

Exploring Motives and Barriers to Exercise among “At-risk and Obese” Filipino College Students

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Abstract – Exercise is a critical component of physical activity that has been a trend and a challenge to many educational institutions. The steadfast increase in the percentage of obesity in the world was even heightened due to the coronavirus disease (COVID)-19 pandemic. With these in mind, the researchers aimed to explore the perceived motives and barriers to exercise among "at-risk and obese" Filipino college students using the free-listing methodology. This quantitative-descriptive study considered 355 purposively selected students from a comprehensive state university in Pampanga, Philippines, who were categorized above their normal body mass indices. Responses in the free list were coded using the subscales of the Exercise Motivation Inventory-2 (Mullan et al., 1997) for the motives, while the subscales of Myers and Roth (1997) were adopted for barriers. It was found out that most of the subscales from EMI-2 that involve motives to exercise are still apparent in the present day. The motives indicated in the results were primarily health-related and for self-satisfactory causes. On the other hand, most of the barriers identified in the 1997 subscales were still relevant and evidenced in the contemporary time, even amid a global health concern, since most of them were still identified concerning the listed responses. Furthermore, emerging motives and barriers were also discussed in the study. The results provided clear-cut inputs for educational institutions to facilitate the development of exercise programs that are adherent to what motivates the students and reconsider potential hurdles that may impede such physical activity participation.

Keywords – exercise motivation, free-listing methodology, obesity, physical activity, physical education

INTRODUCTION

The coronavirus outbreak was first detected in Wuhan, China, in December 2019. The Corona Virus Disease (COVID)-19 pandemic has posed unprecedented challenges in the global economy [1], health departments [2], and the education sector [3].

Since many learners are now pursuing their education at home, they have less motivation to perform more physical activities than what they practiced before the pandemic started. During the pre-pandemic period, learners have been performing a lot of physical activities in their respective schools, especially during Physical Education (PE) classes, given that the nature of PE consists of various physical activities. However, because of the widespread virus, there was a sudden halt in the physical activity (PA) participation of the learners since they are strictly advised to abide by the law and stay inside their houses.

Doctors and other medical and health agencies announced that COVID-19 has no cure yet [4]. Performing physical activities is a massive help in keeping a good physique and helps to improve holistic health [5]. According to Laddu et al. [6], regular physical activities through moderate-intensity physical exercises can prevent viral infections and enhance immune support. Physical activity is not the absolute cure to COVID-19, but it can minimize the chances of acquiring it. Being physically active contributes to one's physical and mental health. Regular engagement in physical activity is a great way to enhance physical health and emotional and mental aspects [7]. Engaging oneself in physical activities, work out, and exercises have been proven to be positively seen as an intervention for mental health problems such as anxiety, stress, and depression [8]. It was revealed in a study conducted by Brand et al. [9] that those who actively engage themselves in physical exercises

during the pandemic have more positive mood states and outlooks than those of their inactive counterparts.

Status of Overweight and Obesity in the World

Feeding practices and eating habits contribute to obesity [10]-[11]. A study among university students conducted across eight Association of Southeast Asian Nations (ASEAN) countries found that sedentary lifestyle and physical inactivity are not the main factors contributing to obesity, but the specific dietary behavior of people [10]. Hence, the study proves that physical inactivity is not always associated with obesity, but it is about the appropriate dietary habits. In addition, unhealthy feeding practices and improper eating behavior can increase the risk of being obese [11].

Thailand conducted a research tracking obesity and nutrition [13]. Hence, Thailand's focal point of the policies in obesity research focuses on food and PA education [12]. On the other hand, the ubiquity of obese and overweight among Thai students was also high because of the amount of time spent in sedentary activities such as watching television for several hours and playing video games [13].

Status of Overweight and Obesity in the Philippines

The performance of children in doing PA is a significant factor in their fitness level. It shows that the lesser the engagement to such PA, the more prone and “at-risk” to being regarded as obese or overweight. In a study conducted by Peltzer et al. [14], it has been revealed that in the Philippines, there have been a high number of university students who are overweight or obese.

In 2015, a study conducted in Iloilo City revealed that sex, educational level, level of PA, food intake, alcohol and smoking habits, weekly allowance, and some obese family members are the identified factors contributing to obesity among adolescent women [15]. The same study also stated that the status of obesity and eating practices are viewed as barriers to forestalling obesity.

Barriers to Exercise from Various Perspectives

Physical activity and exercise bring a lot of health benefits to people. It helps in strengthening a person's immune system which will serve as a weapon against any disease, rewards people with good physical appearance, and develops confidence. Despite these positive health benefits, other people tend to practice sedentary behaviors and possess physical inactivity

because of some barriers that affect their willingness to engage in physical activities. Baert et al. [16] reported that the barriers to physical activity among adults are composed of various intrapersonal factors. In the same study, intrapersonal barriers have been identified as physical impairment, lack of time, tiredness, lack of motivation, unfamiliarity with exercise procedures, and lack of interest. Relatively, the same factors were also revealed in the study conducted by Moreno and Johnston [17] but gave stress to women's participation in PA. The PA participation among women is more likely to be less prevalent as compared to their male counterparts, mainly due to barriers such as lack of time, predicted lack of enjoyment, and self-consciousness [17].

In a study conducted by Hoare et al. [18], it was found out that more than 22% of the respondents have been reported to be identified under the inactive group, which means that they are doing very little PA every day. These respondents from the inactive group have identified barriers that hinder them from physical activity while recognizing exercise to bring a lot of health benefits to people. It helps in strengthening a person's immune system, which will serve as a weapon against any diseases, rewards people with good physical appearance, and develops confidence within. But despite these positive health benefits, other people tend to practice sedentary behaviors and possess physical inactivity because of some barriers that affect their willingness to engage in physical activities. Baert et al. [16] reported that the barriers to physical activity among adults are composed of various intrapersonal factors. In the same study, intrapersonal barriers have been identified as physical impairment, lack of time, tiredness, lack of motivation, unfamiliarity with exercise procedures, and lack of interest. The same factors were also revealed in the study conducted by Moreno and Johnston [17] but gave stress to women's participation in PA. Physical activity participation among women is more likely to be less prevalent than their male counterparts, mainly due to barriers such as lack of time, predicted lack of enjoyment, and self-consciousness [17].

Motives to Exercise from Various Perspectives

Hindrances and challenges may always be present in participating in different PAs, but there are still motivating factors that can be referred upon. Sibley et al. [19] suggested that the motives for exercising and engaging in PAs depend on the participant's desired outcomes. It emphasized that when intrinsic motivation

and competence-related motives were firm and being instilled in the mind and heart of the participant, the more influential the results will be [19]. Aaltonen et al. [20] acknowledged that the primary motivating factor for adults is their desire to achieve good health. In the same study, it was also reported that aside from recognizing health as a key factor for motivation, it was also found out that consciousness to physical appearance, interest, and body image are also viewed as motivating factors [20]. Firth et al. [21] argued that socio-ecological factors are also identified to be critical factors that motivate people to engage in various vigorous exercises.

It has been stressed in the study conducted by Zelenskyi and Zelenskyi [22] that the predominant motive of female college students was their aspiration to have a good body shape, lose weight, and achieve a healthy body. Meanwhile, Zhou et al. [23] reported that among their respondents who are actively participating in PAs through sports, they have discovered that the prevailing motives for them to engage actively in PAs are mastery of the skills in playing the sport, health consciousness, maintaining a good physique, and their ego as competitive individuals. The desire to acquire a good physical appearance and the desire to please the public is also identified as a significant motive in PA participation among older men and women [24]. In the study of Cagas et al. [25], given the low number of Filipinos who regularly engage in health-promoting physical activity, determining which exercise participation motivations are especially important to Filipinos may provide helpful information for physical activity promotion.

Status of Physical Activity Participation in the Philippines

Filipino students are being encouraged to actively participate in different physical activities considering that the PE subject is integral in the school curriculum. Physical activities are also observed in Philippine society like holding sports events held at the barangay to municipality levels or even up to national league events and competitions [26].

The most frequent reasons to exercise identified by the Filipinos were to be strong and sexy, and the most stated motive is to lose weight [25]. With that, it was clear that most Filipinos are conscious of their physical appearance. On the other hand, a study in the Asia-Pacific region showed that Filipinos engaged in physical activity to prevent non-communicable diseases (NCDs) [27]. Thus, Filipinos who are involved

in physical activities planned to have an excellent physical appearance and to prevent NCDs. Some students live a sedentary lifestyle [28]. Meanwhile, Tolentino [29] confirmed that physical condition was the primary reason why Filipino physical education majors undertake physical activities.

The Philippines is one of the countries that are most likely to be active in social media. Many Filipinos spend their time scrolling and browsing on social media, which is mainly why they are physically inactive. Currently, the *TikTok* application is one of the trending and most visited sites worldwide because of its features. In this pandemic, many Filipinos are using this application to have fun and learn something new [30]. In addition, the trending China-owned application has been a new way of exercising and has helped Filipinos to be physically active and engage in activities such as dance challenges and dance face-offs, which can also be referred to as simple forms of physical activity participation. Home workout tutorials, calisthenics, and other exercise or sports training and skills improvement can also be found in the *TikTok* application. In this way, Filipinos, though isolated and quarantined in their houses, can still practice active living, and break a sweat every day.

While most studies cantered on apparently healthy individuals and from a general population, there is a need to explore motives and barriers from the perspective of an understudied group such as the "at-risk and obese" students. Also, given the unfortunate circumstances brought by the pandemic, giving attention to exploring the barriers and motives of Filipino college students from such groups would be of great help to the field of research in physical education and the students who can be affected by this. With that, the study determined the barriers and motives of the "at-risk and obese" students from a particular public institution of higher learning in the Philippines. This may potentially serve as a benchmark to prepare fitness programs instituted by PE practitioners and fitness experts, even during a pandemic.

OBJECTIVES OF THE STUDY

The researchers aimed to explore and investigate the perceived motives and barriers to participating in exercise among "at-risk and obese" Filipino college students using the free-listing methodology.

More specifically it seeks to determine the motives for exercise, as identified by the participants, be categorized according to the subscales of the Exercise Motivation Inventory - 2 [31]; determine the barriers to

exercise be categorized using the subscales of Myers and Roth [32].

METHODS

Research Design

This study used the Free Listing Method, a method in which the respondents can reflect upon their ideas and list assumptions about a specific category based on their understanding, experience, and knowledge. They can refer to some domains or factors that are sometimes being omitted in an open-ended questionnaire. Through this method, the respondents can freely express their perceptions and ideas about a specific field, providing answers and results with sincerity and authenticity [33]. This design was useful to capture the identified motives and barriers as perceived by the respondents since this would also apprehend other aspects beyond the identified various subscales and potentially establish culture-associated factors, including the timely context of the pandemic.

Participant of the Study

The respondents of the study included Filipino college students who are enrolled in Physical Education (PE) courses, PE 2 "Exercise-based Fitness Activities" for first-year students, and PE 4 Menu of Physical Activities for second-year students during the Second Semester of Academic Year 2020-2021 from the Institute of Physical Education (IPE) System of a public comprehensive university in the Province of Pampanga, Philippines. Employing the use of the purposive sampling technique, participants were selected according to their ability to explain and explicate factors in a specific category, theme, or phenomenon [34]. To qualify as a respondent, the student (either male or female), through their body mass indices (BMI), must be specifically categorized as "at-risk" (BMI ranges from 23 to 24.9 kg/m²), "Obese I" (25 to 29.9 kg/m²), and "Obese II" (above 30 kg/m²) according to the Philippine Association for the Study of Overweight and Obesity (PASOO) [35]. Data were facilitated through the faculty members of the Institute subject to data privacy procedures and ethical compliances. Such interpretation may be of use for individuals 16 years old and above [35]. In this study, although there were three categories considered when BMI was interpreted, they were collectively taken as one group of subsamples for further analysis.

In this study, 355 qualified student-respondents from different colleges and campuses, ranging in age from 18 to 39 years old, participated. The sample was

composed of males ($n = 136$) and females ($n = 219$) with a mean age of 19.80 years old (± 1.83), a mean height of 1.64 meters (± 0.10), and a mean weight of 165.02 lbs. (± 30.44). The sample group had an average BMI of 27.79 (± 4.76). Also, there were 105 (29.58%) participants categorized as "at-risk," 171 (48.17%) were Obese Level I, and 78 (21.97%) were Obese Level II. Based on the data, 219 (61.69%) of them reported that they were currently exercising, while 136 (38.31%) identified themselves as non-exerciser.

Data Gathering Instrument

The first part of the instrument included questions about the demographic characteristics of the respondents to provide a demographic view of the sample. This included their age, sex, height, weight, and computed BMI. They were also asked the question: "*Ikaw ba ay kasalukuyang nag-eehersisyo?*" (Do you currently exercise?) to provide general information on the status of their participation in exercise.

The second part of the survey includes open-ended questions, which were content validated by five experts. The pool of expert validators included a professor of physical education, two (2) nurse educators, a language expert, and a registered psychometrician. The computed item-content validity indices of the questions were at 1.00, indicating their high extent of validity [36].

Data-Gathering Procedures

Permission from the Director of IPE was obtained via electronic mail correspondence to allow the researchers to gather information from their students enrolled in PE classes who met the inclusion criteria set and subsequently got information from the PE teachers. In identifying the students who qualified to the set criteria, an email was sent to all PE teachers of the IPE System to generate information on the number of students identified as "at-risk or obese" as per PASOO [35] standards. The open-ended questions were requested to be forwarded to the students who qualified for the criteria through their respective PE teachers and were willing to participate in the study. Participants were given a week to complete the online survey, and follow-up was done with teachers.

Since the open-ended free-listing method was employed in this study, as it was justified to be of use in identifying the reasons or hurdles to exercise among college students [37] [38], this identified the contemporary motives and barriers to participating in

an exercise from the perspective of “at-risk and obese”-categorized students.

Data Analysis

The data that was collected from the open-ended questions of the free-listing methodology on the possible reasons why they or they do not participate in exercise were coded independently by the first and second authors. The first and the second authors categorized the answers by independently coding them one by one using the fourteen subscales of EMI-2 [31] for the motives and the subscales of Myers and Roth [32] for barriers. The coding process and inter-coder agreement procedures were performed using MAXQDA version 2020.4.1. If the first and second authors have conflicts or discrepancies in the codes, the third author resolved the conflicts.

Ethical Considerations

Several ethical standards bound the procedures of obtaining data from the participants in the conduct of research, such as the Belmont Report (1979) and the Data Privacy Act of 2012. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research [39] for one, considers three core principles of ethics in research involving human participants such as "respect for others, beneficence, and justice."

RESULTS AND DISCUSSION

Motives to Exercise

A total of 458 responses for motives were collected from the sample of college students categorized as "at-risk and obese" based on their BMI. These were further categorized and coded using the subscales of the Exercise Motivation Inventory (EMI)-2 of Mullan et al. [31] with an inter-coder agreement of 37.02 percent between the first and second authors. The third author, who specialized in physical education and human movement sciences, settled the disagreements.

Out of 458 responses for motives, 65.72% of them were categorized within the themes provided by Mullan et al. [31]. It could be surmised in Table 1 that "positive health" was the most identified reason for the respondents to exercise, as this constitutes a little more than a quarter of the total responses (32.23 percent). This result means that they consider physical activity as essential to maintaining good health. This may also be associated with the study's situation during a pandemic; hence, sustaining one's good health is of

utmost concern. This further implies that exercise is vital in times of a global health issue [9].

Exercise among categorized "at-risk and obese" respondents also identified "weight management" (25.58 percent) as a second mostly identified motive. The respondents considered losing weight as one of the main reasons why they engage themselves to exercise as it also contributes to their wellness and the improvement of their health [40]. Moreover, since “appearance” (20.27 percent) also emerged as a prevailing motive, most of the respondents' main concern is their physical attributes. Their looks may also be highly considered as a reason for them to exercise. It can be associated with how society, particularly in the Philippines, consider being sexy as a primary motive to exercise [25]. This may further imply that exercise frequency has a positive association with the dimensions of positive body image, and appearance-based exercise is one of the motivations that can help increase such correlation [41].

Table 1. Summary of Motives for Exercise

Theme	f	%	Sample Responses
Positive Health	97	32.23	“to be healthy”
Weight Management	77	25.58	“ <i>magbawas ng timbang</i> ” (to lose weight)
Appearance	61	20.27	“ <i>masuot ang gusto kong damit</i> ” (to wear the clothes I want)
Ill-Health Avoidance	19	6.31	“It lessens the risk of health problems”
Strength and Endurance	16	5.32	“ <i>para lumakas ang pangangatawan</i> ” (to make my body strong)
Affiliation	10	3.32	“Doing it with somebody, I need a workout buddy because I'm lazy whenever I do it alone”
Stress Management	5	1.66	“release stress”
Health Pressures	5	1.66	“if a doctor tells me to”
Competition	4	1.33	“to be sporty and athletic”
Revitalization	3	1.00	“ <i>para maging masigla</i> ” (to become lively)
Enjoyment	2	0.66	“... <i>masaya ako kapag pinagpapawisan ako</i> ” (I feel happy when I'm perspiring)
Nimbleness	2	0.66	“ <i>para makagalaw ng maayos</i> ” (to move easily)
Challenge	0	0.00	-
Social Recognition	0	0.00	-
Total	301	100	-

Other Motives

Apart from the themes provided by the EMI-2 [31], emerging motives appeared after analyzing the responses. In fact, 156 out of 458 responses (34.06%) from the qualified student-respondents were considered as emerging motives. Five (5) of these were adopted from Cagas et al. [37], particularly on “requirement” (7.69%), “leisure” (6.41%), “athletic goals” (1.92%), “lifestyle” (9.62%), and “social influence” (7.69%). However, the most frequently identified “other” motive to exercise was “general fitness” (40.38%). “Personal” reason, as a motive, garnered the second-highest frequency (22.44%) since most of the responses were about being confident and avoiding body shaming.

Additional motives were revealed by the student-respondents such as the "materials" they use in performing an exercise. It can be associated with the student-respondents' current BMI and having a hard time doing calisthenics exercises [42]. It appears that some of the student-participants are depending on their quality of exercise to the usage of the exercise materials or equipment [43]. Another emerging motive is "athletic goals" but only has a minimal response. The results further indicate that some students exercise because they are athletes and therefore, keep and maintain their exercise participation [44]. The last identified emerging motive is the "pandemic" which only has a single response. Thus, it can be assumed that even if we are facing a global pandemic, it is still feasible to exercise and not limit our capabilities [9].

Table 2. Summary of Other Motives for Exercise

Theme	f	%	Sample Responses
General Fitness	63	40.38	"to be fit"
Personal	35	22.44	"To boost self-confidence to avoid body-shaming on my self "
Lifestyle	15	9.62	"I want to improve my way of living"
Requirement	12	7.69	"Requirement in school /PE"
Social Influence	12	7.69	"Mga taong nakikita ko na may progress/result sa pag exercise na ginagawa nila" (Seeing the progress and results of people who exercise)
Leisure	10	6.41	"upang makapag palipas oras" (To spend spare time)
Materials	5	3.21	"materials sa pag-eehersisyo (Materials used in exercising)"
Athletic Goals	3	1.92	"athlete"
Pandemic	1	0.64	"I want to take care of myself, especially this time of the pandemic"
Total	156	100	-

Barriers to Exercise

From the list of responses, 448 responses were gathered and qualified as barriers from the student-respondents. These data were categorized and coded using the subscales of the barrier factors identified by Myers and Roth [32] with an inter-coder agreement of 62.41% between the first and second authors. The remaining 37.59% are disagreements and were settled by the third author.

Table 3. Summary of Barriers to Exercise

Theme	f	%	Sample Responses
Too lazy	106	27.3	"katamaran sa pag-eehersisyo" (laziness to exercise)
Not enough time	76	19.5	"time management"
Interferes with school	74	19.0	"busy sa school works" (busy in school works)
Medical problems	23	5.93	"having an asthma"
Family obligations	22	5.67	"maraming gawain sa bahay" (too much household chores)
Interferes with work	21	5.41	"pagkabusy sa trabaho" (busy at work)
Takes too much discipline	14	3.61	"consistency doing workouts and exercise"
No convenient places	12	3.09	"not enough space to workout"
Too tired	10	2.58	"lack of energy"
Too inconvenient	9	2.32	"lack of materials"
Too much work	5	1.29	"too much work and things that I need to prioritize first"
Uncomfortable	5	1.29	"dahil sobra sa timbang" (because of excessive weight)
Bad weather	3	0.77	"sikat ng araw" (sunlight)
Interferes with social life	3	0.77	"laging umaalis" (always leaving)
Family does not encourage	2	0.52	"family matters"
Get hot and sweaty	1	0.26	"di pinapawisan" (does not perspire)
Too fatigued	1	0.26	"I feel extreme fatigue whenever I do"
Don't like to exercise alone	1	0.26	"walang kasama mag work out" (no one to work out with)
Too boring	0	0.00	-
Look silly	0	0.00	-
Causes sore muscles	0	0.00	-
Too uncoordinated	0	0.00	-
Friends do not exercise	0	0.00	-
Total	388	100	-

A total of 388 out of 448 responses (86.61%), were categorized within the themes provided by Myers and Roth [32]. Table 3 depicts the summary results of the frequency distribution and percentage of the barriers to exercise. It appears that most of the respondents are not that concerned with their health because of laziness. More than a quarter of the total responses (27.32 percent) constitute the subtheme "too lazy" as a barrier to exercise. This is consistent with the study of Myers and Roth [32].

Some of them also think that what impedes them from exercising is because they do not have enough time (19.59 percent), which interferes with their school-related activities (19.07 percent). This could mean that doing exercise would require much of their time, and it may not be their priority. Students having "not enough time" to perform an exercise can be associated with their busy school schedules, work, or other activities that prevent them from exercising [18]. Given that the respondents are college students, having a heavy school workload and busy academic schedule is also a factor for them not to exercise.

Other Barriers

Apart from the themes provided by Myers and Roth [32], other emerging responses constitute additional themes. Twenty-five percent (25 percent) of the responses identified that eating their favorite food is a leading barrier to do exercise. Moreover, the increasing number of COVID-19 cases determined the emergence of the "pandemic" as another barrier (23.33 percent). These were followed by "personal" barriers constituting 15 percent of the total coded responses. Other barriers among "at-risk" and obese students were identified in undertaking "online games". Unsurprisingly, they may spend the entire day or night playing internet games. The loss of interest in exercise is one of the most serious of these issues. Instead of exercising, they are more interested in playing online games [45].

Female student-participants who have "menstruation" may lead to "mood" swings as the emerging theme of barriers in exercise. This means that females are more prone to be sedentary in exercising throughout their menstrual cycle. Increases in stress hormones because of negative emotions can worsen feelings or mood that can affect decision-making, such as increased tolerance and interest in a long-term activity routine, such as not engaging in physical exercise [46].

As a result of using social media, individuals are "being criticized," such as receiving negative feedback through comments, which is considered an emerging barrier to participating in any exercise. The last barrier as per the student-respondents is the "mobile device." However, they are unaware that excessive cell phone use has negative effects such as sedentary behaviors that can interfere with exercise and that a high level of use can contribute to a larger problem of leisure time sedentary behaviors such as the "sit and play" that makes people more likely to become obese. This is because while using mobile devices, people were twice as likely to consume more sugary drinks, fast food, and sweets, and snacks, thereby resulting in a minimized drive to exercise [47] [48].

Table 4. Summary of Other Barriers to Exercise

Theme	f	%	Sample Responses
Food	15	25.00	"Mga paborito kong pagkain" (my favorite foods)
Pandemic	14	23.33	"growing covid cases"
Personal	9	15.00	"Maraming pong pinagkakaabalahan" (too much preoccupation)
Online Games	6	10.00	"video games"
Menstruation	4	6.67	"monthly period"
Mood	4	6.67	"Depende sa mood ko" (depends on my mood)
Social Media	3	5.00	"I'm distracted by social media/ internet"
Being Criticized	3	5.00	"Negative feedbacks from other people"
Mobile Device	2	3.33	"pagce-cellphone" (using cellphone)
Total	60	100	-

CONCLUSION AND RECOMMENDATION

Most of the subscales from EMI-2 [31] that involve motives to exercise are still apparent in the present-day times despite the more than a decade gap of both studies. Also, most of the barriers identified in the 1997 subscales were still relevant and evidenced in the contemporary time, even amid a global health concern, since most of them were still identified in the listed responses. The other barriers that emerged were deeply rooted within the context of the respondents who were categorized as "at-risk and obese" students, attending classes online, and mostly limit their interaction within a virtual setting.

Most of the respondents are too lazy and have insufficient time to exercise, which may interfere with their school-related activities. Some of them consider

medical issues, including their family and home responsibilities as hindrances to exercise.

It is noteworthy that within the context of the respondents, a considerable number of them perceive their love for food as an emerging barrier, while some of them took the pandemic as a remarkable hindrance to being active. Moreover, many of them have personal reasons that inhibit their physical activity participation, like exercise. Also, female respondents cited menstruation as a burden to undertake exercises. Lastly, since the pandemic started, a notable reason not to exercise was also attributed to their preference to play online games instead, thereby limiting, if not stopping, themselves from actively participating due to its passive nature.

Considering that health reason was confirmed to be a top motivator for the students to participate in an exercise, it is recommended that physical education teachers, specifically at the collegiate level, further emphasize the integration of health concepts and the impact of exercise on the body in its various dimensions. Presentation of relevant and current research about how exercise improves an individual whose BMI is above the normal in the content of their lessons is also encouraged.

Since the study results were focused on the lower college year levels, it is recommended that future researchers consider the higher year level as respondents.

Given the country's current situation experiencing a global health crisis, putting healthy habits and practices into consideration is very important. It is recommended for physical educators to integrate and provide more engaging physical activities for the students to improve their physical fitness.

The study dealt with the acquisition of a free list from each respondent on why they exercise or not. However, it did not further investigate the underlying reasons of each motive or barrier as the inferences were justified merely by local and foreign-related literature. The relatively low inter-coder agreements for both motives and barriers can be attributed to the seemingly vague responses, which may be perceived differently by the first and second authors. Although the third author had established the discrepancies, the consensus was not fully achieved to strengthen the claims thoroughly. The respondents only involved college students with PE subjects who were on their first- and second-year only.

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