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THE IMPACT OF COVID-19 ON PHYSICAL EDUCATION: MOBILITY-RESTRICTIVE MEASURES ON THE REMOTE LEARNING SETUP

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ABSTRACT

The remote learning setup engendered numerous disadvantages to both learner and educator. Mental health, accessibility affected by one's socioeconomic classification, availability of technological apparatuses, and lack of social integration are some of the reported disadvantages caused by remote learning. The effects are far more notable in subjects that demand physical activities given that several prerequisites must be accessible to the learner for him/her to successfully participate. To specifically assess the impact of this new normal in physical education, a specific course offering in University of the Philippines Los Baños (UPLB), Human Kinetics 12: Walking for Fitness, is examined through a quantitative study involving students who were enrolled. Surveys and other statistical tools are utilized to yield accurate data about the impact of mobility-restrictive measures to the perception and performance of the students. The findings of this study revealed what they feel about the quarantines and lockdowns have a negative effect to their perception and performance in HK12: Walking for Fitness. Besides the fact that the policies are meant to restrict mobility and that HK12: Walking for Fitness requires mobility, it must also be considered that the First Semester, A.Y. 2020-2021 is the first semester of the university to observe remote learning. Even though the study did not capture such behavior, it must be noted that the drastic shift to online classes made it difficult to students to cope with the new normal in education.

Contribution/ Originality: This study effectively reimagining Human Kinetics in the New Normal of Education. In a third-world country plagued by a global pandemic, multiple super typhoons, earthquakes, volcanic eruption, and a questionable integrity of the state, all in one year, sectors where human lives are affected such as the education sector should be reimagined in a way that not only strengthens its citizens to face adversaries but also acts with compassion. And it is Department of Human Kinetics' task to complement this compassion with physical activity that shall contribute to the stability of the students' mental well-being in this time of crisis.

1. INTRODUCTION

COVID-19, the pandemic of the early 21st century, undeniably challenged the global society that has been heavily capitalist and technological for the last decades. Under an individualist doctrine in a postmodern age, the 21st century world is fashioned to maximize human potential through globally accessible and profit-driven markets, advanced technological breakthroughs, and hyperactive cyber communities all while democracies and Mother Nature are under threat. With the virus spreading around the world at an exponential rate starting from December 2019, the status quo appeared to worsen and the foundations of the individualist doctrine that guided the formation of the century seemed to reveal its rotten core. All aspects of human living were gravely affected as states attempt

to cope with the pandemic that has infected more than 84,000,000 people and took almost 2,000,000 lives as of writing. Economic activities were forced to be limited as small businesses close and companies adjust to the crisis. Consequently, jobs were also minimized as employers lay off their workers; some had to declare bankruptcies. Mobility-restrictive measures such as quarantines and lockdowns were issued, confining the people in their homes and quarantine facilities for the time being. As a result, cyber communities catapulted in activity and number. Education pushed through as governments permit the opening of the online classes where students and educators stay at home and communicate via virtual meeting and learning platforms such as Zoom, Google Classroom, Moodle, Canvas etc. (Mateo, 2018). The health sector, on the other hand, had to take up the challenge, risk their lives, and brave the frontlines as they cater to the needs of the infected while attempting to develop a vaccine. Seeing all these, one cannot deny that the COVID-19 pandemic posed a serious threat to the lives of the people that had grown accustomed with neoliberal ideals of how society is supposed to operate without considering its pitfalls. It took a microscopic, inanimate being for them to be exposed. Evident of the precarity of the integrity of their governments as well as fragile socioeconomic breakdowns, third-world countries are very much at risk. The Philippines, for example, is governed by a weak democratic regime with hints of fascism-authoritarianism. The government's decisions in dealing with the pandemic appear to be unscientific and prejudiced as the president downplay the intensity of the situation by using simple-minded arguments, offering absurd solutions such as spraying gasoline to face masks, failing to set priorities, among others (Lasco & Curato, 2019). As a result, the country has one of the highest recorded cases in Asia. The effects were immediately visible in the economy as inflation rates skyrocket and poverty worsen. To top it all off, mobility-restrictive measures have been effective for a year now, engendering yet another avenue for more socioeconomic and sociopolitical problems. One of the sectors that was gravely affected by the issuance of quarantines and lockdowns is education. The operations of primary, secondary, and tertiary education had to be reinvented from scratch since the government and the education bureaucracies themselves — Department of Education and Commission on Higher Education — decided to push through with the academic year. With insufficient funding and training, educators are obliged to create modular learning materials at a limited span of time, not to mention the fact that some teachers had to deliver the modules to students who reside in far-flung communities (Philippine Daily Inquirer, 2020). Both learner and educator faced the new normal of learning through remote classes, reducing the true experience of attending school to a mere content transferring activity as evidenced by the proposition that online learning is devoid of the socialization educational institutions usually host. The remote learning setup engendered numerous disadvantages to both learner and educator. Mental health, accessibility affected by one's socioeconomic classification, availability of technological apparatuses, and lack of social integration are some of the reported disadvantages caused by remote learning. The effects are far more notable in subjects that demand physical activities given that several prerequisites must be accessible to the learner for him/her to successfully participate.

2. LITERATURE REVIEW

2.1. Covid-19 pandemic and Online Education

The COVID-19 pandemic has forced an unprecedented global shutdown that has greatly changed what it means to be a teacher, a student, and even a parent in the months that schools have been closed. While most school systems normally require daily physical attendance during weekdays and bring students together in large groups to learn in a collective endeavor, the closing of schools and the months of social distancing have shifted the site of learning to the home, where learning happens primarily alone or with the help of family members through the technologies available (Roe, Blikstad-Balas, & Dalland, 2020). During this time, it became clear that jobs such as those of teachers had to change from face-to-face to virtual communication in a matter of hours, a situation for which they were not trained (Gonzalez-Calvo, Barba-Martin, & Bores-Garcia, 2021). Thus, there is a paradigm shift in the way educators deliver quality education—through various online platforms. The online learning, distance

and continuing education have become a panacea for this unprecedented global pandemic, despite the challenges posed to both educators and the learners. Transitioning from traditional face-to-face learning to online learning can be an entirely different experience for the learners and the educators, which they must adapt to with little or no other alternatives available (Pokhrel & Chhetri, 2021).

Online learning refers to a learning environment that uses the Internet and other technological devices and tools for synchronous and asynchronous instructional delivery and management of academic programs (Huang, 2019; Usher & Barak, 2020). Synchronous online learning involves real-time interactions between the teacher and the students, while asynchronous online learning occurs without a strict schedule for different students (Singh & Thurman, 2019).

Online physical education classes, instituted nearly worldwide during the 2020 pandemic, were a wholly new experience for both teachers and students. The sudden shift to online classes left teachers unprepared and struggling with unfamiliar teaching methods, forcing them to resort to trial-and-error approaches. Inadequate online teaching strategies and low teacher and student readiness for online classes made the transition difficult (De Vera, 2020). Therefore, teachers need to develop educational strategies for online classes that help students form a learning attitude. Engaging and motivating students to participate in physical activities can help convey the value of physical education (Ahn, 2019).

There are only few studies on the impact of Covid-19 pandemic on physical education mobility-restrictive measures on the remote learning setup challenges that university students experience during the pandemic, limited data exists regarding the definite approaches they use to overcome them. Thus, to specifically assess the impact of this new normal in physical education here in the Philippines, a specific course offering in University of the Philippines Los Baños, Human Kinetics 12: Walking for Fitness, is examined through a quantitative study involving students who were enrolled in the course for the 1st Semester 2020-2021. Surveys and other statistical tools were utilized to yield accurate data. The goal of this study is to define the scope, intensity, and kind of impact mobility-restrictive measures have on HK12: Walking for Fitness, a course offering that requires mobility, specifically towards the performance and perception of the enrolled students. The researchers are steadfast in attempting to discover this knowledge as well as its implications in the future.

3. METHODOLOGY

The study is primarily conducted among students of the University of the Philippines Los Baños who were enrolled in Human Kinetics 12: Walking for Fitness for the first online semester, 1st Semester Academic Year 2020-2021. A survey via Google Form was created and disseminated among Facebook groups where the target population is likely to be a member of, making it a convenience sampling. Otherwise, they were disseminated through snowball sampling wherein a qualified student was asked whether he/she knows another qualified student for him/her to fill up the online survey, making the survey design's sampling process as non-probability. Furthermore, since the statistical material is an online survey, it must be noted that the data yielded from this study fails to account for offline and/or technologically or financially challenged students. The form was released to the public.

Firstly, the respondents were asked about their accessibility to technological apparatuses that are prerequisites for a student to perform well in an online setup of a physical education or human kinetics class. They were also asked whether they were able to comply with all the requirements of the course, especially the walking journal.

The questions in the survey design are fashioned to reveal the scope, intensity, and kind of impact the government-issued quarantines and lockdowns have on the student's perception and performance on HK12 in the 1st Semester, Academic Year 2020-2021. The survey was divided into two. The first section makes use of a Likert scale to reveal whether they agree or not with the pre-written statements that are engineered to reveal the respondents' perception and performance. And the second section utilizes a Yes-No and multiple-choice format to

know more about the students' various situations. Lastly, the respondents optionally inputted their thoughts about HK12: Walking for Fitness and HK12 in general.

3.1. Primary Section

Below is the list of pre-written statements in the primary section of the survey design. Respondents were asked to choose whether they strongly agree, agree, are neutral, strongly disagree, or disagree with the statements. The first section is classified into different subsections that are meant to dissect and measure the perception and performance of the respondents.

To get an objective and accurate score from each subsection, the verbal answers are assigned with numbers (strongly agree = 5, ..., strongly disagree = 1) and the average score of a respondent's answers to the statements of a subsection reflects the findings on a specific subsection. Scores are rounded off to the nearest hundredths. In some cases, such as subsection B, a question is constructed to show the reverse results, making the assigned scale of numbers opposite for it to be combined with the other normally constructed question.

A. Success of Course Outcomes is engineered to reveal whether the objectives of the course, specifically the fourth one as stipulated in the course guide that is to analyze the notion of how the quality of life can be improved through walking exercise, are achieved.

1. I learned something new from the course regardless of whether I was able to submit all requirements or not.
2. After finishing the course, I appreciated walking more. The course was successful in attaining its objectives for its learners.

*B. Genuine Pursuit of Learning m*easures how concerned and invested the students are to learning from the course in this remote learning setup.

3. I am more concerned of finishing my required HK courses in my curriculum than actually learning from them. After all, it's just HK.
4. It felt good when I was doing the walking activities of the course.

C. Attitude towards the Effects of Mobility-Restrictive Measures to the Student's Personal

Performance reveals the way how the respondents perceive the effects of quarantines and lockdowns to their respective personal performances in the course.

5. I think that the quarantines and lockdowns limited my ability to participate in this course.
6. Since this course requires a lot of walking and the government issued quarantines and lockdowns, I think I failed to maximize the course. I feel that I could have performed better in this course if there were no pandemic.
7. When I'm doing the walking activities, I felt that I am at risk of getting the virus even I wore a mask. Even I did submit the requirements, I felt so vulnerable and afraid while doing the activity due to the pandemic.

D. Attitude towards the Effects of Mobility-Restrictive Measures to Student's

Performance, on the other hand, shows the respondent's perception on the effects of quarantines and lockdowns to the performances of the students enrolled in the course.

8. I really think that this course is ineffective and not inclusive since it requires a lot of walking and some really can't go out of the house. Maybe, some don't have smartphones to keep track of the walking data.

D 1. Attitude towards Necessary Adjustments is fashioned to reveal whether the students have the desire or need to call for important changes in the course.

9. UPLB should stop offering these courses that require a lot of mobility for the time being. This includes walking and running. It may be better if UPLB will invest in HK courses that can readily be done within our homes.
10. HK courses must assign less written outputs since HK is physical education. Video outputs must be less demanding when it comes to editing and raw videos should be acceptable. What's the essence of physical education if it will only make us seat in front of our laptop typing essays and editing our videos? The status quo of HK education in UPLB is a bit ironic. Adjustments must be made.

3.2. Secondary Section

Moving on, the secondary section of the survey design should reveal the situations the students were in when they were accomplishing the required walking outputs in the course. The respondents were asked whether they have smartphones or gadgets to track their walking data. Given the mobility-restrictive measures, they were also queried if they were permitted by their parents or guardians to go out of the house and walk for miles. To assess their safety, the use of mask when accomplishing the walking requirements and the place where they walked were questioned. Considering the fact that there is a huge number of quarantine violators at the time when the students were expected to be conducting the walking requirements, the respondents were asked if there were a lot of people, he/she encountered when doing the task. The students were then queried whether they wanted to be more active or returned to their original daily routines after finishing the walking activities. The last and optional entry was placed in the form for the respondents to type in their further thoughts about HK12: Walking for Fitness and HK12 in general.

4. RESULTS

Assuming that all 16 sections have a full capacity of 20 students and the other professors did not take in additional learners upon their prerogative, the survey collected responses from the non-probability sample of 24 students or 7.5% of the target population, which is 320 UPLB students who are enrolled in Human Kinetics 12: Walking for Fitness for the first online semester of the university, 1st Semester of School Year 2020-2021. Below are the results of the survey.

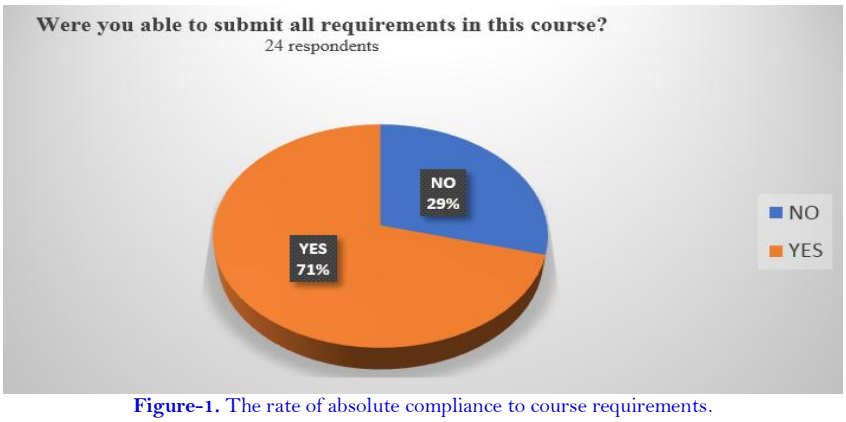

Figure-1. The rate of absolute compliance to course requirements.

Figure 1 shows that 71% of the respondents or 17 out of the 24 students were able to successfully submit all the academic requirements of the course. The remaining 7 students did not complete the course requirements.

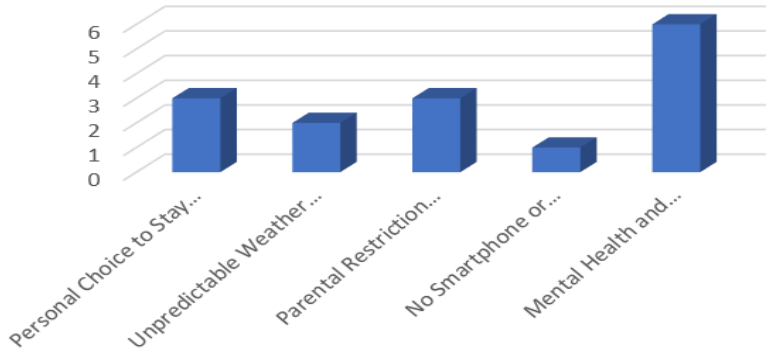

Figure-2. Reasons for Non-Compliance

Presented by Figure 2 are the reasons of those who failed to submit all requirements. The respondents were asked to check all the boxes in the form that applies for them and type an additional entry when deemed necessary, yielding a number more than 7. Among the abovementioned reasons, mental health and personal problems turned out to be the top.

4.1. Primary Section

A. Success of Course Outcomes

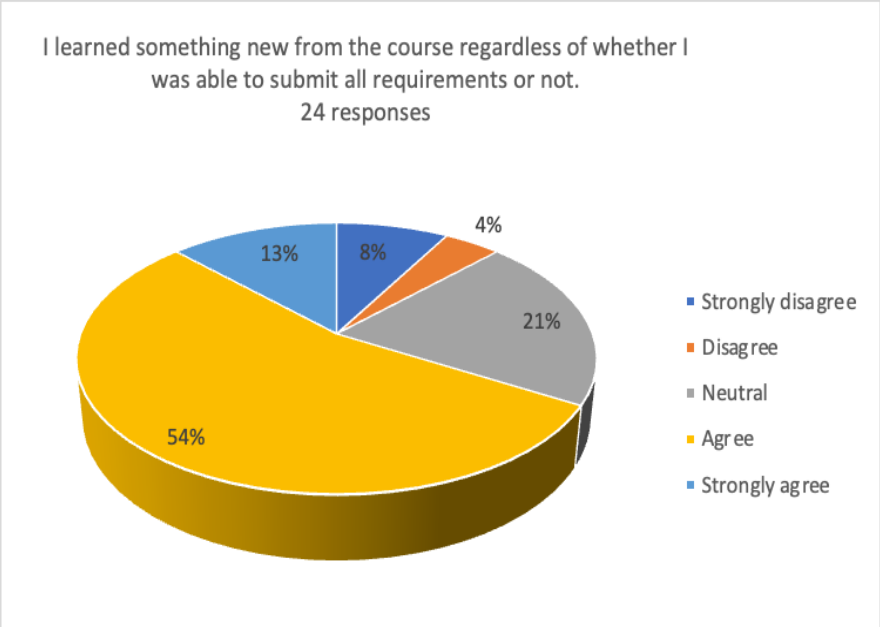

Figure-3. Level of agreement based on requirements compliance.

As shown in Figure 3, 54% of the respondents agreed they learned from the course, that walking not only improves their fitness but it also alleviates depression, fatigue and improves mood (Steinhilber, 2018).

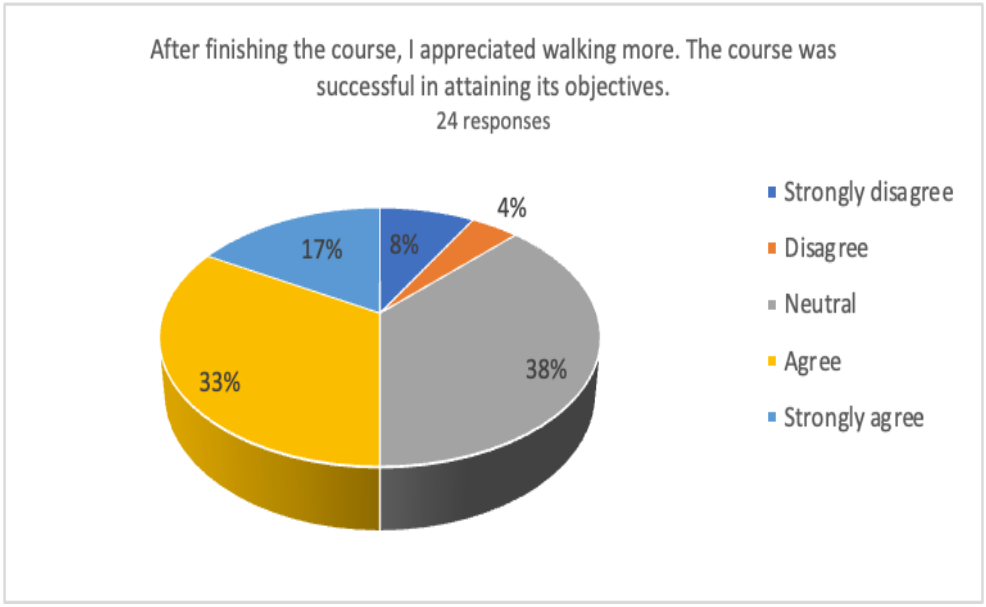

Figure-4. Level of appreciation for walking upon course completion.

Figure 4 shows that only 33% of the respondents agreed that they appreciate walking more after finishing the course and the course was not that successful in attaining its objectives, due to the quarantines and lockdowns.

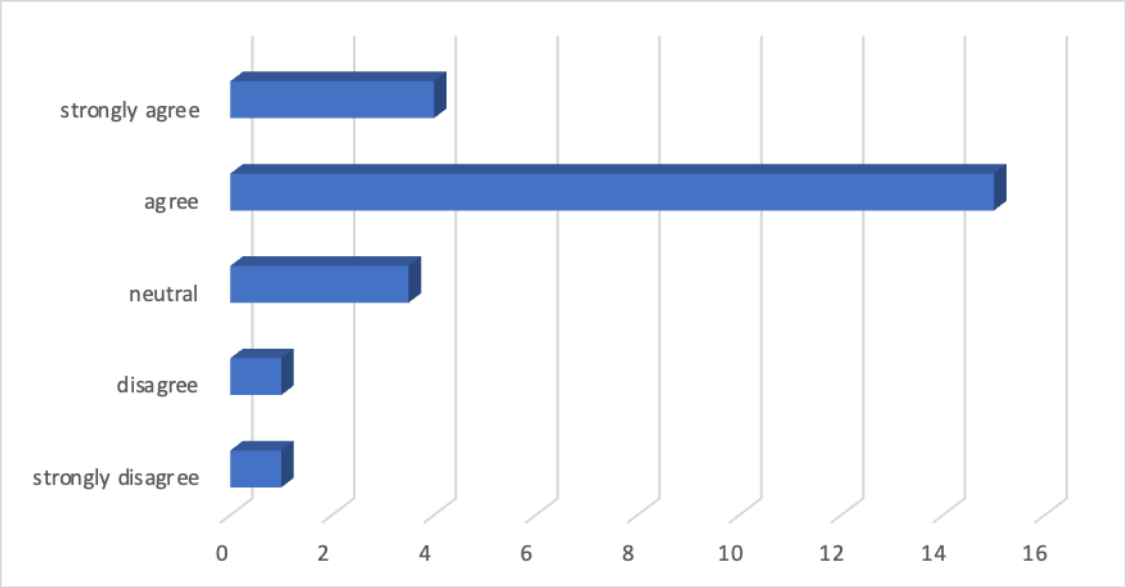

Figure-5. Success of course outcomes.

Figure 5 shows that most of the respondents agreed with the statement about their learning from the course. The measure, however, only specifically talks about the fourth course outcome – *analyze the notion of how the quality of life can be improved through walking exercise* – and does not give us any information whether the students can create walking programs, mitigating cardiovascular diseases, among the other courses outcomes. Nevertheless, the data shows that the respondents possess the quality of mind that their lives can be improved through walking.

B. Genuine Pursuit of Learning

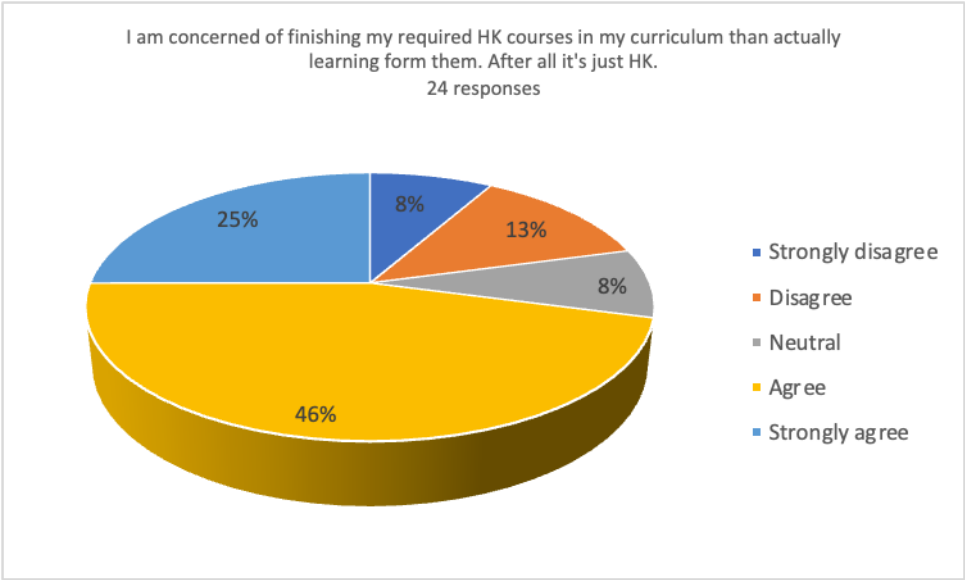

Figure-6. Level of concern for accomplishing HK courses in his/her curriculum.

As shown in Figure 6, almost half (46%) of the respondents agreed that their main concern was just to finish the required HK subjects in their curriculum, because compared to other elective courses, HK grades are not included in their general weighted average. If included in the computation of their general weighted average, students will take HK courses seriously like their other electives.

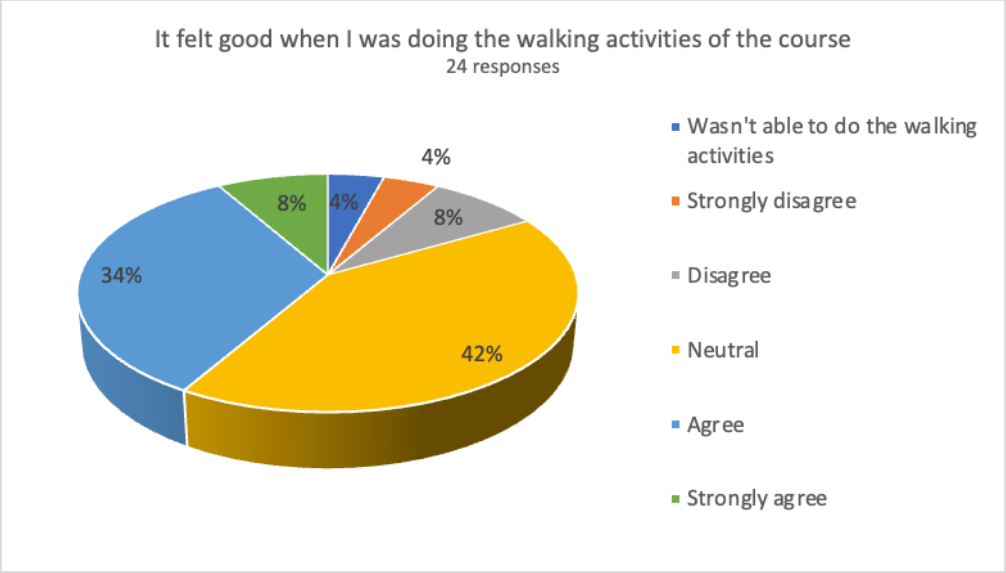

Figure-7. Level of satisfaction in accomplishing course activities in walking.

For the level of satisfaction in accomplishing course activities in walking (Figure 7), 34% agreed that they felt good doing their walking. Recent studies suggest that walking has many valuable benefits. It can significantly improve cardiovascular health, blood circulation, mood, energy levels and overall fitness (Nicole, 2021).

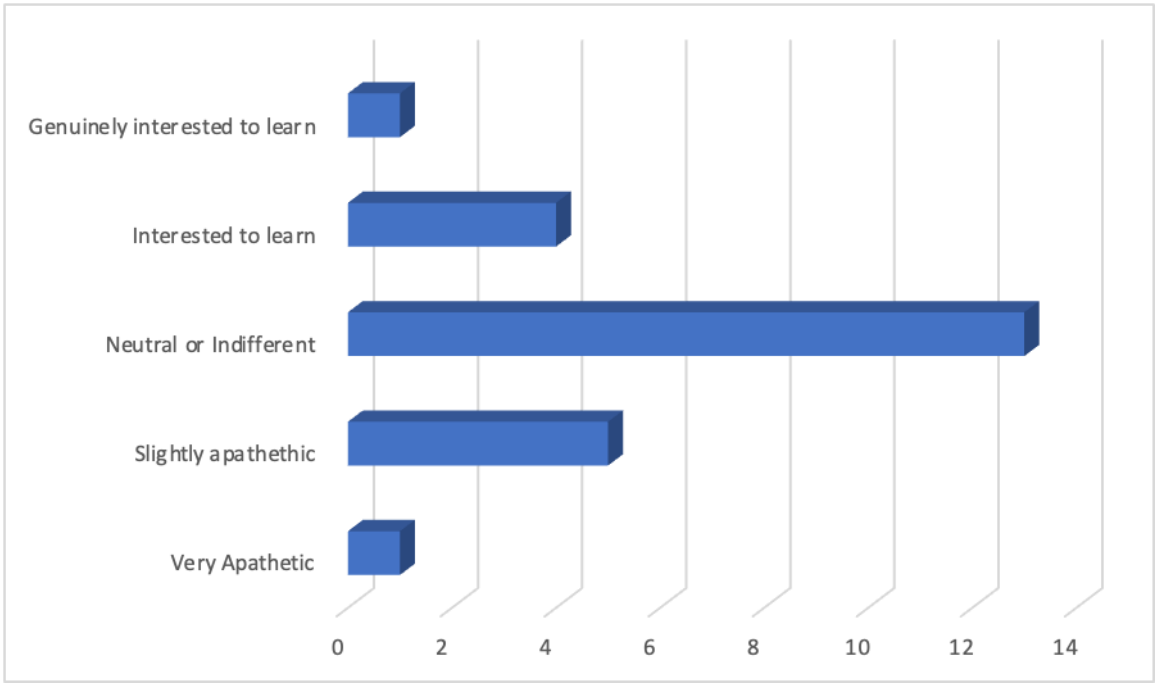

Figure-8. Genuine pursuit of learning.

As shown in Figure 8, more than half of the respondents feel indifferent about the course. Furthermore, the sum of the apathetic is more than the sum of the interested, which can be inferred that the presence of genuine pursuit of learning for HK 12 Walking for Fitness is absent among the respondents.

C. Attitude towards the Effects of Mobility-restrictive Measures to the Student's Personal Performance

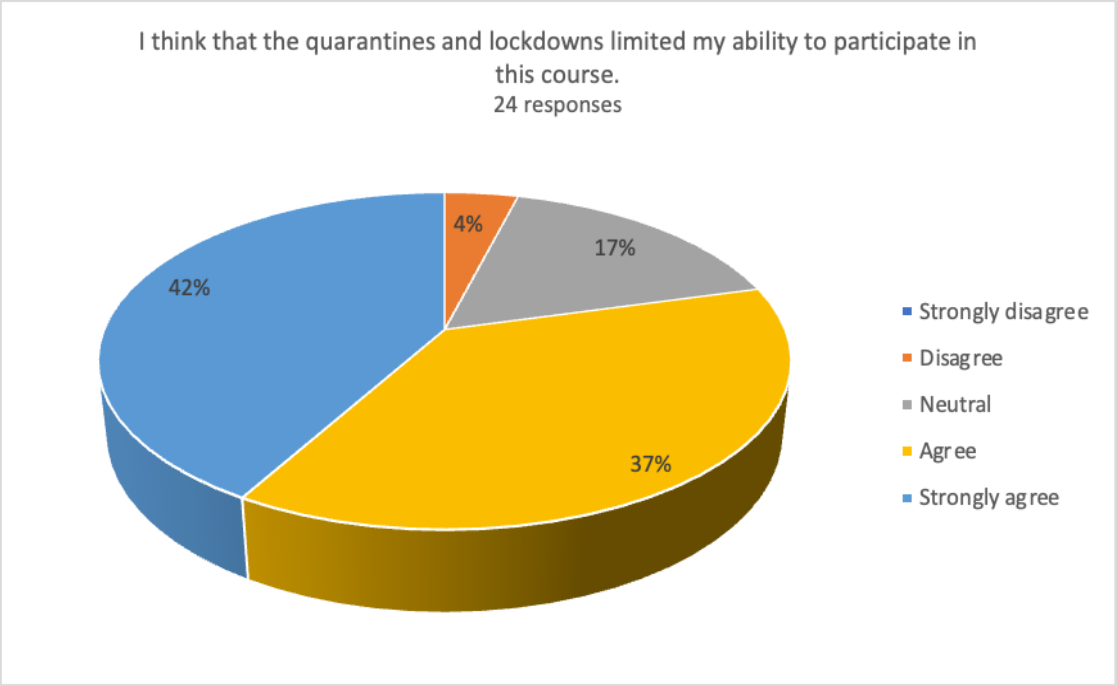

Figure-9. Level of perception on the impact of quarantines and lockdowns in course participation.

The level of perception on the impact of quarantines and lockdowns in course participation in Figure 9.

shows that 42% of the respondents strongly agreed that due to quarantines and lockdowns their involvement in walking activities limited them to join.

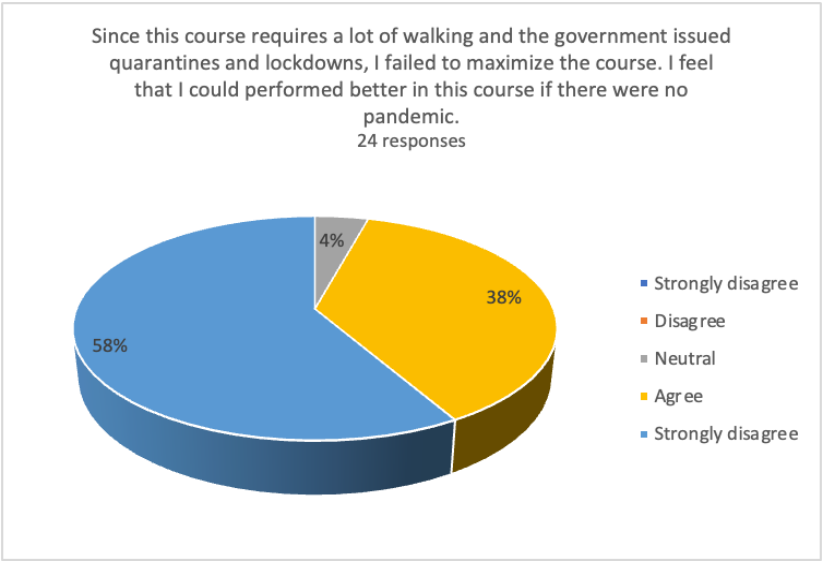

Figure-10. Level of perceived course maximization due to government issued quarantines and lockdowns.

The data shown in Figure 10 supports the implication on the students' performance in their walking activities because some of them cannot go out due to quarantines and lockdowns.

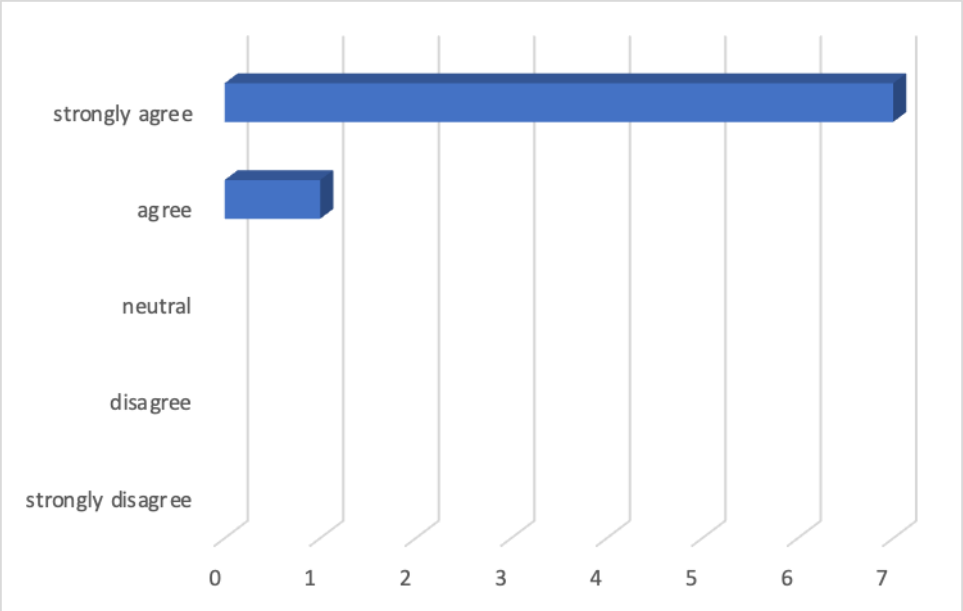

Figure-11. Attitude towards the effect of mobility-restrictive measures to personal performance.

Figure 11 reveals that more than half of the respondents agreed with the positively related statements. With this data, it can be said that there is significant evidence to infer that the quarantines and lockdowns affected both the perceptions and personal performances of the students in HK12: Walking for Fitness.

D. Attitude towards the Effects of Mobility-restrictive Measures to Fellow Student's Performance

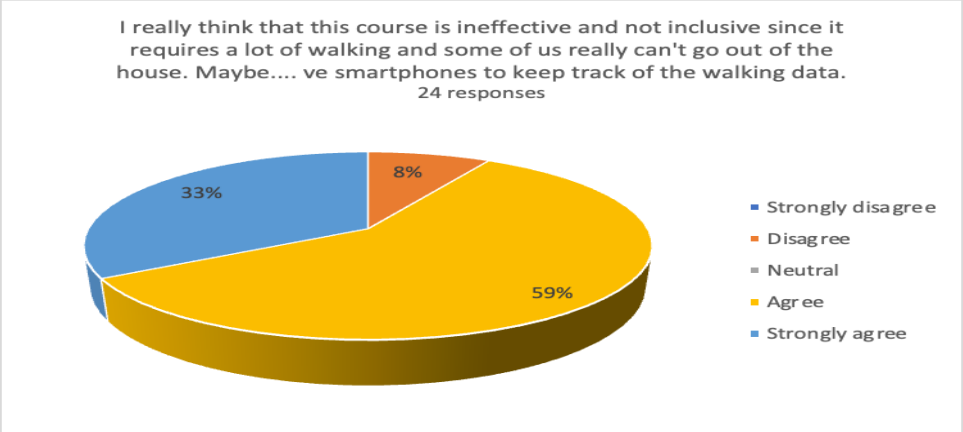

Figure-12. Attitude towards the effects of mobility-restrictive measures to fellow student's performance.

Since there is only one question for this subsection, further analysis was not conducted. With more than 90% of the respondents supporting the statement, the data shown in Figure 12 supports the inference on the previous subsection that HK 12: Walking for fitness is not effective and should not be included because some of the students cannot go out due to quarantines and lockdowns.

E. Attitude towards Necessary Adjustments

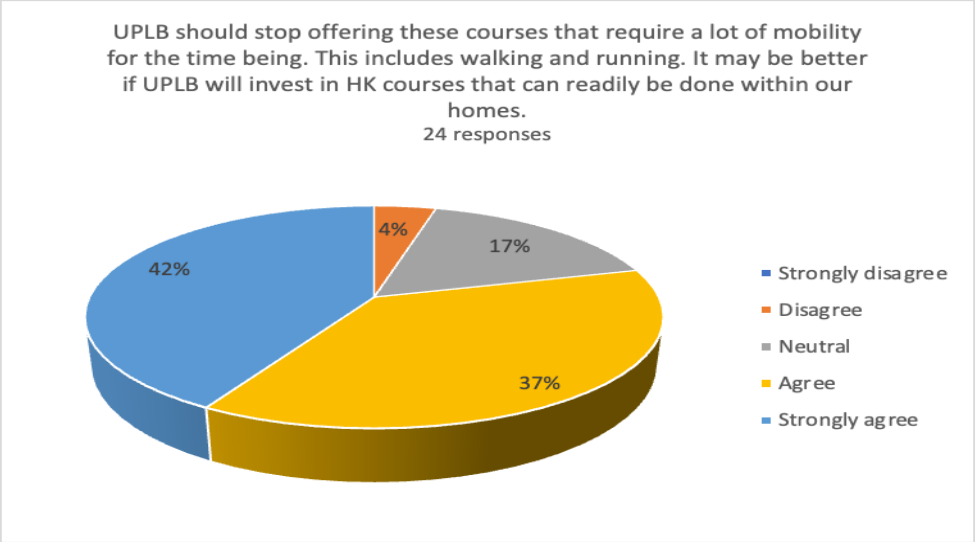

Figure-13. Levels of agreement in the cancellation of HK courses due to home restrictions.

Majority of the responses in Figure 13 expressed that the walking exercises are either too many or too far in distance, making it challenging for them to comply given that the 1st semester A.Y. 2020-2021 is the first online semester of the University. The respondents found it hard to participate in a physical education course that is offered online since HK courses, especially HK 12 Walking and Running, requires mobility. And it is difficult to be mobile in a society where policies that restrict mobility are imposed and everyone is under the threat of global pandemic.

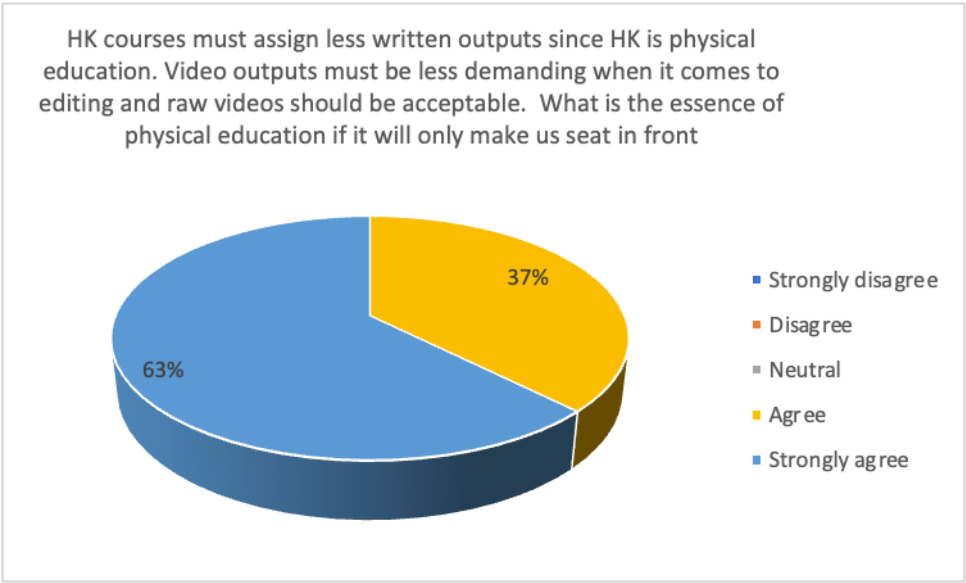

Figure-14. Levels of agreement in complying to given HK course requirements.

Figure 14 reveals that 63% of the respondents strongly agreed that it would be best for HK courses not to assign video and less written outputs, besides in this setting where all citizens are obliged by the government to stay indoors, and physical activity must be more promoted.

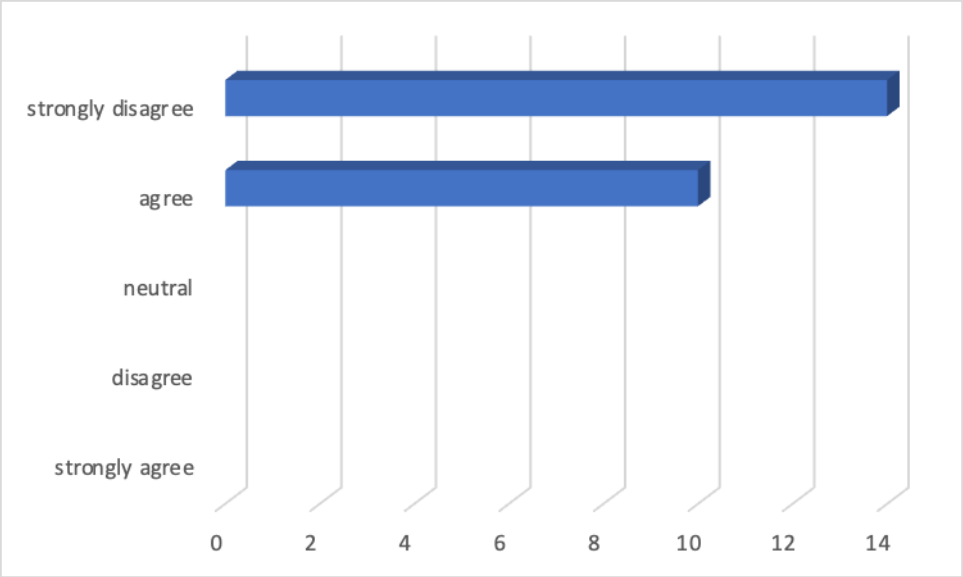

Figure-15. Attitudes toward necessary adjustments.

Figure 15 shows that there is very strong evidence to deduce that students support the idea of having necessary adjustments in Human Kinetics education in this online setup.

4.2. Secondary Section

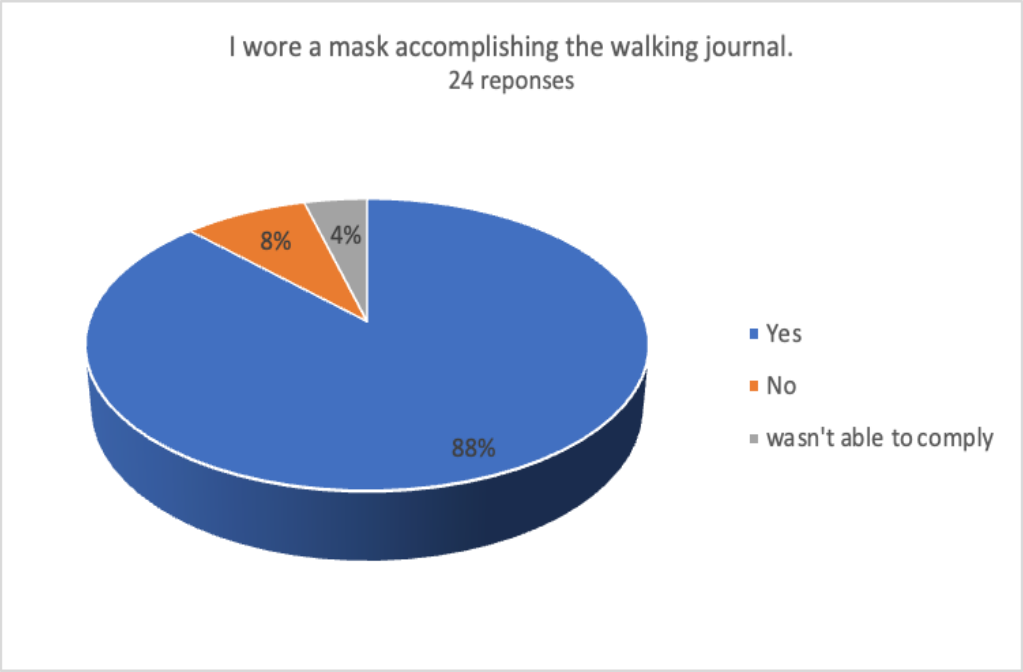

Figure-16. Ability to comply in wearing masks in accomplishing the walking requirements.

Figure 16 reveals that there are 2 respondents who did not wear a mask when accomplishing their walking journals, exposing them to the risk of catching the virus.

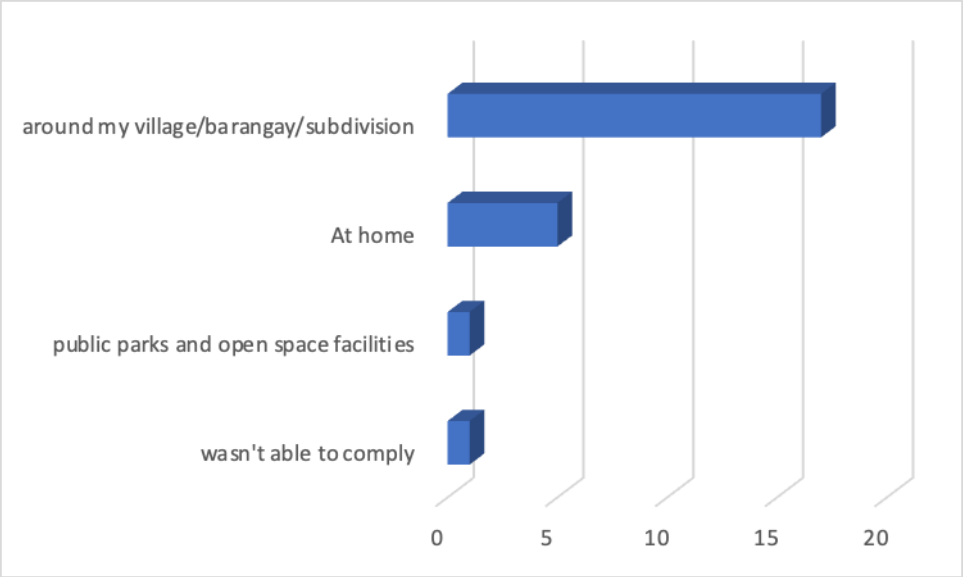

Figure-17. Walking location for students' walking requirements.

Figure 17 shows that majority of the respondents walked around their place of residence, while others accomplished it inside their homes with one reported that they have treadmill. The other two either was not able to comply or walked in public parks and open-space facilities.

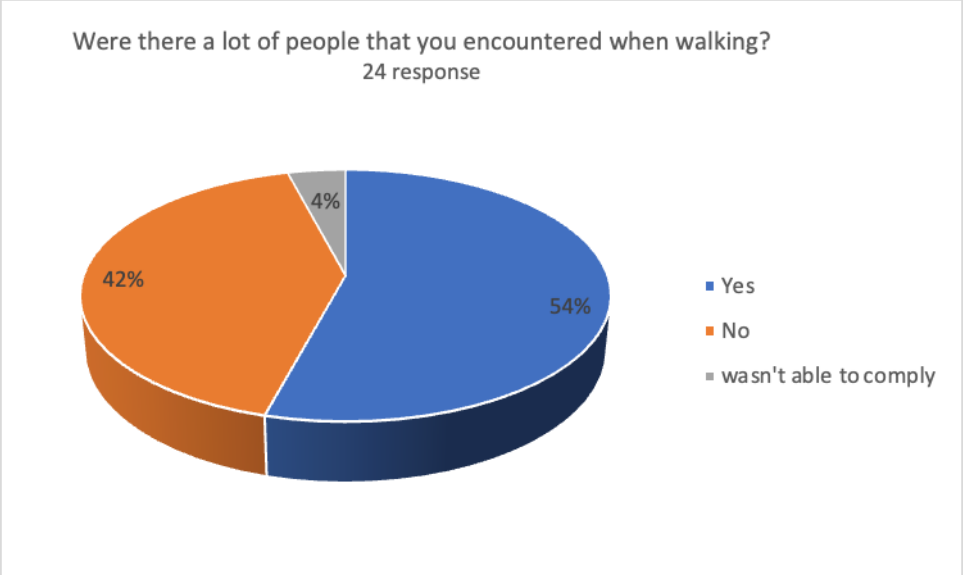

Figure-18. Possibilities of encountering people during walking.

Figure 18 reports that more than half of the respondents encountered a considerable number of people when they are walking, an information that might be bothersome for the government who issued the mobility-restrictive policies in the first place.

The respondents were asked what they did after finishing the walking requirements, it shows in Figure 19 that three-fourth of the respondents returned to their original routine and stayed at home. Whether they live an active or sedentary lifestyle before and after the walking activities, the study does not cover.

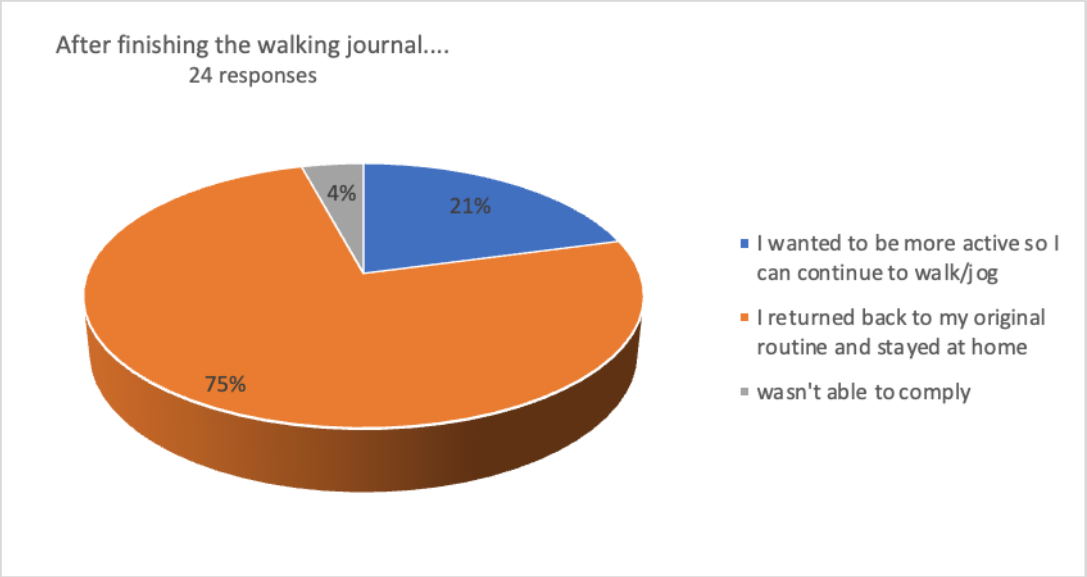

Figure-19. Types of realization upon completion of walking requirements.

5. DISCUSSION AND CONCLUSION

The findings of this study revealed the effects of mobility-restrictive measures to the perception and performance of the qualified students, which will be discussed further. In the meantime, it is important to note the scope and limitations of the study for future references. Firstly, the study mainly focuses on the viewpoint of the students and failed to consider that of the educators. Nevertheless, it can be said that the study captures the mindset of the students, making it student-centered. A study tackling the viewpoint of the educators may be beneficial to get a grasp of the bigger picture. Secondly, the study is primarily quantitative with the use of Likert scale. Furthermore, it focuses on just two dependent variables that both describe a student's mindset, which are perception and performance. Besides drawing a line between the two dependent variables, it would also be better if another study is conducted that reveals more dimensions that are not just limited to mindset. Possible dimensions may include, but are not limited to, socioeconomic classification of the student, psychological well-being, intensity of typhoon's impact to their neighborhood, intensity of pandemic's impact to their neighborhood, among others. These variables, when considered, may reveal much more about the impact of the mobility-restrictive measures to a mobility-requiring course such as HK12. Lastly, the study could have been better if the survey design also caters offline students. By making it more inclusive, statistical representation will increase, enabling for the study to yield more accurate data. Moving on to the study proper, the results turned out to be self-explanatory to the traits and characteristics it attempted to describe. The two main measuring tools in the primary section, which are C and D, excellently revealed what the students feel about the quarantines and lockdowns have a negative effect to their perception and performance in HK12: Walking for Fitness. Besides the fact that the policies are meant to restrict mobility and that HK12: Walking for Fitness requires mobility, it must also be considered that the First Semester, A.Y. 2020-2021 is the first semester of the university to observe remote learning. Even though the study did not capture such behavior, it must be noted that the drastic shift to online classes made it difficult to students to cope with the new normal in education. Furthermore, it must also be noted that even though the professors do not necessarily ask their students to go out of their house and walk for miles, some students feel the need to go out and accomplish the task. It is by the desire of accomplishing the requirements that students are motivated to get out of their house even it means that they are extremely at risk of catching the virus, at the same time violating the mobility-restrictive policies subject to the specific rules in their place of residence. It is also alarming to know that some respondents reported that they did not wear a mask as revealed in the secondary section. Knowing such information behooves the researchers to empathize with the statements written in subsection E about necessary

adjustments. In order for the researchers to come up with their recommendation and conclusion, the reader must first understand how they came up with it. First, it is vital to dissect the primary section into subsections to reveal whether necessary adjustments are needed or not. High scores in A (Success of Course Outcomes) and B (Genuine Pursuit of Learning) are meant to offset whatever scores in C (Attitude: Personal Performance), D (Attitude: Others' Performances), and E (Attitude: Necessary Adjustments) because having significantly higher scores in A and B means that students genuinely enjoy taking up the course. If such is true, then any high score in C, D, and E are meaningless. However, the subsection A is, in truth, an ineffective measure of variable since it only covers the fourth course outcome and not all. Besides, B resulted to a score highest in neutrality and indifference and higher in apathy over interest, saying that the genuine pursuit of learning is absent. These rather fragile scores in A and B are overpowered by the high scores in C, D, and E. A high score in C means that students personally feel that they are directly affected by the policies while D means that they feel the same for their fellow students. On the other hand, a high score in E means that they feel the need for adjustments. Having received such data, it can be concluded that the mobility-restrictive policies take a toll on the overall performance of the students in HK12: Walking for Fitness, as well as put the students at risk.

6. RECOMMENDATIONS

6.1. On Retainment

Mobility demanding HK12 courses such as walking and running must be retained in being offered for the next online semesters to come. However, adjustments must be made so as not to put the students at whatever risk this turbulent period has to offer.

6.2. On Mobility

Asking students to do activities that either requires long distances or a big space should never be done again unless the pandemic is over. Although it is true that a student can accomplish a walking/running activity by doing it back and forth in his/her house, it is rather absurd, and it reduces the accomplishment of the activity as something that is only done for the sake of passing.

6.3. On Alternatives for Mobility-demanding Courses

Focus on exercise routines that are equivalent to distances.

6.4. On Consultation with the Students

Professors are enjoined to consult with their students regarding the activities they plan to assign to their students, and it is vital that the educators know the various situations his/her students are in. All these recommendations are subject to one solution: effectively reimagining Human Kinetics in the New Normal of Education.

In a third-world country plagued by a global pandemic, multiple super typhoons, earthquakes, volcanic eruption, and a questionable integrity of the state, all in one year, sectors where human lives are affected such as the education sector should be reimagined in a way that not only strengthens its citizens to face adversaries but also acts with compassion.

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