and more concerned on how they look especially when they are still single while the older generation has the wisdom to spend their time wisely to conserve energy and money while they are occupied with their family responsibilities, thus, physical appearance is of less importance. The school's upper management is mostly dominated by older age bracket, with bigger roles and time spent in conducting their responsibilities, it means less engagement in recreational activities. However, if the school has a facility that invites wellness similar to a gym, this will encourage the respondents to engage in physical activities during their free time.

Physical activity fluctuates with age and gender. Physical movement is known to decrease with age because of the diminishment of muscle quality in both upper and lower appendages and changes of muscle to fat quotient, adaptability, deftness, and continuance [16], as well as the decline in total energy expenditure significantly and progressively with age [17]. It is imperative to have a wellness program in our school to address the issues and concerns regarding health and well-being.

Table 2 shows the result of the extent of engagement in physical wellness activities of NONESCOST personnel. Flexibility exercises include stretching activities such as yoga and shibashi. Exercise for Strength and Muscular Endurance includes weight training and core muscles exercises. An active aerobic activity includes Zumba, brisk walking and jogging. Active and Sports and Recreation activities includes sports tournaments and inter office team building and Moderate Physical Activities includes day to day job, taking the stairs and household chores.

The data implied that the respondents have a limited engagement in all physical wellness categories. Although there were few who engaged in physical activities, these are in their own personal level. In terms of Flexibility, Strength and Muscular Endurance, Active Aerobic Activity, Active Sports and Recreation, women have a higher percentage of non-engagement compare to men, while in Moderate Physical Activity, men have a lower engagement compare to women.

Table 1. The Body Mass Index (BMI) of School Personnel

Variables	Groups	N	BMI Under weight	Normal	Over weight	Pre-Obese	Obese Type 1 (obese)
Sex	Male	30	1 (3.3%)	9 (30%)	7 (23.3%)	12 (40%)	1 (3.3%)
	Female	49	5 (10.2%)	20 (40.8%)	7 (14.3%)	13 (26.5%)	4 (8.2%)
Age	22-33 yrs old	39	5 (12.5%)	19 (14.7%)	7 (7.1%)	8 (12.7%)	1 (2.5%)
	34 -50 yrs old	40	1 (2.6%)	10 (25.6%)	7 (17.9%)	17 (43.6%)	4 (10.3%)

Table 2. The extent of engagement in Physical Wellness Activities of school personnel

Variables	Groups	N	Flexibility		Strength and Muscular Endurance		Active Aerobic Activity		Active Sports and Recreation		Moderate Physical Activity	
			Non-Flexible	Flexible	Non Muscle Fitness	Muscle Fitness	Non Active Aerobic	Active Aerobic	Non Active Sports Recreation	Active Sports Recreation	Non-Active	Active
Sex	Male	30	22 (73.33%)	8 (26.67%)	20.75 (69.17%)	9.25 (30.83%)	20.25 (67.5%)	9.75 (32.5%)	22.25 (74.16%)	7.75 (25.83%)	14 (46.67%)	16 (53.33%)
	Female	49	42.5 (86.73%)	6.5 (13.26%)	45 (91.83%)	4 (8.16%)	41.25 (84.18%)	7.75 (15.81%)	46.25 (94.38%)	2.75 (5.61%)	18 (36.73%)	31 (63.27%)
Age	22-33 yrs old	40	32.5 (81.25%)	7.5 (18.75%)	34 (85%)	6 (15%)	31.25 (78.12%)	8.75 (21.87%)	34.25 (85.62%)	5.75 (14.37%)	8.25 (20.62%)	31.75 (79.37%)
	34 -50 yrs old	39	32 (82.05%)	7 (17.94%)	31.75 (81.41%)	7.25 (18.58%)	30.25 (77.56%)	8.75 (22.43%)	34.25 (87.82%)	4.75 (12.17%)	15.25 (39.10%)	23.75 (60.89%)

In age group, both the young and old have an identical percentage in non-engagement except in Moderate Physical Activity where the younger group is more engage than the older group. There are factors to consider why women and old group have a lower engagement in physical fitness compare to men and younger group. Factors such as socioeconomic level, educational attainment, marital status and self-perception of health are identified as predictors of barriers to physical activity [18]. Physical movement conduct is also affected by both individual attributes such as age and sex, behaviour and motivation and the social environment like parks and gyms. The lack of wellness program and sports facilities in the school adds to the limitations of engagement in physical activity of the majority of the respondents. Integrating exercise as part of daily work can enhance fitness, thus, implementing an institutional wellness program may improve the overall wellness of the respondents.

Table 3. Physical Fitness Attitude of the School Personnel towards Physical Wellness Activities according to Age and Sex

Indicator	Variables	Groups	N	Very Poor	Poor	Fair	Good	Excellent
Health and Fitness	Sex	Male	30	0 (0%)	0 (0%)	2 (6.7%)	4 (13.3%)	24 (80%)
		Female	49	1 (2%)	1 (2%)	0 (0%)	6 (12.2%)	41 (83.7%)
	Age	22-33 yrs old	40	1 (2.5%)	0 (0%)	0 (0%)	3 (7.5%)	36 (90%)
		34-50 yrs old	39	0 (0%)	1 (2.6%)	2 (5.1%)	7 (17.9%)	29 (74.4%)
Appearance	Sex	Male	30	0 (0%)	0 (0%)	1 (3.3%)	8 (26.7%)	21 (70%)
		Female	49	1 (2%)	1 (2%)	3 (6.1%)	10 (20.4%)	34 (69.4%)
	Age	22-33 yrs old	40	1 (2.5%)	0 (0%)	1 (2.5%)	9 (22.5%)	29 (72.5%)
		34-50 yrs old	39	0 (0%)	1 (2.6%)	3 (7.7%)	9 (23.1%)	26 (66.7%)
Enjoyment	Sex	Male	30	1 (3.3%)	1 (3.3%)	6 (20%)	12 (40%)	10 (33.3%)
		Female	49	2 (4.1%)	1 (2%)	15 (30.6%)	17 (34.7%)	14 (28.6%)
	Age	22-33 yrs old	40	3 (7.5%)	1 (2.5%)	7 (17.5%)	15 (37.5%)	14 (35%)
		34-50 yrs old	39	0 (0%)	1 (2.6%)	14 (35.9%)	14 (35.9%)	10 (25.6%)
Challenge	Sex	Male	30	0 (0%)	0 (0%)	2 (6.7%)	9 (30%)	19 (63.3%)
		Female	49	1 (2%)	1 (2%)	4 (8.2%)	21 (42.9%)	22 (44.9%)
	Age	22-33 yrs old	40	2 (5%)	0 (0%)	8 (20%)	17 (42.5%)	13 (32.5%)
		34-50 yrs old	39	1 (2.6%)	3 (7.7%)	10 (25.6%)	16 (41%)	9 (23.1%)
Social	Sex	Male	30	0 (0%)	1 (3.3%)	5 (16.7%)	9 (30%)	15 (50%)
		Female	49	1 (2%)	0 (0%)	12 (24.5%)	17 (34.7%)	19 (38.8%)
	Age	22-33 yrs old	40	1 (2.5%)	0 (0%)	7 (17.5%)	14 (35%)	18 (45%)
		34-50 yrs old	39	0 (0%)	1 (2.6%)	10 (25.6%)	12 (30.8%)	16 (41%)
Competition	Sex	Male	30	1 (3.3%)	3 (10%)	8 (26.7%)	5 (16.7%)	13 (43.3%)
		Female	49	4 (8.2%)	4 (8.2%)	14 (28.6%)	14 (28.6%)	13 (26.5%)
	Age	22-33 yrs old	40	3 (7.5%)	4 (10%)	10 (25%)	9 (22.5%)	14 (35%)
		34-50 yrs old	39	2 (5.1%)	3 (7.7%)	12 (30.8%)	10 (25.6%)	12 (30.8%)
Feeling Good	Sex	Male	30	0 (0%)	1 (3.3%)	4 (13.3%)	11 (36.7%)	14 (46.7%)
		Female	49	2 (4.1%)	2 (4.1%)	7 (14.3%)	18 (36.7%)	20 (40.8%)
	Age	22-33 yrs old	40	1 (2.5%)	3 (7.5%)	3 (7.5%)	17 (42.5%)	16 (40%)
		34-50 yrs old	39	1 (2.6%)	0 (0%)	8 (20.5%)	12 (30.8%)	18 (46.2%)
Outdoor	Sex	Male	30	0 (0%)	0 (0%)	3 (10%)	8 (26.7%)	19 (63.3%)
		Female	49	1 (2%)	1 (2%)	6 (12.2%)	23 (46.9%)	18 (36.7%)
	Age	22-33 yrs old	40	1 (2.5%)	0 (0%)	1 (2.5%)	16 (40%)	22 (55%)
		34-50 yrs old	39	0 (0%)	1 (2.6%)	8 (20.5%)	15 (38.5%)	15 (38.5%)

Table 4. The factors that prevent NONESCOST school personnel to engage in physical wellness activities

Factors	Variables	Groups	N	Not Important Barrier	Important Barrier
Lack of Time	Sex	Male	30	10 (33.3%)	20 (66.7%)
		Female	49	14 (28.6%)	35 (71.4%)
	Age	22-33 yrs old	40	10 (25%)	30 (75%)
		34 -50 yrs old	39	14 (35.9%)	25 (64.1%)
Social Influence	Sex	Male	30	15 (50%)	15 (50%)
		Female	49	19 (38.8%)	30 (61.2%)
	Age	22-33 yrs old	40	13 (32.5%)	27 (67.5%)
		34 -50 yrs old	39	21 (53.8%)	18 (46.2%)
Lack of Energy	Sex	Male	30	15 (50%)	15 (50%)
		Female	49	10 (20.4%)	39 (79.6%)
	Age	22-33 yrs old	40	11 (27.5%)	29 (72.5%)
		34 -50 yrs old	39	14 (35.9%)	25 (64.1%)
Lack of Will Pow er	Sex	Male	30	11 (36.7%)	19 (63.3%)
		Female	49	11 (22.4%)	38 (77.6%)
	Age	22-33 yrs old	40	9 (22.5%)	31 (77.5%)
		34 -50 yrs old	39	13 (33.3%)	26 (66.7%)
Fear of Injury	Sex	Male	30	24 (80%)	6 (20%)
		Female	49	42 (85.7%)	7 (14.3%)
	Age	22-33 yrs old	40	31 (77.5%)	9 (22.5%)
		34 -50 yrs old	39	35 (89.7%)	4 (10.3%)
Lack of Skill	Sex	Male	30	22 (73.3%)	8 (26.7%)
		Female	49	31 (63.3%)	18 (36.7%)
	Age	22-33 yrs old	40	25 (62.5%)	15 (37.5%)
		34 -50 yrs old	39	28 (71.8%)	11 (28.2%)
Lack of Resource	Sex	Male	30	12 (40%)	18 (60%)
		Female	49	17 (34.7%)	32 (65.3%)
	Age	22-33 yrs old	40	16 (40%)	24 (60%)
		34 -50 yrs old	39	13 (33.3%)	26 (66.7%)

Positive attitude about exercise is a strong predictor of physical activities, however, goals setting to perform exercise are not related to actual behaviour, barriers influence attitude to perform exercise [20]. A wellness program design should reinforce these positive attitudes to enhance active participation. Exercise is always positively associated with high self-esteem [19]. Both sexes and age group have a positive attitude towards physical activity but they don't engage in such activities due to various factors and lack of wellness program hamper their participation in physical engagement. Both sex and age group have either Excellent or Good in ratings and they value the health benefits of a healthy lifestyle, an indicator of positive attitude towards physical fitness. However, their BMIs speak differently with male being categorized as pre-obese and female as normal.

Table 3 reveals the attitude of NONESCOST Personnel towards physical activities. Males have higher ratings than Females in Appearance, Enjoyment, Challenge, Social, Competition, Feeling Good and Outdoor while Females have higher ratings in Health and Fitness, both values exercise as important in maintaining a healthy lifestyle. Younger group have a higher rating than Older group in Health and Fitness, Appearance, Enjoyment, Challenge, Social, Competition, Feeling Good, and Outdoor.

Table 4 shows the factors that prevent NONESCOST personnel to engage in physical wellness activities. The male considered Lack of Time as the primary factor and Fear of Injury as the least factor that prevents them to engage in physical wellness activities. Males are expected to be the breadwinner of the family and the pressure to provide basic needs may lead to work overload and bigger responsibilities. This will affect their time for recreation and wellness. Lack of time is one of the most frequently cited barriers but few studies conducted on its effects on physical activity and suggested that perceiving lack of time as a barrier could, in fact, be a reflection of a lack of self-motivation rather than a legitimate obstacle to regular participation in physical activities [21].

The female considered Lack of Energy as the primary factor and Fear of Injury as the least factor that prevents them to engage in physical wellness activities. Competing factors of gender role can also be a barrier in physical engagement. Females are known to perform well in multi-tasking and the role of women to take care of the house and kids while having a regular job can take its toll on their energy. Less time in recreational games impedes their skills development and the fear of injury hampers their engagement in sports. The difference in the anatomy between male and female is one of the reasons why women are prone to injury. Both groups share the

same ranking of barriers that they considered least important.

The 22-33 years old and 34-50 years old considered Lack of Resource and Lack of Will Power as the primary factor that prevents them to engage in physical wellness activities while the Fear of Injury was the least factor. Both age groups have a similar ranking of factors that prevents them to engage in physical activities. They share the same barriers and it shows consistency that the school needs to have a wellness program that addresses these barriers. The school have limited equipment for sports and these are underutilized due to the absence of sports and wellness program. Lack of resource is the absence or limited equipment or facility for exercise and this is an influencing factor why personnel have a limited engagement in exercise.

It is the key purpose of the researcher to identify and recognize the key drivers of behaviour to help the school in drafting its wellness program as well as how effectively is the said program implemented.

CONCLUSION AND RECOMMENDATION

The study revealed that the school personnel have a limited engagement in physical activities due to several factors yet they exhibited a positive attitude towards physical wellness activities regardless of sex and age. The Body Mass Index (BMI) of female group and young groups are within normal than male group and old group who are considered pre-obese. Lack of Resource, Lack of Will Power, Lack of Energy, Social Influence, and Lack of Time are factors that contribute to limited physical wellness engagements by school personnel.

School Personnel positive attitude towards wellness activities leaves much to be desired, thus, conducting further studies should be pursued considering other variables such as motivation and self- efficacy towards wellness engagement, efficiency and productivity of personnel who are physically active and comparative studies of wellness program among State, Colleges and Universities.

It is recommended that the Human Resource Office, and Clinic office are encouraged to come up with specific program to monitor the individual physical wellness and provide incentives for those who maintained their BMI, BP and other medical norm. The data of this study is hoped to be valued for reference. Likewise, full implementation on the proposed Physical Wellness Program should be taken into consideration by all school personnel. The school administrators may provide a wellness activity area where the personnel can do physical exercises or workout during their vacant or after office work as well as improvement of the physical environment for effective physical activity interventions shall be properly looked into for access to all personnel. The Deans and Office Heads may integrate in their One-year Action Plan on physical and sports activities that will foster camaraderie and physical wellness among members of their Department and/or office. The Technology and Livelihood Education (TLE) and Tourism department may come up with wellness activities such as Spa, Manicure, Pedicure, and Massage as part of their income generating activities. Lastly, the personnel are encouraged to engage in healthy lifestyle practices, regular physical activities and workout, and sports programs and interventions for their welfare and benefits.

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